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EVIDENTIARY HEARING
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:)
)
Application for Certification for) Docket No. 07-AFC-6
the Carlsbad Energy Center Project)
_____)

WAVECREST ROOM
HILTON GARDEN INN
CARLSBAD, CALIFORNIA 92008

WEDNESDAY, FEBRUARY 3, 2010

9:16 A.M.

Reported by:
Troy Ray
Contract No. 170-08-001

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

1 COMMITTEE MEMBERS PRESENT

2 James D. Boyd, Presiding Member

3 Anthony Eggert, Associate Member

4 Paul Kramer, Hearing Officer

5 Tim Olson, Adviser

6
7 STAFF AND CONSULTANTS PRESENT

8 Mike Monosmith, Project Manager

9 Richard Ratliff, Senior Staff Counsel

10 Neghar Vahidi

11 APPLICANT

12 John A. McKinsey, Attorney

Brian J. Nese, Attorney

13 Kimberly J. Hellwig, Attorney

Stoel Rives, LLP

14 George L. Piantka, Project Manager

15 NRG West
Carlsbad Energy Center, LLC

16

17 INTERVENORS

18 Allan J. Thompson, Attorney

Ronald R. Ball, City Attorney

19 Joe Garuba, Special Project Manager

City of Carlsbad

20

21 INTERVENORS

22 Allan J. Thomson, Attorney

South Carlsbad Coastal Redevelopment Agency

23

Julie Baker

24 Arnold Roe

Power of Vision

25

- 1 INTERVENORS (Continued)
- 2 Kerry Siekmann
- 3 Catherine Miller
- 4 Terramar Associates
- 5 William Rostov, Attorney
- 6 Sarah Jackson
- 7 EARTHJUSTICE, Center for Biological Diversity
- 8 Rob Simpson
- 9 Environmental Consultant
- 10
- 11 ALSO PRESENT
- 12 Jim McIntosh, Director
- 13 California Independent System Operator
- 14 Steven C. McClary
- 15 MRW & Associates
- 16
- 17 Rory Cox
- 18 Pacific Environment
- 19
- 20 Tam Hunt
- 21 Community Renewable Solutions, LLC
- 22
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- 24
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1 P R O C E E D I N G S

2 9:16 a.m.

3 COMMISSIONER BOYD: Good morning, ladies and
4 gentlemen. A lot of familiar faces out there now.
5 Welcome to Day 3 of the California Energy Commission's
6 Sighting Committee Evidentiary Hearings on the Carlsbad
7 Energy Center Project.

8 I'm Commissioner Jim Boyd of the California
9 Energy Commission and the committee chair for this site
10 committee activity. The other members of the siting
11 committee for this project is Commissioner Anthony Eggert,
12 who is to the right of Mr. Kramer here. And Mr. Paul
13 Kramer is our hearing officer. And for most of you who
14 have been here know that we rely 95 percent on him to --
15 or maybe 98 percent to run these hearings while we sit and
16 absorb all the information.

17 As you know, the siting committees make
18 recommendations to the full commission, which then has to
19 act on whether or not to approve the application of many
20 applicants throughout the state for power plant siting
21 cases. I don't need to repeat much because most of you
22 are familiar with the process.

23 We've had two very late days, lots of public
24 interest, and we are going to go back on our evidentiary
25 hearing track today.

1 To my left is my advisor, Tim Olsen, and before
2 and maybe Anthony's advisor, and we'll all work to bring
3 this case to as speedy a resolution as we can.

4 I'll just mention the ex parte rules that are in
5 effect. The Applicant, the Intervenors, and the staff of
6 the Energy Commission are all parties to the case,
7 therefore, ex parte communication rules apply; and we
8 cannot talk to any of them, any of the parties except in
9 public like this. So we serve a quasi-judiciary role here
10 in terms of making a decision and recommendation on the
11 case, and all that has to be predicated on the record.

12 So with that brief background, I'll let first
13 Commissioner Eggert, if he wants to say a word too, and
14 we'll turn it over to our hearing officer, Mr. Kramer.

15 COMMISSIONER EGGERT: Just, I guess, a very quick
16 good morning to everyone. And again, I think all of you
17 are familiar faces as Commissioner Boyd has mentioned. So
18 again, looking forward to a full day of informative
19 hearing. And in particular, I know one of the areas of
20 great interest, greenhouse gases, is coming up today, so
21 I'm looking forward to that discussion as well. So
22 thanks.

23 HEARING OFFICER KRAMER: Thank you.

24 Do we have any people who were not with us
25 yesterday or Monday, in the audience?

1 Okay. A couple people.

2 So people have asked in the past who are all
3 these other people up here. And I want to take this
4 opportunity to let them introduce themselves to you. So
5 start with the Applicant.

6 MR. MCKINSEY: I'm John McKinsey, counsel for the
7 Applicant, Carlsbad Energy Center, LLC, which is a
8 wholly-owned subsidiary of NRG Energy, which is the owner
9 of the existing generating facility as well as this
10 project.

11 And the proponent with me is Mr. George Piantka,
12 the project manager for NRG Energy in this project.

13 HEARING OFFICER KRAMER: Let's just go around the
14 table.

15 MR. SIMPSON: Good morning. I'm Rob Simpson, and
16 I'm intervened in this process in opposition of the
17 project.

18 MR. RATLIFF: I'm Dick Ratliff, the counsel for
19 the Energy Commission staff. And on my left is Mike
20 Monosmith, the staff project manager.

21 HEARING OFFICER KRAMER: And in the back corner
22 is our court reporter. Everybody who will be speaking
23 today, if you could make sure to either give him a
24 business card or spell your name at some point, then
25 there's a good chance it will be accurately spelled in the

1 transcript.

2 Continuing on with the Center for Biological
3 Diversity?

4 MR. ROSTOV: Good morning. My name is Will
5 Rostov. I'm counsel for the Center for Biological
6 Diversity. I work with EARTHJUSTICE.

7 And with me is Sarah Jackson, who is our research
8 associate.

9 Is the microphone working?

10 HEARING OFFICER KRAMER: We need to get close,
11 like we're rock stars.

12 Is that better in the back? Are you hearing him
13 okay? Okay.

14 MR. ROSTOV: Close.

15 HEARING OFFICER KRAMER: Oh, that's even better.

16 Continuing on.

17 MS. MILLER: Good morning. My name is Catherine
18 Miller, and I'm a resident of Terramar. And Terramar is a
19 intervenor in this process.

20 MS. SIEKMANN: My name is Kerry Siekmann. And
21 along with Catherine Miller, I am intervening for Terramar
22 opposing the project.

23 MS. BAKER: Good morning. I'm Julie Baker, an
24 intervenor with a group called Power of Vision in
25 opposition to the project.

1 And to my left is Dr. Arnold Roe, also with
2 Power of Vision.

3 MR. THOMPSON: My name is Allan Thompson. I'm
4 special counsel to the City of Carlsbad for this
5 proceeding.

6 To my right is Ron Ball, who is the city attorney
7 for the City of Carlsbad.

8 And to my left is Joe Garuba, who has been
9 working on this case for the city since its inception.

10 HEARING OFFICER KRAMER: Thank you. I'm wearing
11 two hats today. We have a public advisor at the Energy
12 Commission whose job is to educate and help the public
13 understand how to participate in our process. She was
14 here with her associate for the previous two days,
15 including our evening public comment sessions, but she has
16 returned to the office or perhaps to another hearing where
17 her services will be more needed. So in her absence, if
18 you do have some questions about participation, you can
19 see me during the break.

20 I'll just point out to the members of the public,
21 it's quite possible we will not be taking anymore oral
22 public comments during these hearings, but we have
23 extended the opportunity for you to file written comments
24 until -- so long as they're received at our offices by
25 February 22nd. And that's all summarized with the

1 appropriate address on a single sheet of paper, of which
2 there are probably 150 or so on the table out in the foyer
3 along with -- there's a brochure explaining the public
4 advisor's office functions and some of their business
5 cards, and a sheet you can sign up to get on the mailing
6 list for this project.

7 If you have e-mail and you're comfortable, I'd
8 recommend using your e-mail address and getting on the
9 mailing list. And you won't receive copies of every
10 document that circulates in the case, but you'll receive
11 at least notice of when significant documents go up on our
12 website, such as a proposed decision or a notice of future
13 hearings either before the committee or before the full
14 Energy Commission. So that's probably the best way and
15 the most efficient way for you to keep abreast of the case
16 if you would like to do so.

17 So now let's return to our visual resources
18 panel.

19 Oh, and also out on the table there are some
20 copies of a spreadsheet that we're all using to keep track
21 of the players and the topics that we're going to be
22 hearing over the next couple of days. So if you want a
23 playbill, so to speak -- and there are no ads, it's
24 printed at public expense -- you can grab one of those
25 from the table outside.

1 So back to our visual resources panel, if -- from
2 my left, if you folks could introduce yourself again.

3 Sir?

4 MR. NEU: Good morning. My name is Don Neu. I'm
5 the planning director for the City of Carlsbad.

6 MR. WOJCIK: My name is Bob Wojcik. I'm director
7 of engineering for Hoffman Planning and Engineering.

8 MR. MASON: Robert Mason. CH2M Hill representing
9 the Applicant.

10 MS. GALE: Marsha Gale, Environmental Vision,
11 representing the Applicant.

12 MR. KANEMOTO: BILL Kanemoto with the Energy
13 Commission.

14 HEARING OFFICER KRAMER: Okay. And then also
15 Ms. Siekmann and Ms. Miller are witnesses as well.

16 They're just seated over at their regular place.

17 Okay. As I recall, we left off about to begin
18 the staff examination of Mr. Kanemoto.

19 So, Mr. Ratliff, if you would proceed.

20 MR. RATLIFF: Yes, Mr. Kramer, Mr. Kanemoto,
21 we've tried to tailor our -- Mr. Kanemoto's testimony to
22 try to shorten it a bit since we don't want it to be too
23 redundant with some of the themes that were in yesterday's
24 testimony concerning the visual appearance.

25 We have about five or, I think, six slides that

1 we will put up that are from exhibits that are in
2 evidence, but we wanted to circulate those in hard copy as
3 well as put those up because the visual -- the ability to
4 actually see these slides projected, at least from your
5 perspective, are pretty difficult I think to see,
6 particularly when we're talking about fairly subtle visual
7 change.

8 HEARING OFFICER KRAMER: These certainly are not
9 high-def projectors.

10 MR. RATLIFF: And I would also point out that in
11 the staff FSA there are KOP pictorial exhibits which are
12 diagrams which are actually photos, and simulations which
13 also, I think, will help you perceive the visual change.

14 HEARING OFFICER KRAMER: Okay. So when you talk,
15 speak about these in your examination.

16 And, Mr. Kanemoto, in your responses, if you
17 could refer to them by reference to the original documents
18 from which they came, that would be helpful for the
19 record.

20 DIRECT EXAMINATION

21 MR. RATLIFF: Okay. Mr. Kanemoto, could you
22 briefly describe your qualifications and experience? And
23 as a fellow low-talker, make sure your -- I have to remind
24 you to be close to the microphone so people can hear you.

25 MR. KANEMOTO: I have over 25 years of experience

1 preparing CEQA and NEPA studies, the majority of that time
2 specializing in visual assessment and simulation. I've
3 prepared between one and two hundred visual studies in
4 that time. I also taught computer simulation and
5 animation at the Graduate School of Environmental Design
6 at UC Berkeley for several years. And I have a master's
7 degree in landscape architecture.

8 MR. RATLIFF: Bill, you might want to take the
9 microphone and hold it in your hand actually, it's --
10 otherwise, when you move your head, we can't hear you.

11 HEARING OFFICER KRAMER: We also have the
12 portable microphone if that's easier.

13 MR. KANEMOTO: No, I'll speak more directly.

14 Would you like me to repeat anything that I --

15 MR. RATLIFF: Yes, please.

16 MR. KANEMOTO: Okay. I have over 25 years of
17 experience preparing CEQA and NEPA studies, the majority
18 of that time specializing in visual assessment and
19 simulation. I have prepared between one and two hundred
20 visual studies in that time. I have also taught computer
21 simulation and animation at the Graduate School of
22 Environmental Design at UC Berkeley for several years, and
23 I have a master's degree in landscape architecture.

24 MR. RATLIFF: Could you please summarize your
25 analysis and your conclusions?

1 MR. KANEMOTO: We used the standard visual
2 assessment methodology employed by CEC and all its staff
3 assessments of power plants based on a five-step scale of
4 visual sensitivity of the setting in viewers and visual
5 change from the project. Now, it's based on similar
6 federal agency methods that are standard professional
7 practice.

8 We evaluate the visual contrast and dominance of
9 the plant in the context of generally high visual
10 sensitivity based on the high existing scenic value of the
11 beach lagoon vicinity.

12 The evaluation was done from a range of
13 representative key observation points, or KOPs, that were
14 selected with input from CEC staff. And that's what you
15 see in the figure on the screen, which is Figure 3 from
16 the FSA discussion.

17 Now, in this map the red areas are where the top
18 of the stacks would be visible as mapped by GIS and ground
19 truth. These are the different KOPs as you can see. And
20 these included specific key viewpoints around the lagoon
21 identified in the city's local coastal plan.

22 To that list of points, several additional KOPs
23 were obtained at the request of the city, including one
24 from within the Encina site, one at the Coastal Rail
25 Trail, an additional point on Carlsbad Boulevard, and so

1 on.

2 We studied the visibility of the site from
3 throughout the viewshed, and I believe this is a thorough
4 representation of sensitive viewer groups.

5 Based on these views, we concluded that with
6 recommended mitigation measures, impacts of the project
7 could be kept to less than significant levels. There are
8 principle reasons for this, of course; the below-grade
9 siting of the structures and the tall existing tree
10 screenings surrounding most of the site. Together the
11 berm and trees provide screening of roughly 60 feet above
12 surrounding highway grade in addition to 30 feet of
13 screening by the below-grade siting. So the total amount
14 of screening is roughly 90 feet in height.

15 MR. RATLIFF: How high?

16 MR. KANEMOTO: Roughly 90 feet, based on the
17 height of the trees as measured by an arborist as one of
18 the data responses.

19 However, as I think everyone knows by now, the
20 alternatives for the I-5 project that we obtained from
21 Cal Trans indicated that the existing earth berm and tree
22 screen would be removed by the proposed widening,
23 potentially leaving the CECP site as well as the Encina
24 site wide open to view from the highway and much more
25 visible to viewpoints around the lagoon. Staff concluded

1 that this could represent a significant impact if not
2 somehow mitigated.

3 MR. RATLIFF: Mr. Kanemoto, just to be clear,
4 what were your conclusions concerning the direct impact of
5 this project to visual resources?

6 MR. KANEMOTO: Well, we concluded that they would
7 be less than significant from all the KOPs that were
8 displayed on Figure 1.

9 MR. RATLIFF: And then in addition to the direct
10 impact analysis, you did a cumulative impact analysis; is
11 that correct?

12 MR. KANEMOTO: Yes.

13 Q And could you list the projects that were
14 included in that cumulative impact analysis?

15 MR. KANEMOTO: Yes. These were selected by the
16 city, and included the desalination project, future public
17 use of a decommissioned Encina plant site, the Coastal
18 Rail Trail, possible development of the undeveloped parcel
19 east of I-5 across from the CECP site, the city's sewer
20 interceptor and lift station projects, the LOSSAN Double
21 Tracking Project and of course the I-5 widening.

22 MR. RATLIFF: Okay. Now, concerning the
23 cumulative impact, could you just explain that a little
24 bit, the cumulative effect of the I-5 widening project?

25 MR. KANEMOTO: Well, again, as presented by

1 Cal Trans, the tentative proposed alignments would result
2 in removal of some or all of the existing berm and
3 vegetation currently screening the CECP site. This would
4 expose not only the CECP site, but the entire Encina site
5 along with tanks, switch yard, and so on to southbound
6 I-5. This would remove the vivid element of the tall tree
7 canopies and would substantially increase visibility of
8 the CECP project and Encina plant as seen from the lagoon
9 and vicinity. And as I mentioned, we concluded that these
10 impacts would be characterized as a
11 potentially-significant impact.

12 In staff's view this impact could be significant
13 even without the CECP because the loss of tree canopy and
14 the exposure of the Encina plant.

15 Because the EIR, EIS is not yet released, there's
16 some uncertainty about the specifics of the project, but
17 CEC staff spoke with Cal Trans to get as much detail as
18 possible. On-site surveys of projected highway alignments
19 were conducted by CEC staff with Cal Trans staff. From
20 those surveys, staff concluded that the cumulative visual
21 impact should be mitigable and develop condition VIS-5.

22 The viability of VIS-5 was based on the
23 observation that, according to the site surveys, there
24 could be a buffer zone of similar width as the existing
25 berm available for a new landscape buffer between the

1 proposed new edge of highway and the nearest proposed CECP
2 structures while allowing for a 30-foot perimeter road
3 around the plant. Since the existing berm and trees were
4 shown as substantially screening the project, it was
5 logical, we felt, to assume that similar screening could
6 be achieved within a buffer area of similar width.

7 If we could see the next slide.

8 On the top, this slide shows what the site
9 surveys with Cal Trans revealed. Essentially with the
10 proposed movement of the right-of-way by about 70 feet,
11 there remains room for a 75- to 90-foot wide landscape
12 buffer area plus a 30-foot wide access road around the
13 plant.

14 Next slide, please.

15 HEARING OFFICER KRAMER: For the record, when we
16 go to read the transcript and try to figure out what he
17 was looking at as he was speaking, was Exhibit 203 --
18 well, clearly was not just one page, so we need to
19 describe this more precisely, or alternatively, we can
20 introduce this document as some sort of exhibit and then
21 he can refer to it by page number. So what's your
22 preference?

23 MR. RATLIFF: Go ahead and mark it as an exhibit
24 then.

25 HEARING OFFICER KRAMER: Okay. Will there be any

1 objection from the parties to accepting this?

2 Okay. So I'll come up with a number in a minute.

3 So now, Mr. Kanemoto, you were just speaking
4 about page 2, and now you're on to page 3, correct?

5 MR. KANEMOTO: This is page 2.

6 HEARING OFFICER KRAMER: And you just asked for
7 the next slide, which would be page --

8 MR. KANEMOTO: Yes, page 3.

9 HEARING OFFICER KRAMER: Okay. Thank you.

10 MR. KANEMOTO: This is a depiction of a
11 mitigation concept first developed by Cal Trans suggesting
12 that a replacement berm and landscape screening could be
13 accommodated within the CECP's site. The light gray berm
14 in the background on the right shows where the existing
15 berm is located. The dark berm to the left is within the
16 buffer zone area depicted in the previous slide.

17 To staff, a scenario such as this appeared
18 functionally equivalent to the existing conditions, so it
19 indicated that mitigation of similar effectiveness is
20 feasible.

21 Maybe we could go back to the previous slide
22 again?

23 HEARING OFFICER KRAMER: Page 2?

24 MR. KANEMOTO: Yeah.

25 If you look in the bottom of this slide, it sort

1 of illustrates the mechanics of how the screening
2 operates, and it's essentially similar to what exists now.
3 But what is being proposed as one option under condition
4 VIS-5, with mitigation similar to this concept, staff
5 believes that there would still be visual change that
6 couldn't be called impact, but that it could be less than
7 significant as depicted in the simulations we analyzed in
8 the staff assessment.

9 Our belief in the feasibility of this berm
10 concept was strongly influenced by our understanding that
11 actual construction of the I-5 widening is, according to
12 Cal Trans, at least five to ten years away following
13 approval of the final EIS. This period would give new
14 landscape screening time to mature, shortening the period
15 when screening would not be equal in height to the
16 existing.

17 I also think it is important to emphasize here
18 that staff is not dictating a particular solution in
19 condition VIS-5. The purpose of this information just
20 shown was to establish the viability of this concept or
21 some variant as a potential solution based on facts such
22 as the site survey, rather than conjecture.

23 MR. RATLIFF: Thank you, Mr. Kanemoto.

24 Can you tell us what your reaction to the city's
25 video production was, the one taken from the air, used to

1 depict project impacts?

2 MR. KANEMOTO: Well, the main point I would make
3 is that the video does not include any mitigation such as
4 the berm and vegetative screening that staff has required
5 as a condition of the project.

6 In addition, the video includes an aerial view,
7 which tends to emphasize the entire structure including
8 the 90 feet or so which would not be visible off site,
9 either because it is located below grade or screened.

10 HEARING OFFICER KRAMER: Are we speaking of
11 Exhibit 431? It's described as the HNTB visual simulation
12 of -- simulation video of the power plant?

13 MR. RATLIFF: Yes.

14 HEARING OFFICER KRAMER: From a helicopter
15 circling the plant?

16 MR. RATLIFF: Yes.

17 HEARING OFFICER KRAMER: Okay. And let's see.
18 We're not supposed to use the word "simulation" anymore,
19 are we?

20 MR. RATLIFF: I think it was a --

21 MS. SIEKMANN: Visualization.

22 MR. RATLIFF: -- visualization.

23 Thank you.

24 HEARING OFFICER KRAMER: Okay.

25 MR. RATLIFF: And likewise, Mr. Kanemoto, did the

1 visualizations of the project site from ground level, did
2 they include the mitigation that staff has proposed for
3 screening in the event the I-15 widening project does cut
4 across the berm to the power plant?

5 MR. KANEMOTO: Well, yesterday we saw a still
6 visualization from southbound I-5 that did depict a berm
7 without landscape screening on top.

8 HEARING OFFICER KRAMER: And that was
9 Exhibit 430.

10 MR. RATLIFF: Now, the city in its analysis
11 refers often to the visual impacts of the project that
12 were analyzed in the 1989 NOI for the Encina and South Bay
13 projects for SDG&E. What was different about that NOI
14 analysis?

15 MR. KANEMOTO: Well, the NOI analysis refers to a
16 very different project in a much more visually-prominent
17 position sited above grade with higher stacks facing the
18 beach and outer lagoon. The project included a new
19 channel that would disrupt beach access. All these
20 aspects were a big part of the NOI conclusions of
21 significant impact and differ from the CECP proposal.

22 If we could see the next slide, please?

23 The next slide. That one. Thanks.

24 These are images of the project as analyzed in
25 the NOI.

1 Next slide, please.

2 And next slide again.

3 HEARING OFFICER KRAMER: So those are pages 4 and
4 5 you just referred to.

5 MR. KANEMOTO: Next slide.

6 So the first two images were images of the
7 project as analyzed in the NOI; and the last two that you
8 just saw are KOP 1 as they appeared in the FSA analysis.
9 And again, from a similar viewpoint on Carlsbad Boulevard.
10 I think the comparison makes the difference in impact very
11 clear.

12 MR. RATLIFF: Did the NOI make recommendations to
13 reduce the visual effect of the project?

14 MR. KANEMOTO: Yes, the NOI recommendation
15 lowering the height of the stacks, building the project
16 below grade, and landscaping to provide screening, as well
17 as painting.

18 MR. RATLIFF: Are these the kinds of mitigations,
19 if you would call them that, that have been incorporated
20 into this project?

21 MR. KANEMOTO: Yes, they are all incorporated in
22 the CECP proposal and greatly reduce the impacts in our
23 opinion. The new site is also less visible, particularly
24 from beach areas.

25 MR. RATLIFF: Finally, or almost finally here,

1 the city's testimony, that of Mr. McDonald, states that
2 your analysis didn't consider the shut down and demolition
3 of existing Units 1 through 3. Did you?

4 MR. KANEMOTO: Well, it's true we did not discuss
5 the shut down of Units 1, 2, 3; that was not discussed
6 because, as I understand it, their shut down would not
7 lead to any visible changes to the Encina site building.
8 So they are not relevant visual issues.

9 MR. RATLIFF: So it's your understanding that the
10 demolition isn't part of the project?

11 MR. KANEMOTO: Not -- not this project.

12 MR. RATLIFF: And finally, what do you find to be
13 lacking about the city's visual analysis?

14 MR. KANEMOTO: Well, primarily, again, it fails
15 to account for any mitigations such as the berm and
16 landscaping replacement that staff's conditions would
17 require. We have never disagreed with the city that there
18 would be cumulative impacts without mitigation, however,
19 we concluded that mitigation similar to the existing
20 condition is feasible.

21 MR. RATLIFF: Thank you.

22 That concludes our direct testimony.

23 HEARING OFFICER KRAMER: Mr. Thompson, now for
24 the city, with your witness, Mr. Neu.

25 MR. THOMPSON: Thank you.

1 DIRECT EXAMINATION

2 MR. THOMPSON: Would you please, Mr. Neu, state
3 your name for the record?

4 MR. NEU: Yes. My name is Don Neu. I'm the city
5 planning director for the City of Carlsbad.

6 MR. THOMPSON: Does the Carlsbad general plan
7 have any policies or requirements related to visual and
8 aesthetic resources?

9 MR. NEU: Yes, it does. It has several, some of
10 which I included in my written testimony. A number of
11 these policies relate to the city's character as primarily
12 a low-rise community, a community with 40 percent of open
13 space, three lagoons, and an effort to protect those
14 lagoons and the viewsheds around them. Also, basically an
15 emphasis that the City of Carlsbad places on future
16 development in terms of its quality, both aesthetically
17 and functionally.

18 MR. THOMPSON: Do you believe that the city has
19 been successful in these goals?

20 MR. NEU: I very much do agree. I think we've
21 implemented a number of plans that have created the
22 character I believe that the residents here have enjoyed
23 and would like to retain, things such as our open space
24 management plan and our habitat management plan, which
25 again, are limiting development in the city in general and

1 also focusing on the importance of the lagoons to the
2 community and how we protect and provide stewardship of
3 those lagoons.

4 More in the way of development, we have a number
5 of policies relating to preserving the land form in the
6 community. There's been a lot of discussion of where the
7 proposed plant could be viewed from. If you've driven
8 around the community, you'll notice this isn't a flat
9 city. We have a great deal of varied topography. We have
10 standards relating to how those hillsides are modified.

11 We've also been very vigilant in terms of sign
12 restrictions, developing scenic corridor guidelines, and,
13 as has been discussed in previous testimony the last
14 couple of days, things such as building height being very
15 limited within this community.

16 MR. THOMPSON: Thank you.

17 Going back to the general plan policies, is it
18 your opinion that the CECP is consistent with those
19 policies?

20 MR. NEU: I don't believe it is. I think we've
21 tried to make the point that the existing facilities
22 certainly are the most visible construction or development
23 within the community, and I think we've tried to look at
24 the added facilities as only adding to the cumulative
25 impact of an already difficult situation there.

1 In terms of how it would be analyzed, I would say
2 one of the issues that the city would have looked at had
3 we been chartered -- or responsible for permitting the
4 facility would have been, well, what would have been our
5 criteria for deeming significance. And there's been a lot
6 of testimony back and forth about Appendix G of the CEQA
7 guidelines. Certainly we would have used that. But as
8 part of that analysis that we would have considered the
9 city's general plan.

10 MR. THOMPSON: Why did the city have
11 visualizations prepared showing the CECP and the I-5
12 widening?

13 MR. NEU: Well, it's my understanding they were
14 prepared to primarily show the cumulative impacts that at
15 the time the project was moving forward through the Energy
16 Commission process, those simulations or visualizations
17 had been requested and were not available. So the city
18 set about to try to have some visualizations prepared that
19 would show that so that we would have an idea of what the
20 ultimate impact would be.

21 MR. THOMPSON: Would you please summarize the
22 testimony that you've submitted in this proceeding.

23 MR. NEU: My testimony in general was focused on
24 the visual and the aesthetic impacts of the project.
25 Again, it was considering what was prepared in the final

1 staff assessment. And for the purposes of my analysis of
2 that, I assume that the Interstate 5 widening project was
3 going forward. It was indicated as such in the final
4 staff assessment. And that the earthen berm and the
5 landscaping was to be removed.

6 We also assumed that there might be additional
7 impacts on the other side of the project from fire
8 department requirements for access. And based on that, it
9 left a very limited area for landscaping as well as raised
10 a number of questions as far as the feasibility of
11 landscape screening being as dense as has been shown in
12 some of the simulations we've seen.

13 MR. THOMPSON: How does your approach to
14 assessing the visual aesthetic scenic impacts differ from
15 your understanding of how Mr. Kanemoto went about his
16 analysis?

17 MR. NEU: Well, I think in general, from the
18 city's perspective and from my personal perspective, the
19 difference would primarily be the focus on our standards,
20 our community character issues. And the simulations that
21 were done in the final staff assessment, the before and
22 afters, I don't believe we've taken issue with that.
23 We've submitted a number of sites that have been included
24 to show the impacts from these other locations.

25 But in terms of the plans the city has, the

1 limits on development, the heights and other standards,
2 when you applied those as well as our general plan
3 requirements, it just didn't add up to be something that
4 would be consistent or at least something that could be
5 found to be insignificant.

6 MR. THOMPSON: You've referred to your type of
7 analysis as more of a scenic and aesthetic approach. Is
8 that correct? And if so, would you elaborate on that
9 briefly.

10 MR. NEU: Yes. I think with the criticisms of
11 the visualizations we've seen, that we've tried to take a
12 look at the site that would be from multiple vantage
13 points, including other areas of the city, again, because
14 of the terrain and the community.

15 Also taking into account, and I think largely
16 because of our experience locally with the Coastal
17 Commission, we've had instances where a single-family
18 residence -- we've had issues appealed by the coastal
19 staff because a side yard fence wasn't open and had
20 landscaping blocking views to the coast.

21 So it was quite amazing to see that the coastal
22 staff elected not to participate because they've taken
23 some pretty rigid positions about views of coastal
24 resources, particularly in this location with a lagoon, it
25 was amazing to see that they were absent in the

1 proceedings.

2 As far as our analysis, again, the coastal plan
3 in this segment is something that identifies a number of
4 key observation points which were evaluated. I think the
5 difference of opinion is really on the effectiveness in
6 some cases of the mitigation if you assume that the
7 structure heights as proposed will be permitted.

8 MR. THOMPSON: Part of the criticism of the
9 visuals that Mr. Martinez produced were that the exact
10 diameter was supposed to be a little larger and I think a
11 transmission line was supposed to be a little taller or
12 something. With regard to those, do those make any
13 difference in the approach that you used?

14 MR. NEU: I don't believe they do. Again, we
15 were trying to look at ultimate heights and evaluate from
16 the various points within the community what would that
17 impact be. And again, going back to the character of the
18 community, the proposed heights and massing and the
19 untreated exterior of the structures as proposed are just
20 totally not in keeping with the City of Carlsbad.

21 MR. THOMPSON: And has your approach been used in
22 the past?

23 MR. NEU: Yes, it has. You know, one of my
24 responsibilities with the city is to implement the city's
25 environmental ordinances as they relate to the California

1 Environmental Quality Act. So I would say, you know, in
2 every action that we take, we're looking to find
3 compliance with the city's general plan as a starting
4 point and then going from there into the more detailed
5 standards.

6 MR. THOMPSON: Would the other heading on the
7 land use plan place any height limits on development?

8 MR. NEU: Yes. It does it places a 35-foot
9 height limit.

10 MR. THOMPSON: What are the typical requirements
11 for landscaping imposed by the Coastal Commission for
12 development within the coast zone?

13 MR. NEU: Well, within the coastal zone,
14 particularly in areas of great concern such as lagoons,
15 they often would require or will require native
16 landscaping, certainly non-invasive landscaping so that
17 it's not taking over the native species. We have had a
18 lot of experience with that, being the only jurisdiction
19 in north county with an improved habitat management plan,
20 so we've done a lot in terms of developing guidelines for
21 use of native planting.

22 There's also been a great deal of focus on water
23 conservation with the state adopting a water conservation
24 ordinance that became effective the first of this year.

25 So with those things, it will be difficult, I

1 believe, to create a landscape screening that would
2 effectively block the majority of what's proposed.

3 MR. THOMPSON: One of the criticisms that we've
4 heard more than once is the failure of the city to put
5 landscaping, and I assume that they're talking about a
6 tall wall of green trees on our visuals or consider that.
7 Would you respond to that criticism, please.

8 MR. NEU: Well, I would say in general when we
9 evaluate a project within the City of Carlsbad, we try to
10 take the approach that landscaping is there to complement
11 or accentuate the aesthetics of the project, not to be the
12 primary means of making up for its aesthetic failings. So
13 with that in mind, we typically would show in all of our
14 visuals to our decision makers, here's what it looks like
15 without landscaping. We might also show here's a
16 rendering that's 10, 20 years out, which typically a
17 developer may show to try to give a picture as the project
18 mat user. But we're usually focused on here's what it's
19 going to look at on opening day.

20 MR. THOMPSON: And finally, if I may, a wall of
21 trees some hundreds of feet long reaching well into the
22 air, would that kind of visual feature, in your opinion,
23 be either acceptable to the city or consistent with the
24 general plan policies?

25 MR. NEU: Well, I think it create some issues in

1 terms of some of the general plan policies that deal with
2 views to the coast and coastal resources. Obviously,
3 there's an issue there about screening of a negative
4 visual situation versus that screening, but generally
5 speaking, the type of screen wall that's proposed is
6 unheard of I think in the city, and I guess I would say we
7 have some doubts that from a landscaping perspective would
8 be successful.

9 I know the existing screening out there right now
10 with the Eucalyptus trees, there's quite a bit of the
11 trees that you can see through. The lower-level
12 vegetation, again, is somewhat spotty. And you can see
13 that over time, landscaping doesn't last forever, it needs
14 to be replaced.

15 And I do believe one of the proposed conditions
16 of certification addresses that, but what's out there
17 today has not, in my opinion, been taken care of. So it
18 is something that you can't just put in and walk away from
19 and say that you've mitigated forever.

20 MR. THOMPSON: Thank you very much.

21 That completes the redirect.

22 HEARING OFFICER KRAMER: Thank you.

23 Just to mark your slide show pages, we can mark
24 those as Exhibit 221. And we'll discuss bringing that
25 into the record a little later.

1 (Thereupon, Exhibit 221 was
2 marked for identification.)

3 HEARING OFFICER KRAMER: Next would be
4 Ms. Siekmann, or Ms. Miller, your choice, which of you
5 goes first to testify, followed by the other.

6 MS. SIEKMANN: Thank you.

7 DIRECT EXAMINATION

8 MS. SIEKMANN: Since Mrs. Miller has already been
9 introduced, I won't ask her what her name is.

10 But where do you reside?

11 MS. MILLER: I reside at 5299 El Arbol in
12 Carlsbad, 92008, and it's in the community of Terramar.

13 MS. SIEKMANN: Does Terramar have an association
14 of homeowners?

15 MS. MILLER: Yes, we do.

16 MS. SIEKMANN: Are you a member of the Terramar
17 association of homeowners board of directors?

18 MS. MILLER: Yes. I am the president of the
19 board of directors of the Terramar association.

20 MS. SIEKMANN: How long have you been on the
21 board?

22 MS. MILLER: I've been on the board for
23 approximately 14 years and have been the president for
24 about seven years.

25 MS. SIEKMANN: And where is Terramar located in

1 relation to the Encina property?

2 MS. MILLER: We are on the -- the neighborhood
3 located south of the Encina property on the south side of
4 Canon Road.

5 MS. SIEKMANN: And why did you decide to become
6 an intervenor in this proceeding?

7 MS. MILLER: Our neighborhood has always tried to
8 be good guardians of the ocean and coastline. Terramar
9 has also coexisted with Encina for over 50 years while it
10 provided needed electricity to the county of San Diego.
11 The technology of Encina required it to be located near
12 water.

13 When the CECP was proposed, Terramar residents
14 voiced great concern over siting a second power plant
15 along the coast. Since the plant is air cooled and
16 doesn't need ocean water for cooling, siting it on the
17 precious coastline is no longer necessary.

18 Terramar residents wanted to express our concerns
19 regarding the CECP application in the areas of safety,
20 noise, air quality, visual, technology, land use,
21 biological, water, resources, greenhouse gas emissions and
22 more.

23 MS. SIEKMANN: Can you give me some history of
24 what has happened in Carlsbad near our community of
25 Terramar in the last few years?

1 MS. MILLER: As Encina has grown old and
2 obsolete, Carlsbad by the Sea has grown into a beautiful
3 coastal town. In the last 15 years, our coastal zone has
4 developed into a much-desired vacation destination. This
5 has not happened by chance. There has been a concerted
6 effort on the part of the city, developers, and the
7 communities to make Carlsbad a vacation spot that people
8 from around the world desire to visit.

9 I have watched the development of the Sheraton
10 Hotel and Resort, the Grand Pacific Palisade Hotel, the
11 Seapointe Resort, the West Hotel and restaurants, Inns of
12 America, the Crossings golf course and restaurant, the
13 Hilton Garden Inn, and the premium outlet center open for
14 business.

15 A huge attraction for Carlsbad is Legoland; and
16 soon it will have a companion hotel. The Ponto area is
17 slated for a resort development. Another coastal hotel is
18 to be constructed at the edge of downtown Carlsbad.

19 All of these ocean developments have been built
20 within the last 15 years and are within two miles or less
21 of Terramar except for the Ponto development.

22 There is also the famous La Costa Resort as well
23 as the Four Seasons Aviara. Carlsbad is known for our
24 world famous flower fields. And the list goes on and on.

25 MS. SIEKMANN: What are the visual issues with

1 the proposed CECP?

2 MS. MILLER: The proposed site for the CECP sits
3 next to the I-5 freeway. The I-5 freeway is the main
4 thoroughfare to every single resort and establishment
5 listed above. When the I-5 widening occurs, and we all
6 know that will happen, the proposed CECP will be so close
7 to the highway that every tourist, commuter, and local
8 will see it rising out of the ground 109 feet into the
9 air. And no matter what color you paint it or what bushes
10 you plant in front of it, everyone will see it. Instead
11 of Carlsbad By The Sea, we will be referred to as Carlsbad
12 by the two power plants.

13 Our views of the coast and its surroundings are
14 unique. These are treasured pictures in our minds. I
15 live at the coast, and every day I talk to people who have
16 driven long distances to surf, swim, relax, exercise,
17 pray, renew, and spend time with the beauty of the coast.
18 We daydream these treasured views while at work, and it
19 helps get us through the day. These views are the subject
20 of calendars, paintings, photographs, coffee cups,
21 marketing materials, books, and the list goes on.

22 The FSA visual section suggests that painting the
23 power plant will allow the power plant to blend in with
24 nature. I have shared staff's suggestions with others.
25 It would be inappropriate to repeat exactly what the

1 reaction was when I informed them of staff's suggested
2 mitigation.

3 Power plants are industrial buildings no matter
4 what color they are painted. That is why even though
5 there are paintings of the ocean, people want to go and
6 see the ocean itself. There is a difference between a
7 green tree and a green power plant. There is a difference
8 between the sky and a painted power plant emission stack.

9 The city has spent an extraordinary amount of
10 time and money to preserve the future vision of our city.
11 As intervenors, Kerry and I have spent an extraordinary
12 amount of time and our own funds to fight the licensing of
13 the proposed CECP. We have also watched the Power of
14 Vision intervenors spend extraordinary time and money to
15 stop the proposed CECP.

16 Every day the Encina plant gets closer to
17 retirement. When that does happen, the vision of Carlsbad
18 and its economy deserve the opportunity to see the
19 industrial blight removed from our beautiful coast.
20 Please let this happen for us.

21 MS. SIEKMANN: Thank you.

22 In addition, I would just like to say that the
23 coastal -- the California Coastal Act is meant to protect
24 coastal areas as a resource of public importance. The
25 California Energy Commission acting as the Coastal

1 Commission is also supposed to protect the coastal areas
2 through the Warren Alquist Act.

3 The I-5 widening is a future project and,
4 therefore, a visual cumulative impact analysis is required
5 per page 4.1-29 of the FSA. And I have read this, so I
6 will not read it again unless someone wants to hear it.

7 The I-5 widening issue creates cumulative impacts
8 for our community. Cal Trans has made it clear that this
9 project is going to happen. The visual impacts must be
10 addressed in full before any licensing can be contemplated
11 due to page -- staff report 4.1-29 on cumulative impacts.

12 In addition, I would also like to say that there
13 are statements in the visual section of the FSA that refer
14 to views from trains, cars, and the Coastal Rail Trail as
15 brief. Staff states that brief views are not significant
16 and do not affect views significantly.

17 Often a brief view is significant. When a person
18 leafs through a travel magazine trying to find a place to
19 vacation, they will only take a brief view of the pictures
20 offered. Realtors offer brief views of houses to get
21 people interested. Carlsbad is a tourist town. We must
22 depend on brief views to attract individuals to come to
23 our city for enjoyment. The brief view of an industrial
24 power plant in Carlsbad can make a lasting impression.

25 Thank you.

1 HEARING OFFICER KRAMER: That concludes your
2 testimony then?

3 MS. SIEKMANN: Yes, it does.

4 HEARING OFFICER KRAMER: Okay.

5 MS. SIEKMANN: I made it brief, once again.

6 HEARING OFFICER KRAMER: I'm sorry?

7 MS. SIEKMANN: I made it brief.

8 HEARING OFFICER KRAMER: Oh, yes. Thank you.

9 Okay. Then we will begin with cross-examination
10 of the witnesses.

11 Beginning with the Applicant, Mr. McKinsey.

12 CROSS-EXAMINATION

13 MR. MCKINSEY: Bill, I had a couple of questions
14 for you. I just wanted to make sure I understood one
15 character of your testimony. In fact, actually, I have a
16 question about condition VIS-5.

17 VIS-5, if I understand correctly, is proposed
18 specifically to ensure that this project accommodates a
19 potential widening of I-5, correct?

20 MR. KANEMOTO: Yes.

21 MR. MCKINSEY: And so you crafted VIS-5 around
22 some potential I-5 widening project, correct?

23 MR. KANEMOTO: Yes.

24 MR. MCKINSEY: And would you -- how would you
25 characterize what we know about I-5 widening now? In

1 other words, how would you -- we're talking about an I-5
2 widening project, but when you were crafting this
3 condition, did you know precisely or did you just make
4 some assumptions about what the project could be?

5 MR. KANEMOTO: We were provided with a couple of
6 the proposed alternatives at that time and one in
7 particular that was emphasized by Cal Trans staff. And
8 that was portrayed to us as the most likely scenario, so
9 we used that as the basis. And it was the only one that
10 was provided to us in any detail.

11 MR. MCKINSEY: Thank you.

12 And then one other question, I just wanted to
13 make sure it was clear.

14 The original project also proposes visual
15 screening, planting, and landscaping, correct?

16 MR. KANEMOTO: I'm sorry, could you repeat that?

17 MR. MCKINSEY: Well, the basic project, with or
18 without I-5 widening, as proposed by the Applicant and as
19 evaluated by you, includes visual screening, plantings,
20 and landscaping, correct?

21 MR. KANEMOTO: Correct, as condition VIS-2.

22 MR. MCKINSEY: So VIS-2 is the condition that is
23 mandating that required visual screening and landscaping,
24 correct?

25 MR. KANEMOTO: Yes.

1 MR. MCKINSEY: And then VIS-5 is an extra
2 condition to ensure that that landscaping and screening is
3 not undermined, correct?

4 MR. KANEMOTO: Yes, VIS-5 specifically addresses
5 cumulative impacts of I-5.

6 MR. MCKINSEY: Great. Thank you.

7 CROSS-EXAMINATION

8 MR. MCKINSEY: And, Doctor -- I'm sorry, the
9 "Don" looks like a "Doctor." First, in your written
10 testimony, you discussed the -- in fact, you state some
11 opinions regarding the applicability of a project proposed
12 by SDG&E in 1989, which has been referred to as either the
13 1989 NOI or the 1989 SDG&E project, and Mr. Ratliff asked
14 some questions of Mr. Kanemoto about it, but you referred
15 to it in your written testimony as well and you stated
16 some opinions about it.

17 Could you just summarize what your opinion was
18 about the applicability of that project to and the
19 findings in that project to this proceeding?

20 MR. NEU: Sure. I think that one of the reasons
21 it was referenced was trying to get a point in time where
22 the Coastal Commission in their analysis of a project in
23 that general area, what were the things they looked at and
24 what were the conclusions they reached. And realizing,
25 yes, it is a different project, slightly different

1 location, but in relative terms the heights of the
2 structure and proposed use on the coast were comparable.
3 And so that was referenced as background information.

4 They'll say, well, look, when the Coastal looked
5 at it, again, not the same project, but similar character
6 particulars, here's the conclusion of significant impact.

7 MR. MCKINSEY: I'd like to ask you a couple of
8 questions. And I'm looking at your written testimony.
9 And I think you just quoted a similar phrase.

10 When you say a slightly different location, that
11 was also in your written testimony as one of the reasons
12 why the project was applicable, correct?

13 MR. NEU: Yes.

14 MR. MCKINSEY: And did you hear Mr. Kanemoto's
15 testimony about what that project looked like?

16 MR. NEU: Yes, I did.

17 MR. MCKINSEY: And seeing your experience, I
18 think you were here at that time, I think you had just
19 arrived in the city when that project was being
20 considered, right?

21 MR. NEU: Correct.

22 MR. MCKINSEY: So the project was proposed to be,
23 as Mr. Kanemoto noted, right on the west side of the
24 railroad tracks and right on the lagoon and highly visible
25 from Carlsbad Beach Boulevard, correct?

1 MR. NEU: Yes.

2 MR. McKINSEY: And this project is proposed to be
3 on the other side of the railroad tracks, correct?

4 MR. NEU: Yes.

5 MR. McKINSEY: And this project is also proposed
6 to be located at a below-grade elevation, correct?

7 MR. NEU: Partially, yes.

8 MR. McKINSEY: And so I guess I'm just really --
9 you really believe that the findings and conclusions in
10 that 1990 project are applicable and derive some
11 conclusions about this project?

12 MR. NEU: Well, I do believe they do. As an
13 example, we've had Coastal Commission on residential
14 projects west of the 5 say there are peek-a-boo views from
15 the interstate through to the coast and you need to modify
16 the development accordingly to retain some of those views.
17 So the point I was trying to make is that views even from
18 the interstate, as seen from past history with the Coastal
19 Commission, have been something that were to be protected.

20 MR. McKINSEY: But, and if I understand
21 correctly, the essence of your testimony, though, is that
22 you use either CEQA guidelines or consideration of city
23 policies to evaluate a specific project, correct?

24 MR. NEU: Yes.

25 MR. McKINSEY: And what you explained is that's

1 what you did for this project?

2 MR. NEU: Correct.

3 MR. McKINSEY: Okay. I'd like to understand, you
4 saw Mr. Martinez's testimony yesterday, he was the sponsor
5 of a set of exhibits from the city that he -- I think
6 we're calling the visualizations of the project, correct?

7 MR. NEU: That's correct.

8 MR. McKINSEY: And he is the sponsor of them.

9 Are you also sponsoring or endorsing those
10 exhibits? Your testimony earlier seemed to indicate that
11 you had some familiarity with how they were prepared and
12 why. I just want to make sure if you're also endorsing
13 those as being an accurate characterization of the
14 project.

15 MR. NEU: I guess I would say there are things,
16 at least according to what was shown yesterday, that I
17 would agree are inaccurate about the simulations, but from
18 the standpoint of trying to identify generally how the
19 project may be viewed from other locations within the
20 city, I would sponsor it from that perspective.

21 MR. McKINSEY: And in your -- your oral testimony
22 just now, I think you indicated that in doing your visual
23 analysis, you tried to take a look at it from multiple
24 vantage sites and evaluate it from various points in the
25 community, correct?

1 MR. NEU: Yes.

2 MR. McKINSEY: So in making that statement, are
3 you referring to those visualizations?

4 MR. NEU: I was referring to actually going to
5 the key observation points, as indicated in the FSA, as
6 well as just other areas in the community. You can see
7 the existing facilities from areas actually even east of
8 El Camino Real. So it is very prominent.

9 MR. McKINSEY: So when you're referring to the
10 multiple locations, you're not proposing that you've
11 considered other locations other than the key observation
12 points and the city visualizations?

13 MR. NEU: Well, I guess what I would say to that
14 is, you know, working and living in the community, I see
15 the site from many observation points throughout the city,
16 so sort of my background in general of experiencing it on
17 a daily basis, the site, and what is proposed.

18 MR. McKINSEY: So in your assessment of the
19 prominence and visibility of this project, did you
20 consider -- in fact, I think what you're telling me is you
21 did consider the simulations prepared -- well, at least
22 that appeared in the final staff assessment, correct?

23 MR. NEU: Yes.

24 MR. McKINSEY: And you also understand those
25 simulations reflect what were provided in the AFC and

1 modified at several points, so the Applicant's simulations
2 also appearing in the final staff assessment?

3 MR. NEU: Yes.

4 MR. MCKINSEY: So if I read your testimony, one
5 of the particular points you emphasize is, if I understand
6 correctly, is your concern about the high degree of
7 visibility of the project given the I-5 widening project,
8 correct?

9 MR. NEU: Well, that's certainly one of the main
10 issues. I think also just the high degree of visibility
11 given its height and type of views compared to the
12 community as a whole.

13 MR. MCKINSEY: So when you say high visibility as
14 a whole, I mean, I assume you're referring to the view
15 from the various KOPs in the final staff assessment,
16 correct?

17 MR. NEU: Yes.

18 MR. MCKINSEY: And so if I -- if I understand
19 correctly, you're suggesting that the KOPs in the final
20 staff assessment show the project having a high
21 visibility?

22 MR. NEU: That would be my conclusion, yes.

23 MR. MCKINSEY: And so then coming back to my
24 topic, I think in your written testimony you really do
25 emphasize the I-5 widening eliminating screening along

1 I-5, don't you?

2 MR. NEU: Yes.

3 MR. McKINSEY: And I think yesterday you heard
4 the testimony where Mr. Martinez indicated that Mr. Garuba
5 told him not to put in the landscaping and the screening
6 along I-5 in the simulations he prepared, correct?

7 MR. THOMPSON: I think that's a
8 mischaracterization. What I heard yesterday was that
9 Cal Trans told Mr. Martinez not to put in the visual
10 screening.

11 MR. McKINSEY: Okay. Well, we don't have a
12 transcript, so I'll accept that as an objection.

13 So when you evaluated the potential impact of the
14 I-5 widening, you definitely -- you did not consider any
15 screening, any visual screening being in place there,
16 correct, in your written testimony?

17 MR. NEU: No. I think we -- my evaluation was
18 based on the fact that the existing berming and
19 landscaping was going to be removed, then looking at what
20 are the effects after that, because even VIS-5 talks about
21 mature trees being replaced, 24-inch box and larger. If
22 you're familiar with a 24-inch box tree, that's not a
23 90-foot tree.

24 MR. McKINSEY: So if -- again, though, if I
25 understand correctly, your assessment of I-5 widening is

1 that it eliminates that berm and visual screening proposed
2 in the project?

3 MR. NEU: That is correct.

4 MR. MCKINSEY: So is that an assumption that you
5 just took for granted, or did you evaluate using some
6 science or skills that that would occur as a result of the
7 I-5 widening?

8 MR. NEU: That the berming and landscaping be
9 removed?

10 MR. MCKINSEY: Yes.

11 MR. NEU: That was based in part on the comments
12 in the final staff assessment where it looks at the four
13 alternatives. And it states that under the four
14 alternatives they all include removal of the berm and
15 landscaping.

16 MR. MCKINSEY: So you didn't conduct an
17 independent evaluation regarding the probability of an I-5
18 widening project eliminating the berm and landscaping?

19 MR. NEU: I'm sorry, could you ask that again?

20 MR. MCKINSEY: Did you conduct an independent
21 assessment of whether the I-5 widening project would
22 eliminate the berm and the landscaping on it?

23 MR. NEU: I personally did not. I think based on
24 the information we had, the city's project team, that was
25 presented as the scenario as well as what we got from the

1 final staff assessment.

2 MR. MCKINSEY: So you relied on the evaluations
3 of others and took that as an assumption, correct?

4 MR. NEU: Yes, that's correct.

5 MR. MCKINSEY: Do you believe -- no, that's okay.

6 MR. NEU: I will just add, and I think this is
7 related, that I have had several discussions with
8 Cal Trans for the widening project throughout the city,
9 and there's been a great deal of interest on their part
10 about mitigation and how that can and can't be
11 accomplished given right-of-way constraints. So that's
12 been an ongoing discussion we've had with Cal Trans
13 specifically.

14 MR. MCKINSEY: But again, in your testimony
15 regarding the visual impacts of this project combined with
16 a potential I-5 widening, you're assuming that there would
17 be not be any landscaping or a berm there, correct?

18 MR. NEU: I'm assuming that what's existing is
19 removed, and partly, I guess, two scenarios; one that
20 there's difficulty replacing it because of space
21 constraints, and secondly, in the event it can be
22 replaced, planting a brand new landscape material of the
23 size referenced in the condition and what is the impact of
24 that as a starting point with a new facility.

25 MR. MCKINSEY: In your written testimony,

1 besides, I think, citing a general concern over the
2 visibility of the project, you also indicate, and it came
3 out in your oral testimony just now, concern over the
4 degree to which the project complies with city policies
5 embodied in the general plan, correct?

6 MR. NEU: Yes.

7 MR. McKINSEY: Do you look at -- and, in fact, I
8 think you mentioned the Agua Hedionda Land Use Plan as
9 well as another plan you considered.

10 MR. NEU: That's correct.

11 MR. McKINSEY: And isn't it correct that in
12 evaluating a project's consistency you would look at all
13 the plans that apply to that site in trying to determine
14 consistency?

15 MR. NEU: Yes.

16 MR. McKINSEY: And yet if I understand correctly,
17 you haven't put on any testimony regarding the consistency
18 of the project with any other plans that apply to that,
19 correct? I mean, if you have, you can point me at it in
20 your testimony, but --

21 MR. NEU: No, I think just in general terms
22 there's -- in the testimony, the written testimony, there
23 were mentions about city development standards, but not a
24 specific point by point of compliance analysis, you're
25 correct.

1 MR. MCKINSEY: And then finally, in your -- in
2 that evaluation, one other factor you weigh is the
3 potential height, in fact, the planned height of the
4 project as being both a violation of a city requirement
5 but also a factor in the visual effect of the project.

6 MR. NEU: Yes.

7 MR. MCKINSEY: And I wanted to understand,
8 because in your written testimony you have them mixed
9 together I think. And I wanted to understand, do you
10 agree that it's two independent assessments? One of them
11 is a degree to which the project either does or does not
12 comply with a requirement, and the other is the visual
13 aesthetic effect of, say, in this case, that requirement,
14 the height?

15 MR. NEU: Well, I think you could separate them
16 if you so choose, but I think in the end they certainly
17 are interrelated and may be impossible to pull the two
18 apart. At the end of the day, one of the criteria by
19 which the city would judge significance is compliance with
20 its standards and ordinances.

21 MR. MCKINSEY: And so for you the fact that the
22 project would exceed the 35-foot height was a significant
23 factor in why you feel the project has a strong visual
24 impact?

25 MR. NEU: Yes, it is.

1 MR. MCKINSEY: And yet also you feel -- well, so
2 one final question, just so I really understand.

3 When you evaluated the project -- well, two more
4 questions.

5 First, when you evaluated the project, you were
6 considering both how it would look without visual
7 screening, like the potential I-5 widening, but then also
8 how it is portrayed in the final staff assessment.

9 MR. NEU: That's true. And again, I guess I
10 would qualify that with how it would look with the
11 proposed berming landscaping given brand new material and
12 how that does or doesn't successfully screen the plant.

13 MR. MCKINSEY: Right, and I think you provided in
14 oral testimony, for instance, the exhibits that the
15 Applicant put on yesterday regarding how the Applicant
16 feels the project would look with the I-5 widening.

17 MR. NEU: Right.

18 MR. MCKINSEY: So in your -- in your written
19 testimony and your conclusions that the project is highly
20 visible -- I just want to understand -- you feel -- at
21 least it seemed to me -- that you were not considering --
22 well, you've answered this question, and I won't belabor
23 you on it.

24 Let me just ask it this way: Did you find a
25 conflict between the renderings that Mr. Martinez

1 sponsored showing the project highly visible and exposed,
2 and the renderings and the final staff assessment showing
3 the project largely screened?

4 MR. NEU: Well, I guess it depends what you're
5 meaning by "conflict." Certainly they're not showing the
6 same thing. One is showing landscaping, one isn't. The
7 degree to which the landscaping is shown in some of the
8 simulations I think is definitely embellished to a point,
9 that it would be hard to achieve.

10 MR. MCKINSEY: And then one more question.

11 The north bluff visualization sponsored by the
12 city -- and I'm trying to remember the exhibit number --
13 423, showing a view of the site from the north bluff, it's
14 called, I think, "North Bluff," states on it, you're
15 familiar with that, correct?

16 MR. NEU: I may be, but from your description it
17 doesn't sound familiar. Are we talking about the KOP on
18 Harvard Drive across the way?

19 MR. MCKINSEY: It's not referred to a KOP, it's
20 called a viewpoint from north bluff, and it was one of
21 Mr. Martinez's visualizations showing the project from
22 somewhere I think on Carlsbad Beach Boulevard, or maybe
23 perhaps somewhere in the project site, but from the west
24 side. Are you familiar with that?

25 MR. NEU: I'm sorry, it doesn't sound familiar

1 from what I've heard.

2 MR. MCKINSEY: Can we put that exhibit on the
3 screen? 423.

4 This exhibit. Do you recognize this exhibit,
5 423?

6 MR. NEU: Yes, I do.

7 MR. MCKINSEY: And I think earlier you specified
8 this was one of the exhibits that you evaluated and
9 considered as part of your analysis.

10 MR. NEU: Yes.

11 MR. MCKINSEY: So simple question. Can you point
12 to me anywhere in that exhibit where it shows any visual
13 screening or landscaping?

14 MR. NEU: No, I cannot.

15 MR. MCKINSEY: Thank you.

16 No more questions.

17 HEARING OFFICER KRAMER: Thank you.

18 Staff. Mr. Ratliff?

19 MR. RATLIFF: No questions.

20 HEARING OFFICER KRAMER: Power of Vision?

21 MS. BAKER: Sorry. I was expecting someone else
22 to go before me, so I apologize.

23 HEARING OFFICER KRAMER: Well, I think I did skip
24 over the city. If you'd like, we can let them go ahead of
25 you.

1 Are you ready, Mr. Thompson?

2 MR. THOMPSON: Sure.

3 Thank you. I have a couple of questions first
4 for the Applicant's witnesses.

5 CROSS-EXAMINATION

6 MR. THOMPSON: Is the screen that you propose
7 consistent with the policies of the Coastal Act?

8 MR. MCKINSEY: Can I just ask you to be specific
9 about what screening you're referring to?

10 MR. THOMPSON: The wall of tall Redwoods or
11 whatever it is, the green tree wall, the green tree
12 foliage on the east side of the plant between I-5 and --

13 MR. MCKINSEY: The simulations referring to
14 potential I-5 widening and how the landscape berm would
15 change?

16 MR. THOMPSON: Yes.

17 MS. GALE: First, we're not proposing a wall of
18 trees that are redwood trees. That's not correct.

19 I'm not aware of any conflict with the Coastal
20 Plan.

21 MR. THOMPSON: What kind of trees did you -- were
22 you thinking of a specific type of tree when you made
23 those simulations?

24 MS. GALE: The trees we're thinking of, and we're
25 at the conceptual stage, we're thinking of fast-growing

1 evergreen drought-tolerant trees. This could include
2 broadleaf, evergreen, or conifer.

3 MR. THOMPSON: Did you propose any vegetative
4 screening on the west side of the CECP?

5 MS. GALE: I believe condition of certification
6 VIS-2 calls for landscape screening on the west side of
7 the CECP.

8 MR. THOMPSON: Did you do any visualizations or
9 simulations of that?

10 MS. GALE: No, we have not prepared visual
11 simulations of VIS-2.

12 MR. THOMPSON: Did you do any visualizations of
13 the CECP from any of the KOPs, supervising the closure and
14 removal of the EPS structure?

15 MS. GALE: Let's see. I believe you're referring
16 to one of the cumulative projects; is that correct?

17 MR. THOMPSON: Yes. Encina Unit 125.

18 MS. GALE: Yes. Essentially the visual
19 simulations presented in the FSA are simulations that
20 portray the CECP and not any other projects.

21 MR. THOMPSON: Did you do any of these
22 simulations assuming the I-5 widening prior to the
23 publication of the FSA?

24 MR. MCKINSEY: Can I -- I don't know if you want
25 to clarify, either if you're asking when she did them or

1 if you want to know when they were presented or filed or
2 docketed.

3 MR. THOMPSON: How about the date you did those.

4 MS. GALE: You're asking the date that the visual
5 simulations were prepared?

6 MR. THOMPSON: Yes. Approximate is fine.

7 MS. GALE: Give me a moment, please.

8 MR. THOMPSON: Sure.

9 MR. MCKINSEY: Can I ask, why she's doing that,
10 the relevance of the date she prepared them?

11 MR. THOMPSON: Part of the relevance is the
12 Applicant and the Energy Commission staff refused to do
13 these simulations that we've been asking for for months
14 and months, and so the city was forced into the
15 uncomfortable position of trying to come up with these;
16 and then having submitted them, all of a sudden these
17 appear. And I just think from a curiosity standpoint it
18 would be interesting to know when they were prepared.

19 MR. MCKINSEY: Do you think curiosity is a
20 relevant topic for the evidentiary hearings on a power
21 plant?

22 MR. THOMPSON: It often is.

23 MR. MCKINSEY: I've been trying to abstain from a
24 lot of curiosity questions I'd like to ask the city. If
25 you want me to start going into those, I'm more than glad

1 to.

2 MR. THOMPSON: We're not afraid of that, but if
3 that was an objection, we don't need that response on the
4 record. I'll withdraw the question.

5 MR. MCKINSEY: Thank you.

6 MS. GALE: Is there a question I'm supposed to
7 answer?

8 MR. THOMPSON: No, you did fine.

9 MS. GALE: Oh, thank you.

10 MR. THOMPSON: Could I ask that -- this is for
11 the cross of Mr. Kanemoto. Can I ask that the revised
12 Figure 3 in the FSA be put up on the screen? Is that
13 possible?

14 HEARING OFFICER KRAMER: I think that was the
15 first page of the new exhibit, 221.

16 MR. THOMPSON: No. No. I meant the --

17 MR. MCKINSEY: The Figure 3 that we had on the
18 first day.

19 MR. THOMPSON: From the FSA, yes, exactly.

20 HEARING OFFICER KRAMER: So this is the line
21 drawing?

22 MR. THOMPSON: Yes.

23 HEARING OFFICER KRAMER: It might be good to give
24 him an actual paper copy, because it's going to be hard to
25 read on the screen, from the project description though.

1 MR. THOMPSON: My apologies. I should have
2 alerted the audio-visual folks before.

3 CROSS-EXAMINATION

4 MR. THOMPSON: Mr. Kanemoto, do you have a copy
5 of that?

6 MR. KANEMOTO: Are you referring to this one?

7 HEARING OFFICER KRAMER: I think we have it up
8 now.

9 MR. THOMPSON: No, next page.

10 There you are.

11 MR. KANEMOTO: I have a paper copy of it.

12 MR. THOMPSON: Okay. Great.

13 Is this the project that you evaluated?

14 MR. KANEMOTO: Yes. I believe so.

15 MR. THOMPSON: If you look at the east side of
16 the proposed CECP, there's a -- as you go from the CECP
17 going east there appears to be a road, and I think that
18 this is a road that is either 28 or 30 foot wide.

19 Do you see that?

20 MR. KANEMOTO: The access road around the power
21 plant?

22 MR. THOMPSON: Yes.

23 MR. KANEMOTO: Yes.

24 MR. THOMPSON: And then it appears to be some
25 slope of some -- I think Mr. Monosmith agreed it looked to

1 be about 30 or 35 feet going up the elevation.

2 MR. KANEMOTO: Yes.

3 MR. THOMPSON: And then on top of that road there
4 appears to be another perimeter road. And we've been
5 calling it the upper perimeter road, or words to that
6 effect.

7 Do you see that?

8 MR. KANEMOTO: Yes, of course.

9 MR. THOMPSON: Yes. Now, there's some distance
10 between the eastern edge of that upper rim road and the
11 right-of-way of Cal Trans.

12 MR. KANEMOTO: That's right.

13 MR. THOMPSON: And if I understood your testimony
14 in the FSA, that with the widening of highway I-5, that
15 distance would be about eight feet; is that right?

16 MR. KANEMOTO: I believe so.

17 MR. THOMPSON: And now looking at your VIS-1, if
18 I compare these, and correct me here where I am wrong, it
19 appears that there is a wall of some sort on the eastern
20 edge of the lower perimeter road and there's no upper
21 perimeter road.

22 MR. KANEMOTO: That's correct, in that section.

23 MR. THOMPSON: Is this now the project that we
24 should be evaluating? And let me explain why I'm asking.

25 I think our fire department personnel have been

1 evaluating the figure 211, and now if there are the
2 elimination of roads and putting in walls, it would be
3 helpful to know what the project is.

4 MR. RATLIFF: Again, Mr. Thompson --

5 MR. THOMPSON: Yeah.

6 MR. RATLIFF: -- we discussed this previously.
7 This is not the project, this is the cumulative impact
8 analysis. The project is what -- you asked him previously
9 did you analyze this project. And yes, that's described
10 in Figure 3.

11 MR. MCKINSEY: I think you're also asking him
12 what project you should be analyzing. I don't know that
13 the visual witness should be the one telling you what the
14 project is that you should analyze.

15 MR. THOMPSON: Well, when I asked Mr. Monosmith
16 what the project was, he referred me to this figure, 211,
17 and then left it up to the individual task leaders to see
18 if there were changes in the project that were driven by
19 the cumulative projects that they analyzed. And I think
20 it would be helpful to know what the project is.

21 If the project that you're going to build is on
22 211, that's fine. I think our fire department would like
23 to have some wider roads in there, but if the project
24 you're going to build doesn't have these roads and doesn't
25 have the slope, I think it would be helpful to know.

1 MR. MCKINSEY: I think we can agree that the
2 project proposed by the Applicant and evaluated in the FSA
3 is depicted on this figure, and that the I-5 widening has
4 a potential cumulative effect of modifying what you're
5 focusing on, which is the eastern side of that project
6 site. I mean, is that -- but -- is that correct?

7 MR. THOMPSON: I don't know if that's correct or
8 not.

9 MR. RATLIFF: Is the actual issue the issue of
10 the upper fire road, is that what --

11 MR. THOMPSON: Well, I think there's a couple,
12 three issues. One is from a safety standpoint whether
13 there's going to be a wall or a slope; number two, whether
14 there's going to be an upper road for the fire trucks to
15 go on and to help fight the fires; number three, if
16 there's a going to be enough room for mitigation, visual
17 mitigation, I think -- I think it goes into a number of
18 different areas.

19 MR. RATLIFF: Well, it sounds like you're asking
20 the Energy Commission to design the project, the final
21 project for you; and, of course, we didn't do this. The
22 effort here was to show that there was space to provide
23 mitigation and probably for some perimeter road, upper
24 perimeter road as well, which is something I think we will
25 be discussed under the fire safety issue. But I don't

1 think we were trying -- I mean, our conceptual sketch and
2 so forth is not supposed to be a final design or -- we
3 don't know what Cal Trans ultimately will arrive at, we
4 don't know what Cal Trans ultimately will provide for
5 mitigation, we don't know, in other words, how the project
6 will be engineered, which will be worked out presumably in
7 the future, maybe years down the line between NRG and
8 Cal Trans.

9 The real effort in staff's analysis was to show
10 that it is possible to preserve -- for these two projects
11 to be built together and that there would be space to
12 provide mitigation.

13 But to ask the witness, you know, what's the
14 slope going to be when the final design is there, I don't
15 think it's possible for the witness to answer that. This
16 isn't a final design.

17 MR. THOMPSON: I guess I'm used to having a
18 project somewhat defined before it's presented.

19 MR. RATLIFF: And you do. This is not the
20 project. As I said, the project is Figure 3. That has
21 been analyzed. What we're talking about now is the
22 potential cumulative impact of a project where the EIR has
23 not even been released, where there has been no final
24 alignment identified, and the city, of course, wanted the
25 staff, NRG's staff, to do an analysis of that potential

1 cumulative effect, and we have done that the best we can.

2 But we can't tell you exactly what that project
3 might do and how it might be engineered some years hence.
4 That hasn't been proposed to us by anyone to analyze.

5 MR. THOMPSON: But surely if a cumulative project
6 is sufficiently defined for all the parties to consider it
7 in their analysis, if that project is going to cause this
8 project, the CECP, to eliminate roads and to do other
9 things that were evaluated from a fire and safety
10 standpoint, surely that information should be pertinent,
11 and maybe our charge is to look at both designs --

12 MR. RATLIFF: And we agree with that, and we
13 have, but I mean, I guess I'm just saying the level of
14 detail you may be requesting is impossible to provide when
15 we don't have a final proposal or an EIR from Cal Trans.

16 And I guess my -- Allan, my real intent is to
17 keep in line that there is a project proposed that we have
18 analyzed and there is a cumulative impact which is
19 somewhat nebulous and somewhat in the future that we don't
20 have an environmental document for, and we've tried to
21 analyze that as well, but that is not the project that was
22 proposed to the Energy Commission.

23 MR. THOMPSON: I understand, Dick; and you
24 understand where I'm coming from. We have a fire
25 department that says are we going to have an upper rim

1 road, you know, five years from now, ten years from now,
2 fifteen years from now; and I guess my response is, yes,
3 judging from the project that's being -- that is being
4 asked to be approved.

5 MR. MCKINSEY: Well, I think we can concede
6 something that eliminates this as an issue, because our
7 analysis of the potential widening of I-5 does not have
8 that road there; and that's a point of contention about
9 whether that road is required or not, and that is the
10 subject of tomorrow's testimony. So I don't think there's
11 any ambiguity here.

12 Our analysis, the staff's analysis of the
13 potential cumulative effects -- and I think you're not
14 disagreeing with that I-5 widening in its worst-case
15 scenario could eliminate that east upper rim road.

16 HEARING OFFICER KRAMER: And the rim road would
17 be the only road that would go all the way around the
18 excavated area?

19 MR. MCKINSEY: Well, on the rim, yes, that's
20 correct.

21 HEARING OFFICER KRAMER: So otherwise you'd have
22 to go down the ramp and then drive around.

23 MR. MCKINSEY: And, in fact, it will really help
24 for tomorrow if we have a common set of terms. Either we
25 can call it the upper rim road and the road in the basin,

1 but in that design there's an upper rim road and there's
2 another road down in the basin.

3 And one of the issues that you'll hear tomorrow
4 is whether the upper rim road is required on the east side
5 or not, because the city is concerned that that potential
6 cumulative effect is a problem.

7 HEARING OFFICER KRAMER: Okay. Well, that's
8 obviously -- as you pointed out, if we're going to be
9 talking about the road, we don't need to keep Mr. Kanemoto
10 around to talk about that, at least the fire aspects.

11 So, Mr. Thompson, do you have questions further
12 along that line that relate to the visual topic?

13 MR. THOMPSON: No, not on that line.

14 HEARING OFFICER KRAMER: Okay. Please continue
15 then.

16 MR. THOMPSON: Mr. Kanemoto, did you evaluate the
17 visual impacts of the switch yard?

18 MR. KANEMOTO: Yes

19 MR. THOMPSON: Was the visual analysis that you
20 performed consistent with the requirements of the Coastal
21 Act?

22 MR. KANEMOTO: In what respect?

23 MR. THOMPSON: Section 30413-D3 of the Coastal
24 Act requires an assessment of the potential adverse
25 effects that the proposed site and related facilities

1 would have on aesthetic values; and my question is whether
2 you took that into account.

3 MR. KANEMOTO: Well, yes, I --

4 MR. McKINSEY: Can I object? Or at least I would
5 like to -- your statement, I think, had a presumption --
6 was it 30143D?

7 MR. THOMPSON: 3.

8 MR. McKINSEY: 3.

9 -- as requiring the staff to conduct -- is that
10 what you're presuming in that --

11 MR. THOMPSON: No. I asked him did he.

12 MR. McKINSEY: Okay. I just want to make clear.
13 You weren't asking -- I think you were suggesting it was
14 required. But you're asking whether he did an evaluation
15 pursuant to 30143D?

16 MR. THOMPSON: Yeah. If I used the word
17 "required," I did not mean to. I meant to ask if he -- if
18 he took that into -- that requirement of the Coastal Zone
19 Act, that section of the Coastal Act into account when he
20 did his analysis.

21 MR. RATLIFF: Mr. Thompson, just so we can be
22 clear, that act requires the Coastal Commission, when they
23 provide such a report, to consider, among the things, that
24 they consider the visual analysis of any proposed project,
25 or visual impacts, the aesthetic impacts.

1 MR. THOMPSON: The aesthetic impacts, that's
2 absolutely correct. I couldn't have made that argument
3 better myself.

4 MR. RATLIFF: And his analysis of the visual
5 impacts of the project is, in fact, that analysis.

6 MR. THOMPSON: And it may be or it may not.
7 We've been told that the Coastal Act 30413 analysis was
8 distributed throughout the various sections of the AFC,
9 and when I came to the aesthetic one, I thought it was
10 proper to ask the witness on visual impacts.

11 MR. RATLIFF: Well, you're asking him if he did
12 an analysis pursuant to the act, but there isn't any
13 analysis that's required pursuant to the act, assuming the
14 act applies here; and just assuming that, an analysis of
15 visual impacts would be required, but his analysis is such
16 an analysis.

17 MR. THOMPSON: What I asked him was if he took
18 the language of the Coastal Act into account when he
19 performed his analysis.

20 HEARING OFFICER KRAMER: Could you ask the
21 question again? And we'll have Mr. Kanemoto answer.

22 And Mr. Ratliff is bordering on, if not needing a
23 passport as far as testifying at this point, and he
24 doesn't -- he's not a witness, so I'd rather hear the
25 answer from Mr. Kanemoto.

1 MR. THOMPSON: Mr. Kanemoto, my simple question
2 is did you take the Coastal Act requirements into account
3 when you performed your analysis?

4 MR. KANEMOTO: Yes, we definitely did. I mean,
5 as Mr. Ratliff just explained, we're considering the
6 analysis in the FSA as the equivalent analysis that is
7 required under the Coastal Act; however, the conclusions
8 that are required under the Coastal Act are discussed in
9 the lower section of the FSA in which we talk about the
10 consistency with the Coastal Act, and we're talking -- in
11 that discussion we're specifically talking about
12 consistency with the portion of the Coastal Act that you
13 referred to, 30251.

14 MR. THOMPSON: What's the difference between a
15 visual and an aesthetic analysis?

16 MR. KANEMOTO: That's a good question.

17 MR. THOMPSON: Thank you.

18 MR. KANEMOTO: I don't think there is one,
19 frankly.

20 MR. THOMPSON: Were you here when Mr. Donnell
21 testified that the city does not allow trees and foliage
22 on underground sewer lines?

23 MR. KANEMOTO: I'm sorry, could you repeat that?

24 MR. THOMPSON: Were you here when Mr. Donnell,
25 Scott Donnell testified that the city does not allow trees

1 on top of sewer lines?

2 MR. KANEMOTO: No, I was not.

3 MR. THOMPSON: Finally, hopefully finally, are
4 you aware that the redevelopment agency has designated
5 that whole area as blight?

6 MR. KANEMOTO: As what?

7 MR. THOMPSON: Blight.

8 MR. KANEMOTO: No, I wasn't aware of that.

9 MR. THOMPSON: I think that's it. Thank you very
10 much.

11 HEARING OFFICER KRAMER: Thank you.

12 Power of Vision?

13 MS. BAKER: Yes.

14 CROSS-EXAMINATION

15 MS. BAKER: Good morning everyone. Thank you for
16 your attention and listening.

17 I'm the one that's been responsible for preparing
18 the questions on visual today, and I've really struggled
19 with this, because up until today, or this section rather,
20 it seems like there's been some pretty clear facts about
21 what is and what isn't. And staff and the Applicant's
22 experts say that this -- it's not a visual or aesthetic
23 issue, and the City of Carlsbad and from many of the
24 residents you heard from last night say it is a visual
25 blight.

1 So, Mr. Kanemoto, my question to you is -- and
2 Power of Vision submitted over 200 photographs that have
3 been submitted by residents of the current power plant,
4 what we see every single day from east Carlsbad, north
5 Carlsbad, south Carlsbad, the beach, you can't really be
6 anywhere in Carlsbad without a view of this project.

7 So my question to you is, in many of the power
8 plant siting cases that you've worked on, is this project
9 somewhat unusual in the fact that thousands of residents
10 have a direct view not only of the existing project but of
11 the new project? And many people and residents of this
12 community live up on the hill, so no amount of screening,
13 no amount of fast-growing trees that might be allowed in a
14 coastal zone are ever going to screen the CECP.

15 So I'm curious, in your experience, what has your
16 experience been on working on power plant siting cases in
17 a visual context where such a situation exists where so
18 many people have direct views? This isn't in a backyard,
19 this is in a front yard, so to speak.

20 MR. RATLIFF: Can you tell me what the question
21 was? I didn't hear the question.

22 MS. BAKER: Oh, I thought I asked the question.

23 It was, in his experience working on visual
24 impacts, has there been a case similar to this one where
25 so many residents as well as commuters have a direct view

1 of the project, especially considering that Carlsbad is
2 very hilly and we look down on the project.

3 MR. RATLIFF: Thank you.

4 MR. KANEMOTO: I can't think of any of the
5 projects that were exactly like that, but the concerns
6 that you're talking about were addressed from the
7 perspective of those points of view that we found in the
8 viewshed at a high elevation where you're looking down at
9 the site.

10 And actually, some of those -- at least one of
11 those viewpoints was simulated and appeared in the AFC and
12 the staff assessment. And there were conclusions that
13 were produced on the basis of those views, and as you're
14 aware of what our conclusions were, and that was because
15 of the fact in those simulations, the preponderance of the
16 power plant from those high elevation viewpoints, I
17 believe it's Panillo Drive, are substantially screened or
18 screenable by a screen that height.

19 MS. BAKER: Well, I'm familiar with one of the
20 KOPs that you picked, I believe it's the Capri Trail
21 that's up off Sunnyhill Drive in Carlsbad, and you say
22 that it's -- you've visually mitigated it, but isn't it
23 really a matter of opinion? Because I saw those
24 photographs and screening, and I think there are many
25 residents who are experts in a sense because we look at

1 this every single day. You're just here for a couple
2 days, you know, you're not up on the hill looking down at
3 this.

4 So my question is how do we solve this matter of
5 opinion where you say it's visually mitigatable, and the
6 residents and the people say it isn't. So how is this
7 solved?

8 MR. RATLIFF: I'm sorry, I don't understand.

9 MS. BAKER: Again, I'm asking how is this
10 resolved where -- where -- where staff says that even from
11 high elevations the view of the CECP is mitigatable, and
12 yet residents and people who view this site every single
13 day say it's not.

14 So my question is how do we resolve this
15 conflict?

16 MR. RATLIFF: Well, that -- I mean, I don't want
17 to object to your question, I want you to get an answer,
18 but I don't know if you can expect the witness to tell you
19 how you resolve the fact that people have different
20 opinions.

21 MR. SIMPSON: I'm sorry, the feedback is making
22 it difficult for me to hear some of the things that are
23 going on here.

24 MR. KANEMOTO: I think my microphone --

25 Okay. Well, I think the one tool that could be

1 used is a simulation of a mitigated condition from those
2 viewpoints that everybody involved agreed were accurate.

3 In other words, the analysis of those viewpoints
4 that appear in the staff assessment do not show a
5 mitigated condition. And that was the basis for condition
6 VIS-2, is we recognized right away that there was a need
7 for, you know, significant fill-in of the existing screen,
8 and that's essentially what we're calling for in VIS-2.

9 MS. BAKER: Well, I guess the question is then,
10 if you're calling for mitigation in VIS-2, are there trees
11 that grow high enough to totally screen smoke stacks from
12 views everywhere? I don't believe that's the case.

13 MR. KANEMOTO: I agree with that. We don't
14 dispute that. We encounter this on many cases actually,
15 is that it's very difficult to completely screen a plant
16 including the stacks. That's not the measure that we have
17 to use to determine whether a visual impact is significant
18 or not. Visibility, per se, is not normally the criterion
19 for visual impact. The only times I'm aware that that
20 could be is if it's specifically called for in some
21 adopted ordinance or policy or so on.

22 MS. BAKER: Okay. Thank you.

23 CROSS-EXAMINATION

24 MS. BAKER: And then, Ms. Gale, I was curious
25 about -- well, maybe I'm not sure who should answer this

1 question.

2 Who picked the KOPs?

3 MS. GALE: There was -- are we on here? Can you
4 hear me?

5 Good.

6 Yes, the process of selecting key observation
7 points involved some field study, photo documentation,
8 review of public policy documents in a collaborative
9 consultation process with our office and CEC staff.

10 MS. BAKER: Okay. Thank you. My curiosity is on
11 the one -- and I'm not sure, I apologize for not knowing
12 the exact number, but it's the view where you're going
13 south on I-5.

14 MS. GALE: That would be -- yeah, KOP 6.

15 MS. BAKER: Why was that chosen rather than a
16 direct view of it when you would be next to the project?
17 Because that view, you're looking kind of south, and
18 there's a bluff as opposed to -- it seems like a more
19 accurate view of that would be as if you were directly
20 parallel to the proposed site.

21 MS. GALE: Well, let me just step back for a
22 moment and say that we believe strongly that the I-5
23 corridor is an important public view corridor for analysis
24 purposes; and for that reason, we recommended two views
25 from I-5, one from southbound and one from northbound.

1 When you are traveling southbound and you cross
2 the lagoon, as you're crossing the lagoon and approaching
3 the site, the closer you get to the CECP site, the steeper
4 the bluff and the more obscured the site becomes. So in
5 other words, you approach it and you get a close range
6 view toward the site where the CECP will be visible
7 partially. However, as you get closer, the bluff actually
8 obstructs your view from the car.

9 MS. BAKER: All right. I won't debate that point
10 with you.

11 I'm just curious about -- and again, I'm not
12 really sure who to answer this question to, maybe all of
13 you. I'm just curious about the kind of trees, the
14 long-term maintenance of the screening.

15 It seems like a condition that you all are saying
16 that you put the trees in, you put the undergrowth in.
17 We're in a drought here in southern California. I'm just
18 worried that you all are relying on the screening of the
19 trees and the undergrowth to screen the CECP from ground
20 level, and over time -- I believe Mr. Neu or someone else
21 touched on this a bit -- that the trees are going to die.
22 There's drought. Who's going to take care of them? What
23 assurances do the people of Carlsbad have that that
24 viewshed will be protected by the screening materials that
25 you've suggested?

1 MS. GALE: Bill, do you want to take that first?

2 MR. KANEMOTO: Maybe I should address that.

3 That sounds like something that could easily --
4 and it would probably be a very good idea for something
5 like that to be included in the condition in the
6 verification of --

7 MS. BAKER: And who would be, as a resident,
8 could I call up whoever would be in charge of this and say
9 it doesn't look good? Is it the City of Carlsbad who's
10 going to be charged with keeping an eye on this? I mean,
11 I just foresee struggles on how that's going to play out
12 over time.

13 MR. KANEMOTO: There are precedents for that.
14 That's a typical type of measure that's used routinely as
15 part of lighting and glare mitigation measures on
16 projects. In other words, the verification calls for a
17 complaint resolution form and a process by which those
18 complaints can be resolved. It requires an annual report
19 that summarizes all the complaint that were made and
20 whether or not they were addressed, so on and so forth.
21 That could be included in this set of conditions.

22 MS. BAKER: Okay. Thank you.

23 Would you recommend that that happen?

24 MR. KANEMOTO: I would.

25 MS. BAKER: And who is actually responsible for

1 that? Because I believe I've heard the Applicant suggest
2 that Cal Trans is going to be responsible for the visual
3 mitigation. Or is the Applicant responsible?

4 MR. MCKINSEY: Can I ask Marsha to also answer
5 that question? Because I think she can point out
6 something that goes directly to what you're asking about
7 that's already required in the conditions of certification
8 in VIS-2, this is already there. I mean, I'd end up
9 redirecting her, but --

10 MS. BAKER: I'm sorry, say that again.

11 MR. MCKINSEY: I would end up redirecting her to
12 do this anyway.

13 MS. GALE: Is this on maintenance?

14 MR. MCKINSEY: Yeah.

15 MS. GALE: Is the question on maintenance?

16 HEARING OFFICER KRAMER: And monitoring success.

17 MR. MCKINSEY: I can -- I can do it. I didn't
18 mean to interrupt.

19 MS. GALE: Would you like me to speak to this?
20 Or I think we're on VIS-2 maintenance procedures including
21 any needed irrigation and plan for a routine annual or
22 semi-annual debris removal for the life of the project. I
23 think -- is that the portion of VIS-2?

24 There has been some language drafted in the VIS-2
25 measure, and perhaps there can be further discussion on

1 this, I don't know, but I think Mr. Kanemoto has included
2 some language that begins to address the question you
3 asked.

4 MS. BAKER: And is that a condition of
5 certification?

6 MS. GALE: Yes.

7 MR. RATLIFF: Yes. And in the verification, if
8 you look in the last paragraph, not only is the
9 responsibility on the project owner, but the City of
10 Carlsbad has the ability to, with a concurrence of the
11 compliance project manager, to require the Applicant to
12 replace dead or dying vegetation for the life of the
13 project.

14 MS. BAKER: Okay. Thank you.

15 And then one final question for Ms. Gale.

16 I noticed yesterday in your simulation where you
17 had what it's going to look like with the mitigation and
18 the trees, and you have a dense wall of underscreening and
19 a dense wall of trees. I've just never seen any actual
20 on-the-ground landscaping that truly looked like that.
21 Could you address your simulation, please?

22 MS. GALE: I think you may be referring to the
23 Exhibit 170 and 171, that the view from -- it's a computer
24 rendering from southbound I-5?

25 MS. BAKER: Yeah. I, just in practice, you know,

1 as a city planning commissioner and a resident, I've just
2 never, never seen understory plantings or trees that are
3 that dense and that screen; so I'm just curious, your
4 methodology or how you really truly believe that will
5 look.

6 MS. GALE: Right. Well, we've shown a conceptual
7 rendering. It is based on a set of assumptions. And I
8 can tell you what those assumptions are. Is it a highly
9 realistic image? It is not. However, the assumptions are
10 based on engineering data for ground elevation and slope,
11 for growth rate of the trees, spacing of the trees and
12 spacing of the shrubs.

13 Starting with the trees, we assumed a on-center
14 spacing of 16 to 18 feet apart. It's a relatively tight
15 spacing of trees to give density of canopy, it's a spacing
16 that will allow the trees to grow and be long lived.

17 Shrub spacing could be variable. Something on
18 the order of two to six feet on center for fast-growing
19 evergreen shrubs. That could be shrubs in a natural
20 setting might grow to 20 feet in height. In this case we
21 don't need them to grow that tall.

22 So there are a number of assumptions we've used
23 on the plant materials spacing and the growth rate. For
24 example, the height of the trees at five years is shown to
25 be 20 feet, which is not at all unreasonable if you assume

1 at planting those trees would be six feet tall, and a
2 growth rate of approximately three feet per year for trees
3 that are irrigated and maintained would get you to
4 20 feet.

5 And does that answer your question?

6 MS. BAKER: Well, sort of. I guess that there is
7 some question I have on what kind of shrubs will actually
8 grow under trees and the amount of water that would be
9 required and the kind of shrubs and trees that will grow
10 under drought conditions that will be allowed in a coastal
11 zone.

12 MS. GALE: Well, those are very good questions,
13 and I believe there are species that will meet our
14 criteria. An additional criteria for the shrubs, of
15 course, is that they need to grow adjacent to a freeway.
16 So it is a reasonable question.

17 I could say two potential species would be Lemon
18 Berry, that's a Rhus genus; or Petal Spurium. Those are
19 two possible shrub species that could meet the
20 requirements here in this location. However, there are,
21 I'm sure, others as well.

22 MS. BAKER: Are they native, to your knowledge?

23 MS. GALE: The Rhus is. The Lemon Berry is a
24 native, yes.

25 MS. BAKER: Okay. Thank you.

1 Do you have any idea how long it would take
2 before it would be fully screened? Like how many -- you
3 say five years, but I can't help but think that's somewhat
4 optimistic. I mean, how long would it be before it would
5 be fully screened do you believe in your professional
6 judgment?

7 MS. GALE: I think what we showed in the
8 simulation images suggest from that perspective on
9 southbound I-5, within five years is a reasonable time
10 frame. I think given the whole conceptual nature of where
11 we are with the design data, et cetera, it -- I wouldn't
12 be able to give you a more precise answer.

13 MS. BAKER: Okay. Thank you. So for five years,
14 it is a problem, visually for up to five years.

15 MR. KANEMOTO: Is it okay for me to add something
16 at this point?

17 HEARING OFFICER KRAMER: Yes, go ahead.

18 MR. KANEMOTO: Well, I -- we did find some
19 interesting information because we were wondering the same
20 question, of course; and I spoke with some arborists about
21 this question and got some surprising answers, but it
22 depends on the species that we're talking about, of
23 course.

24 But they pointed out to me that if we were
25 talking about the possibility of non-native species, that

1 they could actually achieve -- and this surprised me, as a
2 landscape architect -- growth rates of between six and
3 twelve feet per year if they're properly managed and with
4 that objective.

5 MS. BAKER: Could I just ask a follow-up question
6 then?

7 Mr. Neu, would non-natives be allowed in that
8 location?

9 MR. NEU: Well, again, I guess that's going to be
10 up to what kind of standards apply. With the water
11 restriction requirements, it's my understanding that the
12 new laws would have you work within a water budget or
13 allowance for your project; so however that was allocated
14 in this particular case, if this is the primary area and
15 other areas of the site are minimally landscaped, perhaps,
16 but without doing that kind of analysis, I couldn't say
17 for sure yes or no.

18 MS. BAKER: Okay. I have no more questions.

19 HEARING OFFICER KRAMER: Thank you.

20 Terramar.

21 CROSS-EXAMINATION

22 MS. SIEKMANN: Ms. Gale, I'm going to talk about
23 cumulative effects.

24 So looking at KOP 4, 3, 2, and 7.

25 HEARING OFFICER KRAMER: This is from the staff

1 assessment?

2 MS. SIEKMANN: Yes.

3 So do you know what I'm talking --

4 MS. GALE: Yes. I'm trying to catch up to you
5 here.

6 MS. SIEKMANN: That's okay.

7 MS. GALE: You said 4, 3 --

8 MS. SIEKMANN: 2 and 7

9 MS. GALE: Okay.

10 MS. SIEKMANN: Okay. So with -- in these KOPs,
11 the second plant is included, correct, in the visual
12 renderings?

13 MS. GALE: I'm sorry?

14 MS. SIEKMANN: You see the second plant's -- the
15 stacks from the second plant included.

16 MS. GALE: The CECP?

17 MS. SIEKMANN: Yes, absolutely.

18 MS. GALE: Okay. Yes.

19 MS. SIEKMANN: Both Encina and the CECP are in
20 those pictures.

21 MS. GALE: Right. The top image is an existing
22 photograph, so that clearly shows existing conditions.

23 MS. SIEKMANN: You're absolutely right. It's the
24 bottom ones where you have -- the top ones you just have
25 Encina, the bottom ones you have both plants.

1 MS. GALE: Yes.

2 MS. SIEKMANN: So my question is, isn't it true
3 if -- on the top ones you can see one power plant, on the
4 bottom ones you can see two power plants. Isn't that
5 considered an industrial intensification of view?

6 MS. GALE: Your terminology confuses me a bit.

7 MS. SIEKMANN: Well --

8 MS. GALE: Industrial --

9 MS. SIEKMANN: -- those are industrial plants --

10 MS. GALE: Industrial intensification of view.

11 MS. SIEKMANN: When you can only see one and then
12 you can see two, wouldn't that be an intensification?

13 MS. GALE: Well, from a land use, if you're
14 talking about land use --

15 MS. SIEKMANN: No, I'm just talking about view.

16 MS. GALE: We generally don't use the term of
17 "intensification" in terms of visual impact assessment
18 terminology. So I -- I wouldn't characterize it exactly
19 that way.

20 MS. SIEKMANN: But using those words, isn't it an
21 intensification of view of the industrial power plants
22 when you add two more stacks to the picture?

23 MR. MCKINSEY: I think the witness is indicating
24 we may need to define "intensification" if you want her to
25 then have an opinion on that.

1 MS. SIEKMANN: It's a higher impact.

2 MS. GALE: Yeah, yeah, I understand, if you would
3 like to characterize the change in that manner; I would
4 not use that language myself.

5 MS. SIEKMANN: But I am. And so I just -- do you
6 agree with me?

7 MS. GALE: No, I don't agree with you.

8 MS. SIEKMANN: You don't agree that that's an
9 intensification, that you see more power plant stacks
10 than -- do you see two more stacks?

11 MS. GALE: I see a visual change, and we have
12 characterized that in a manner that describes it as an
13 incremental change with a portion of the new CECP being
14 partially visible and screened.

15 MS. SIEKMANN: Okay. Thank you.

16 Is your landscape plan drought tolerant?

17 MS. GALE: I'm thinking you're referring to --
18 let's see a figure -- let me find the landscape plan just
19 to make sure we're talking about the same thing.

20 MR. MCKINSEY: Yeah, or maybe if you want to be
21 specific.

22 MS. SIEKMANN: Let's just talk about the I-5
23 widened landscape plan.

24 Is it drought tolerant?

25 MS. GALE: Now, we have not yet prepared a

1 landscape plan for the I-5 widening.

2 MS. SIEKMANN: Okay. Then, just --

3 MR. McKINSEY: I think what you're trying to ask
4 her is what she's considering in terms of the types of
5 plants when she evaluated the screening --

6 MS. SIEKMANN: Yeah, the entire plant, is it
7 drought tolerant.

8 MR. McKINSEY: And what may be throwing it off is
9 the word "plan" is what's required to be filed under
10 VIS-2, would actually specify that. But what you're
11 getting at, I think, you know, what she's considering, the
12 types of plants she considered in the visual analysis and
13 whether those are drought tolerant or not, right?

14 MS. SIEKMANN: Is that -- are they?

15 MS. GALE: Let's see. Just -- if I could attempt
16 to understand and clarify at the same time. There is a
17 conceptual landscape plan that's been prepared for the
18 CECP.

19 MS. SIEKMANN: Yes.

20 MS. GALE: And that was submitted. It's a
21 preliminary conceptual plan, and it does include both tree
22 and shrub suggested species. And those are drought
23 tolerant in general. And some of them are native plants.

24 MS. SIEKMANN: Was there any grass included in
25 that -- what did you call it?

1 MS. GALE: It's a conceptual --

2 MS. SIEKMANN: Yeah, in your --

3 MS. GALE: -- landscape plan. And I can find it
4 and refer to a figure number if that's needed. And I
5 probably should look at it --

6 MS. SIEKMANN: It just kind of looked to me like
7 it had grass, and so that's why I wondered is there grass
8 in it.

9 MS. GALE: I better check, just so I'm --

10 MS. SIEKMANN: Okay. Thank you. That would be
11 fine.

12 MS. GALE: -- not relying on my memory. I'm more
13 familiar with the tree and shrub species.

14 MR. MCKINSEY: Well, let me understand. Were you
15 asking about the conceptual landscape plan, or were you
16 asking about the visual rendering and what that assumes?

17 MS. SIEKMANN: Well, it would be the visual
18 rendering there I would have seen the grass on.

19 MR. MCKINSEY: Okay. So she's not, per se,
20 asking about the landscape concept plan.

21 MS. GALE: Okay. Just to finish that thought,
22 there is no grass proposed.

23 MS. SIEKMANN: In the visual rendering is there?

24 MS. GALE: Now we're talking about the I-5
25 widening.

1 MS. SIEKMANN: Okay.

2 MS. GALE: So, again, for the I-5 widening visual
3 simulations there is not yet a landscape plan. There has
4 been some preliminary conceptual thinking about species.

5 What I would say with respect to grasses, if
6 we're going to have three-to-one slopes along the edge of
7 a freeway, I'm assuming there will need to be some erosion
8 control method, and that will be done either with plant
9 material or other mechanical techniques; it just simply
10 has not been designed yet.

11 MS. SIEKMANN: Okay. Okay. Thank you.

12 Now, yesterday you referred to some numbers like
13 168, 167, I'm not exactly -- I'm so sorry. Those numbers
14 referred to?

15 MS. GALE: I'm thinking you're referring to
16 exhibits.

17 MS. SIEKMANN: Yes.

18 MS. GALE: Visual exhibits.

19 MS. SIEKMANN: Okay. So I have questions about
20 on 168.

21 MR. MCKINSEY: Would you like it up on the
22 screen?

23 MS. SIEKMANN: That would be great, because it's
24 so hard to remember from yesterday.

25 There's a -- I think, if I got the number

1 correct, because it's so hard since it was yesterday, is
2 this the exhibit that shows the new berm with the I-5
3 widening?

4 MS. GALE: Just to review very quickly, I believe
5 there was a set of six -- four images, and Exhibit 167
6 shows the widened I-5 freeway and the CEC- -- I'm sorry,
7 it's Exhibit 168. 168.

8 MS. SIEKMANN: Yeah. And it shows the new berm.

9 MS. GALE: It does. It shows the new berm.

10 MS. SIEKMANN: Who is responsible for creating
11 that berm, for putting that berm there?

12 MS. GALE: I'm not sure that's a question for me
13 to answer from a visual standpoint. We described the
14 technical parameters and assumptions and the berm would be
15 located within the CECP site.

16 MS. SIEKMANN: Well, if -- I mean, since you work
17 for the Applicant and that was put in there by the
18 Applicant, is -- I just wondered is that the
19 responsibility of the Applicant or is it the
20 responsibility of Cal Trans?

21 MS. GALE: When you say "responsibility," that --

22 MS. SIEKMANN: To pay to put it in there.

23 MS. GALE: Yeah, that includes a lot of things.
24 So I can speak to a couple of those in terms of
25 responsibility.

1 I think we've demonstrated that the site, there
2 is sufficient room on the site to accommodate a berm such
3 as we've described.

4 MS. SIEKMANN: Yes, I'm aware.

5 MS. GALE: And according to the condition of
6 certification VIS-5, I believe it would be the
7 responsibility of the owner to maintain that berm.

8 MS. SIEKMANN: Maintaining is not my question.

9 My question is --

10 MS. GALE: As to who would pay for all of the
11 costs associated with the land and the construction and
12 the planting, I'm simply not able to answer that at this
13 time.

14 MS. SIEKMANN: How would I be able to find out?

15 MR. MCKINSEY: The simple answer is I don't think
16 anybody really knows because there isn't an I-5 -- there
17 isn't a Cal Trans condemnation proceeding that's begun.
18 You know, Cal Trans has to acquire rights in that land,
19 and those could go one of two ways. It could be a
20 condemnation where they adversely take them from NRG in a
21 legal proceeding, or they could reach agreement with NRG
22 on a land transfer. And the terms of either the
23 condemnation or land transfer would have all this -- this
24 stuff decided about who pays who how much money.

25 MS. SIEKMANN: So there's a possibility that the

1 state would end up paying for that berm?

2 MR. MCKINSEY: Yeah, certainly. Because
3 Cal Trans -- again, and it may or may not be clear in the
4 end who's paying for what, because it could just be a
5 single dollar amount that's involved as part of a
6 negotiation or a court-ordered condemnation valuation.

7 MS. SIEKMANN: In your visual of the I-5
8 widening, I guess that's 168 -- just in the visual of your
9 I-5 widening -- it went so fast, I'm so sorry, don't know
10 which number. The one that -- where's the six-foot wall
11 on that one? Could you show me where it is?

12 MS. GALE: Okay. So we're still -- we're
13 referring to the photograph, the photographic view and the
14 visual simulation?

15 MS. SIEKMANN: I can't answer that. I just --

16 MS. GALE: Is it the picture --

17 MS. SIEKMANN: No, I think it was not the
18 picture, I think it was --

19 MS. GALE: Are you referring to 165?

20 MS. SIEKMANN: The cross-section.

21 MS. GALE: 165.

22 MS. SIEKMANN: I apologize.

23 MS. GALE: That's all right. I'm trying to keep
24 up with you.

25 MS. SIEKMANN: Yeah, I'm just trying to keep up

1 with you.

2 MS. GALE: I believe you're referring to the line
3 drawing that had two cross-section drawings on it,
4 Exhibit 165 --

5 MS. SIEKMANN: Yeah, I think that's it.

6 MS. GALE: Is this the exhibit --

7 MS. SIEKMANN: I think that is.

8 MS. GALE: -- that you're asking about?

9 Okay. All right.

10 MS. SIEKMANN: Where is the six-foot wall?

11 MS. GALE: The six-foot wall -- someone's got a
12 pointer. Is that right? Someone is helping here on your
13 screen.

14 MS. SIEKMANN: Oh, there's the six-foot wall.

15 MS. GALE: So when you look at the widened
16 roadway at the very edge, the left edge of the roadway you
17 see a line basically, a vertical line that's scaled at
18 six feet.

19 MS. SIEKMANN: Okay.

20 MS. GALE: And then there's a second wall behind
21 that; that is, in fact, the retaining wall.

22 MS. SIEKMANN: So when someone drives by, will
23 they be looking at a wall?

24 MS. GALE: Well, that's a very interesting
25 question. And because we don't have a final design for

1 the widening, we can't answer it definitively. The
2 drawings we have from Cal Trans indicate that there will
3 be a wall along a portion of the CECP.

4 MS. SIEKMANN: Okay. Thank you.

5 And may I ask staff a question?

6 Did you -- when you did your cumulative impacts
7 of the widened I-5, did you take into account that drivers
8 along the scenic I-5 corridor would be looking at a wall?

9 MR. KANEMOTO: No, I wasn't aware that that was a
10 requirement at that time.

11 MS. SIEKMANN: Okay. And then also, because --

12 MR. KANEMOTO: I'm still not clear that that's
13 the requirement.

14 MS. SIEKMANN: Because the decommissioning of
15 Units 1, 2, and 3 are part of the same -- it's part of the
16 project, did you do visual impacts of the decommissioned
17 one, two, and three?

18 MR. KANEMOTO: No, we discussed that earlier,
19 remember. We didn't address that in the visual section,
20 because as far as I'm aware, it has no visual
21 implications. In other words, the building is not going
22 to be taken down, so they'll just be inside of the
23 building.

24 MS. SIEKMANN: But as this is a -- I don't know
25 what you would call it, a change in the project, that is

1 part of the project, would not visual impacts be
2 considered and now would be a good time to do visual
3 impacts of one, two, and three for all those driving along
4 the scenic coast highway?

5 HEARING OFFICER KRAMER: Well, he just answered
6 your question and said that there are no visual changes,
7 therefore, there's nothing to analyze.

8 MS. SIEKMANN: Okay.

9 HEARING OFFICER KRAMER: I mean, maybe inside the
10 building, but that's not a place that he looks.

11 MS. SIEKMANN: Excuse me, but isn't -- I mean,
12 it's already inside of a building, so wouldn't --

13 HEARING OFFICER KRAMER: Right, but all that's
14 going to happen is those units will quit operating, but
15 the building is going to stay there at least until all
16 five units quit operating.

17 MS. SIEKMANN: So only visual impacts impact the
18 new part that's built, not the old part that's going to be
19 decommissioned and sitting on the coast highway?

20 HEARING OFFICER KRAMER: Well, decommissioning
21 simply means that it sits there and doesn't operate, but
22 it doesn't change; that's his point.

23 MS. SIEKMANN: Okay. I just thought there would
24 be visual impacts that we would have because of the change
25 in the project.

1 HEARING OFFICER KRAMER: No, he says he hasn't
2 identified any; so I think he's answered your question.

3 MS. SIEKMANN: Okay. Let's see.

4 This is for the city.

5 Does city policy include Coastal Commission
6 policy as you act as the Coastal Commission sometimes when
7 doing projects and visual impacts?

8 MR. NEU: Yes, it does. For the majority of the
9 city we have obtained what's called coastal permit
10 authority. The Agua Hedionda lagoon area is the one area
11 we do not have local permitting authority.

12 MS. SIEKMANN: Okay. Thank you.

13 Oh, the proposed greening wall on -- this is for
14 staff.

15 The proposed greening wall on VIS-1, if that --
16 if that wall were put there, has staff shared this
17 information with noise and vibration and other areas of
18 the FSA, including safety?

19 MR. KANEMOTO: I'm sorry, could you remind me of
20 what you're referring to? The screening wall?

21 MS. SIEKMANN: Okay. VIS-1, that's the
22 Applicant's exhibit I think, or is it --

23 HEARING OFFICER KRAMER: Oh, I think we all
24 assumed you were talking about a condition.

25 MS. SIEKMANN: It's actually staff's, VIS-2 that

1 was passed out this morning.

2 MR. KANEMOTO: Oh, yes.

3 MR. McKINSEY: Page 3 of the staff's exhibit.

4 MR. KANEMOTO: Could you repeat?

5 MS. SIEKMANN: See, it says proposed row, 8+4
6 barrier. I just assumed that was a wall.

7 HEARING OFFICER KRAMER: "R-O-W" is right-of-way.

8 MS. SIEKMANN: I'm sorry?

9 HEARING OFFICER KRAMER: "R-O-W" is right-of-way.

10 MS. SIEKMANN: Oh, okay. Then I'm sorry.

11 Then let's go to -- let's go to the
12 Applicant's -- the Applicant's exhibit with the six-foot
13 wall.

14 I really apologize.

15 MS. GALE: Oh, okay. So are you wanting to go
16 back to Exhibit 165?

17 MS. SIEKMANN: No, I just wanted to refer to that
18 exhibit and ask staff a question. Because I note -- we
19 had talked about the six-foot wall, and you said you
20 didn't -- or did or didn't know it was going to be there.
21 And so I know that, you know, I understand that. So that
22 wall could affect noise, and I wondered if the noise staff
23 had included input or the safety staff had on the
24 possibility of that wall?

25 MR. KANEMOTO: That, I can't -- I don't know.

1 MS. SIEKMANN: Okay. Thank you. I'm finished.

2 HEARING OFFICER KRAMER: Thank you.

3 We have a couple questions.

4 Do you want to go first, Commissioner Eggert?

5 COMMISSIONER EGGERT: Yeah. I guess this is
6 maybe again just perhaps a clarification relating to the,
7 I guess, the condition of certification, VIS-5, as it
8 relates to the responsibility for basically preparing that
9 berm. And I guess I'm just trying to understand a little
10 bit about -- more about the process that would ensue, you
11 know, if Cal Trans proceeds with the widening and how that
12 discussion would result in assurance that the visual
13 mitigation would occur, if anybody can provide that.

14 MR. MCKINSEY: I think we interpret VIS-5 as
15 requiring the Applicant to -- I mean, it has -- Applicant
16 is responsible to the Energy Commission to provide a plan
17 that's approved by the Energy Commission to accommodate
18 I-5 widening. And so there's -- that's what VIS-5
19 requires. The ambiguity comes in in understanding how
20 they work out a relationship with Cal Trans to meet that
21 requirement as well, and that is the trickier part, and
22 VIS-5 goes into that.

23 COMMISSIONER EGGERT: So in terms of
24 responsibility, a first responsibility to the mitigation
25 requirement, it would be the Applicant, but then

1 subsequent, that could be modified based on negotiations
2 with Cal Trans? Is that --

3 MR. MCKINSEY: Yeah, I think definitely the
4 Applicant agrees that VIS-5 imposes this requirement,
5 vis-a-vis the Energy Commission on them to accomplish it.
6 And the only question is going to be whether and how their
7 relationship works out with Cal Trans, whether they get
8 reimbursed or Cal Trans does the actual work for them,
9 et cetera; but Applicant concedes that VIS-5 requires them
10 to meet these requirements, and so they're responsible for
11 that.

12 COMMISSIONER EGGERT: Okay. Thank you.

13 The other day, yesterday, it might have been
14 Mr. Martinez, but he mentioned that Cal Trans was looking
15 at two -- two redesigns of the highway. One was what he
16 called 8+4, and then there was one called 10+4. And he
17 said that the 8+4 encroached more into the project site
18 than the 10+4. And I was just wondering if somebody could
19 give me a brief explanation of why that is so, just for
20 context.

21 MR. WOJCIK: I believe that testimony was from me
22 about the two different alignments.

23 Cal Trans started out with actually four
24 alignments. One is called the 10+4 with buffer, 10+4 with
25 barrier, 8+4 with buffer, and 8+4 with barrier. Of those

1 four, Cal Trans informed us that they had two preferred
2 alternatives, the 8+4 with barrier and the 10+4 with
3 buffer.

4 Of those two preferred alternatives, Cal Trans
5 has told us and confirmed in e-mails and in the
6 cross-sectional drawings that they sent us, that the 8+4
7 with barrier encroaches the furthest west into the CECP
8 site.

9 HEARING OFFICER KRAMER: And would have the other
10 two that they do not prefer, would they encroach any
11 further?

12 MR. WOJCIK: The 10+4 with barrier would encroach
13 in areas more than the 8+4.

14 HEARING OFFICER KRAMER: But as far as you know,
15 they're not going to -- they're not recommending that.

16 MR. WOJCIK: Correct. In one of the e-mails that
17 they had sent us, they said that the -- that that
18 alternative was not one of the preferred alternatives
19 because it took so much right-of-way.

20 HEARING OFFICER KRAMER: Which would cost them
21 more, presumably, among other things.

22 MR. WOJCIK: Yes.

23 HEARING OFFICER KRAMER: Mr. Kanemoto, when
24 you're determining whether a visual impact is significant
25 or not, do you require that the new feature be completely

1 invisible in order to be insignificant as an impact?

2 MR. KANEMOTO: No.

3 HEARING OFFICER KRAMER: Okay. Those are our
4 questions.

5 Any redirect from any of the parties?

6 MR. SIMPSON: I have a couple questions.

7 HEARING OFFICER KRAMER: Mr. Simpson, you -- even
8 at the late stage of the prehearing conference when you
9 first visited us and told us that you wanted to
10 participate or confirmed that to us, you did not indicate
11 any desire to cross-examine in the area of visual
12 resources.

13 MR. SIMPSON: My questions are based on the
14 testimony that's been provided today. My understanding is
15 that you've encouraged public participation, but it seems
16 that my participation continues to be discouraged.

17 HEARING OFFICER KRAMER: No. You can write all
18 the public comments you want, you can make all the
19 arguments you want in your briefs, but you did not come
20 into the hearings this week with an identified interest in
21 producing factual evidence either by way of direct or
22 cross-examination. So you're going to be limited to the
23 evidence that's developed by the other parties in those
24 areas where you're not allowed to cross-examine. And this
25 would be one of them. So that's the committee's ruling,

1 and --

2 MR. SIMPSON: So I'm not allowed to redirect

3 or --

4 HEARING OFFICER KRAMER: You weren't allowed

5 direct or cross in the first instance, so it would be

6 rather unusual that you would get redirect. I mean,

7 that --

8 MR. SIMPSON: So I can't ask any questions of

9 anybody.

10 HEARING OFFICER KRAMER: Regarding visual,

11 correct, you can not. You're certainly entitled to make

12 arguments, you know, to -- in your closing briefs and to

13 argue the facts to the committee, argue the law; but as

14 far as development of evidence goes, you did not indicate

15 any intent to develop it at the appropriate times, and,

16 therefore, because we are on a very tight time schedule

17 that was based in part on assumption that everybody was

18 going to at the appropriate times identify their needs and

19 intentions, we do not have the time to continue to allow

20 you to sort of pop in at the last minute to ask questions.

21 MR. SIMPSON: Well, until I heard the testimony,

22 I didn't have questions.

23 HEARING OFFICER KRAMER: Most of this testimony,

24 if not all of it, is simply refinement or amplification of

25 what was filed previously, and you were expected, as were

1 all the other parties, to review those materials and
2 determine whether or not you needed to develop evidence.
3 So your request is denied. As I said on Monday and
4 reiterated again yesterday, once a ruling is made, we
5 don't argue it further.

6 MS. SIEKMANN: Mr. Kramer, I did have one more
7 question. I'm sorry. Is that okay?

8 HEARING OFFICER KRAMER: It was prompted by
9 something that --

10 MS. SIEKMANN: It was a question I forgot to ask
11 in my cross.

12 HEARING OFFICER KRAMER: Okay. You didn't use up
13 your time, so go ahead.

14 CROSS-EXAMINATION

15 MS. SIEKMANN: I'm sorry.

16 I just have one more question for staff.

17 It's regarding the transmission lines when the
18 I-5 widens.

19 I wondered if that -- the transmission lines
20 going over the widened I-5 was something that you
21 evaluated, and is there mitigation?

22 MR. KANEMOTO: We discussed those, and there was
23 no mitigation.

24 MS. SIEKMANN: Do you see a visual impact from
25 them, though?

1 MR. KANEMOTO: Not a significant visual impact.

2 MS. SIEKMANN: Thank you.

3 HEARING OFFICER KRAMER: Okay. Thank you.

4 Thank you, members of the visual panel.

5 MR. THOMPSON: Mr. Kramer, I have one redirect.

6 HEARING OFFICER KRAMER: Oh, I'm sorry,

7 Mr. Thompson, go ahead.

8 REDIRECT EXAMINATION

9 MR. THOMPSON: Mr. Neu, this is, I think, a
10 clarification of a statement that you made. You were
11 asked if the widening of I-5, all configurations would
12 take out the berm and the foliage on top of the berm.

13 MR. MCKINSEY: That may mischaracterize my
14 question. I don't think I said "all configurations." I
15 think I probably said the worst case or said do you assume
16 that the I-5 widening or something.

17 MR. THOMPSON: Do you remember that discussion,
18 Mr. Neu?

19 MR. NEU: Yes, I do.

20 MR. THOMPSON: Was there anything else that you
21 relied on, such as a Cal Trans letter?

22 MR. NEU: In regard to how much of the existing
23 berm was removed?

24 MR. THOMPSON: Yes.

25 MR. NEU: Well, I think I had mentioned

1 previously one of the things I relied on besides the
2 Cal Trans letter and correspondence was the
3 characterization of it in the final staff assessment that
4 talked about those four alternatives all removing the berm
5 and landscaping.

6 MR. THOMPSON: Thank you.

7 HEARING OFFICER KRAMER: Okay. Thank you, panel.

8 For those in the audience, we've been going to
9 lunch at about 1:00. That's been our practice. So we
10 will begin with the next panel, which is on the topic
11 of -- well, let's see.

12 Let me go back, because we do have a new exhibit
13 to address. And that would be -- it was the previously
14 identified Exhibit 221, which is a set of nine slides that
15 are printed that are all excerpts from other testimony,
16 but they were provided because Mr. Kanemoto referred to
17 them in his testimony.

18 Staff, do you want to move this exhibit into the
19 evidence?

20 MR. RATLIFF: Yes, please.

21 HEARING OFFICER KRAMER: Is there any objection?

22 Seeing none, that is received as Exhibit 221.

23 (Thereupon, Exhibit 221 was
24 received into evidence.)

25 MR. MCKINSEY: I also note we had on our -- in

1 front of us this morning, I think from staff, a set of all
2 of the Coastal Commission letters all in one package that
3 we talked about bringing in as an exhibit. It's -- I'm
4 looking at it now. It's a packet of letters. And the top
5 letter is a letter from the Coastal Commission dated
6 October 16th, 2007, from B.B. Blevins, or to B.B. Blevins
7 at the California Energy Commission, re: Coastal
8 Commission review for projects subject to the Energy
9 Commission's application for certification. And below
10 that letter is a series of letters. And I think I would
11 move that we put this in as an exhibit also.

12 HEARING OFFICER KRAMER: Okay. Could you
13 describe just ever so briefly the letters that follow?

14 MR. MCKINSEY: Yeah. After the October 16th
15 letter, there is a letter from the City of Carlsbad dated
16 July 8th to the Coastal Commission. There is a letter
17 from the Coastal Commission on July 15th, seven days
18 later, addressed to Mr. Garuba at the City of Carlsbad.
19 And then there's a letter from the City of Carlsbad on
20 July 28th to Peter Douglas at the Coastal Commission from
21 Ronald Ball, the city attorney. And then a letter dated
22 August 8th from the City of Carlsbad directed to Mike
23 Monosmith at the California Energy Commission. And then a
24 letter dated August 25th, I think from myself, directed to
25 Mr. Monosmith. And let me check the last page. And then

1 a letter dated October 27th, from the City of Carlsbad to
2 Mr. Monosmith.

3 HEARING OFFICER KRAMER: Okay. That will be
4 Exhibit -- marked as Exhibit number 194.

5 Is there any objection to the receipt of that,
6 those letters into evidence?

7 Seeing none, we will receive those today.

8 MR. McKINSEY: I'm not sure, but we may have used
9 194 for City Resolution 2002, 351. I've got that on my
10 notes. I don't know if we've already reserved it or if we
11 were going to, but --

12 HEARING OFFICER KRAMER: Okay. Then let's make
13 the Coastal Commission letters Exhibit 195. And during
14 the break, let's get with me to make sure I have a copy of
15 that other one. I don't think we've admitted that yet.

16 MR. McKINSEY: Okay.

17 HEARING OFFICER KRAMER: But we will --

18 MR. McKINSEY: I can't remember, but I have it
19 written here like you did.

20 HEARING OFFICER KRAMER: Okay.

21 MR. McKINSEY: I'll find out.

22 HEARING OFFICER KRAMER: So these will be
23 Exhibit 195.

24 (Thereupon, Exhibit 195 was
25 marked for identification.)

1 HEARING OFFICER KRAMER: And hearing no
2 objection, we will admit those.

3 (Thereupon, Exhibit 195 was
4 received into evidence.)

5 HEARING OFFICER KRAMER: Okay. We'll go off the
6 record for a minute to get our panel together.

7 (Recess.)

8 HEARING OFFICER KRAMER: Okay. We'll go back on
9 the record.

10 This is the topic of greenhouse gases.

11 Folks.

12 This is the topic of greenhouse gases. Just to
13 give everybody a road map for this topic and of project
14 alternatives topic that follows, we're going to -- there
15 are some cross-over issues I suppose, and so we'll -- if
16 you get too far crossed over, we'll probably try to bring
17 you back, but we're -- whatever is said in the one topic
18 will continue to be relevant and we'll consider for the
19 other. So you don't need to repeat yourself because you
20 feel like that you have to say -- make a particular point
21 in both -- under both topics.

22 So we will go through greenhouse gases.

23 And then for project alternatives, we're going to
24 try to separately discuss two different categories of
25 alternatives. One would be the locational type of

1 alternatives; in other words, build the plant in some
2 other place.

3 And the other would be the technological
4 alternatives; use renewable resources, or Dr. Roe has a
5 point to make about this should be a traditional combined
6 cycle that's more efficient than the proposed plant. That
7 would be considered a technological -- part of the
8 technological alternatives discussion.

9 And because of witness constraint, we will talk
10 about the technological aspect first.

11 We'll also cover during alternatives, during the
12 technological portion, concerns that have been raised from
13 everyone; but from the public to -- well, the committee
14 will have some questions too I think about whether a
15 gas-fired power plant is really needed in this area at
16 this point in time. So we'll address all that at that
17 point.

18 Dr. Roe, did you have a question, or did I --

19 DR. ROE: No, I just wanted to know where the
20 no-project alternative would fit, and you just answered it
21 at the end.

22 HEARING OFFICER KRAMER: Actually, that could go
23 in either place.

24 MR. RATLIFF: No, I think it goes under
25 alternatives.

1 HEARING OFFICER KRAMER: No, I mean, but far as
2 technological versus locational. But let's put that under
3 locational as we're dividing --

4 MS. BAKER: And Mr. --

5 HEARING OFFICER KRAMER: Go ahead.

6 MS. BAKER: Just a clarification from me.

7 Yesterday when we were discussing efficiency, it
8 kind of bled into air emissions kind of thing, and I
9 thought we were going to be talking about efficiency and
10 greenhouse gases, but we're going to talk about that on
11 project alternatives also? I'm just -- I'm --

12 HEARING OFFICER KRAMER: I'm trying to remember
13 your point.

14 MS. BAKER: Well, the discussion kind of came up
15 yesterday on the efficiency question because it's less
16 efficient, that it was going to affect the air emissions;
17 and then there was some discussion about, oh, we won't go
18 into that today, we'll discuss that --

19 HEARING OFFICER KRAMER: Oh, I think that was
20 Dr. Roe's point that --

21 MS. BAKER: Yes, it was --

22 HEARING OFFICER KRAMER: -- he wanted to say
23 that, but he wasn't talking about emissions so much at
24 that point, he was -- the portion of his discussion we
25 redirected was his complaint, if you will, that this plant

1 should be the more efficient type of combined cycle.

2 MS. BAKER: Right, but that it was going to
3 affect the emissions -- I don't want to debate that point.
4 What I just wanted to make sure was I thought we were
5 going to be discussing some of that under greenhouse
6 gases. So I just heard you to say that we were going to
7 talk about that under project alternatives?

8 HEARING OFFICER KRAMER: You might be able to
9 discuss -- if it relates to greenhouse gases, then you
10 could. We should talk about it under greenhouse gases.

11 MS. BAKER: Okay. Thank you. Thank you for that
12 clarification. I appreciate it.

13 HEARING OFFICER KRAMER: Okay. So let's
14 introduce the panel. And they're -- they're all over the
15 place.

16 Let's begin with Mr. Vidaver, who is sitting to
17 my right, and then we'll go around just short of
18 Mr. Simpson, and then we will introduce the people at the
19 table.

20 MR. VIDAVER: Good morning. My name is David
21 Vidaver.

22 HEARING OFFICER KRAMER: You need to be really --
23 rock star close to the microphone.

24 MR. VIDAVER: My name is David Vidaver. I'm
25 employed in the Electricity Analysis Office of the

1 Electricity Supply Assessment Division of the California
2 Energy Commission. My civil service classification is
3 that of Electricity Generation Systems Specialist. I've
4 worked for the Commission since 1998 and was a consultant
5 to the Commission for three years prior to that.

6 I assume you want my qualifications.

7 HEARING OFFICER KRAMER: No, it was more just
8 name, rank, and serial number at this point.

9 MR. VIDAVER: Sorry. Apologies.

10 HEARING OFFICER KRAMER: Because we may find that
11 the parties do not need to discuss your qualifications,
12 and we'll dispense with that step.

13 MR. VIDAVER: Okay. David Vidaver, electricity
14 generation systems specialist, N5652078.

15 HEARING OFFICER KRAMER: Thank you.

16 Mr. Walters.

17 MR. WALTERS: I'm William Walters. I'm a
18 co-author of the greenhouse gas section. I have -- I'm a
19 chemical engineer, registered professional engineer in the
20 State of California. I've been working with the
21 California Energy Commission for over ten years now and
22 have been working on GHG analyses for over two dozen cases
23 and have been working with the Commission to augment and
24 increase the level of analysis to meet CEQA requirements
25 over the past few years.

1 MR. LAYTON: Good morning. My name is Matthew
2 Layton. I manage the engineering office of the California
3 Energy Commission. I'm a mechanical engineer registered
4 in the State of California. I've been working at the
5 Commission for about 20 years on air quality and energy
6 issues.

7 HEARING OFFICER KRAMER: Okay. Mr. Rubenstein.

8 MR. RUBENSTEIN: Gary Rubenstein with Sierra
9 Research. We're air quality consultants for the
10 Applicant, and I'm the Applicant's witness on greenhouse
11 gas emissions.

12 MR. McCLARY: Steve McClary, I'm principle and
13 co-owner of MRW & Associates, consultant to the Energy
14 Commission on greenhouse gas emissions and alternatives.

15 MR. McINTOSH: Good morning. My name is
16 Jim McIntosh, I'm the director of renewable resource
17 integration and grid architecture for the California ISO.

18 MR. COX: Rory Cox. I'm the California program
19 director at Pacific Environment and a witness for Center
20 for Biological Diversity.

21 MR. HUNT: Good morning. Tam Hunt, consultant to
22 EARTHJUSTICE for CBD.

23 MR. SHARMAN: Good morning. My name is Lane
24 Sharman, and since we're keeping score of generations, I'm
25 a fifth-generation Californian. And I'm here to testify

1 on behalf of Terramar in opposition to the application.

2 HEARING OFFICER KRAMER: Okay. Thank you.

3 Some of you have not been sworn in I'm sure. So
4 those of you who have not, would you please stand and
5 raise your right hand.

6 ALL FURTHER PROSPECTIVE WITNESSES

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

10 HEARING OFFICER KRAMER: Thank you.

11 Okay. I think most of you were here, so you saw
12 how the earlier panel worked. We will allow the parties
13 to elicit opening testimony from their witnesses. We'll
14 go through all of those witnesses that way, and then we
15 will have a round of cross-examination. And when we get
16 to the lightning cross-examination round, if a question is
17 asked of one of you but one of the others of you feels
18 that you have something to contribute to the subject, you
19 are free to respond after the first party answers the
20 question.

21 So with that, Mr. McKinsey?

22 MR. NESE: I'm Brian Nese --

23 HEARING OFFICER KRAMER: I'm sorry, Mr. Nese.

24 MR. NESE: -- N-e-s-e, counsel for the Applicant,
25 and I'll be leading the direct here for Mr. Rubenstein.

1 DIRECT EXAMINATION

2 MR. NESE: Gary, could you please briefly state
3 your background qualification and the area of testimony
4 you'll be presenting.

5 MR. RUBENSTEIN: Sure. I have a bachelor of
6 science degree in engineering from the California
7 Institute of Technology. I have over 37 years of
8 experience in the field of air pollution research and
9 control. I have supervised or participated in the
10 evaluation of the air quality impacts of over 20,000
11 megawatts of generating resources using a variety of fuels
12 and technologies.

13 I have over 30 years' experience in the
14 management of complex air quality modeling studies
15 including gridded air shed models, which are the ancestors
16 of many of the climate forecasting models currently in
17 use.

18 I have provided expert testimony before this
19 Commission related to greenhouse gas emissions in two
20 prior cases, the Avenal Energy Center and the Ivanpah
21 Solar Energy Generating System.

22 I have conducted analyses of the environmental
23 impacts of resource additions, deletions, and constraints
24 on -- to California's generating grid. The most relevant
25 experience there was my management of a project for the

1 California Public Utilities Commission evaluating the
2 environmental impacts of the proposed merger between
3 Southern California Edison and San Diego Gas & Electric.

4 I also have experience in the conduct of
5 lifecycle analyses of greenhouse gas emissions.

6 MR. NESE: Gary, does the design of CECP offer
7 any advantages in terms of reduced GHG emissions?

8 MR. RUBENSTEIN: Yes, it does. The design of
9 Carlsbad Energy Center project is unique and ground
10 breaking. It is a highly-efficient quick-response
11 combined-cycle power plant. Over the last couple of days
12 as well in some of the pre-file testimony, I've seen some
13 suggestion that the plant is using old technology. At the
14 same time, I've seen others suggesting that the plant is
15 using untested technology. To a certain extent, both of
16 those comments are correct.

17 The Siemens SGT 65000 gas turbine, which is
18 proposed for the CECP, is an evolutionary, not
19 revolutionary investigation of the Westinghouse 501FD gas
20 turbine that this Commission has a great deal of
21 experience with, having sited a number of plants in
22 California using that turbine over the last ten years.

23 The heat recovery steam generator and steam
24 turbine proposed for use for CECP are also not
25 revolutionary new designs, although they do incorporate

1 some new features to facilitate the very rapid start up of
2 the plant.

3 What is revolutionary and ground breaking is the
4 integration of these components and a plant control system
5 that is able to decouple the start up and warm up time of
6 the combustion turbine from the time required to heat the
7 heat recovery steam generator and the steam turbine. This
8 enables the plant to generate 150 megawatts of power,
9 electrical output from each independent train within ten
10 minutes of pushing the start button; something that no
11 combined cycle plant in California can do today.

12 Some have suggested that this design is an
13 inefficient compromise, that better performance and
14 efficiency could be achieved using either advanced
15 simple-cycle gas turbines or advanced combined-cycle gas
16 turbines like the new General Electric H-class turbine.
17 These suggestions are incorrect.

18 Advanced simple-cycle gas turbines, such as the
19 LM6000 and LMS100, again, turbines that this Commission is
20 quite familiar with, are significantly less efficient than
21 CECP.

22 And highly the H-class turbine presents a clear
23 efficiency benefit as compared with the CECP design. It
24 is a single-shaft machine, meaning that the gas turbine,
25 the steam turbine and the electrical generator all share a

1 common drive shaft. This makes it impossible to decouple
2 the warm-up time and ramp rate for the gas turbine from
3 the warm-up times associated with the steam turbine and
4 the heat recovery steam generator, therefore, rendering
5 impossible the type of fast-start performance that CECP
6 will achieve.

7 And I will note that I am personally familiar
8 with the H-class turbine because I handle the air quality
9 licensing for the Inland Empire Energy Center, which is
10 the only H-class turbine operating in the United States
11 today.

12 In addition to these technological benefits, CECP
13 will allow the shut down of Encina Units 1 through 3,
14 which have energy efficiencies or electrical generation
15 efficiencies on the order of 28 percent as compared to
16 roughly 48 percent for CECP.

17 The project will displace greenhouse gas
18 emissions from other less-efficient gas-fired plants,
19 mostly simple-cycle units. The plant will reduce the need
20 for overnight operation of legacy steam plants to maintain
21 spinning reserve and capacity for subsequent APs. And the
22 project facilitates the addition of renewable resources to
23 the California grid by providing efficient quick-response
24 backup generation capability.

25 MR. NESE: How would you compare the efficiency

1 of the project as it relates to the production of GHG
2 emissions with alternative turbine technologies?

3 MR. RUBENSTEIN: The project's design is highly
4 efficient. Before I start presenting some numbers on
5 efficiency though, I want to be very clear in terms of the
6 use of terminology, because I've heard a number of
7 different numbers used over the last couple of days, and
8 these can be confusing.

9 First of all, all of the efficiency numbers I'm
10 going to be presenting today are expressed in units of
11 higher heating value. I don't want to get into too much
12 detail, but there are two different conventions for
13 discussing heat input or fuel consumption or efficiency,
14 high heating value or lower heating value. Most power
15 plant design engineers use lower heating value. And for
16 reasons that are frankly beyond me since the 1970s, the
17 environmental community has used higher heating value as
18 its convention. I will be using higher heating value for
19 all of my numbers consistent with that convention.

20 Second, we have heard already, and there will
21 probably be more discussion this morning, about percentage
22 differences in efficiency. And I think it's important to
23 understand the difference between a percent different in
24 efficiency and a percentage point difference in
25 efficiency.

1 For example, if one technology has an efficiency
2 of 50 percent and another technology has an efficiency of
3 49 percent, the difference between those two is one
4 percentage point, 49 versus 50. However, the unit that
5 has 50 percent efficiency is roughly two percent more
6 efficient. I have heard some of these numbers confounded
7 over the last couple of days.

8 I'm going to be as precise as I can in terms of
9 explaining when I'm referring to percentage point
10 differences or percent differences in efficiency, but I
11 think it's important for the committee to understand that
12 both of those numbers are likely to be expressed today.

13 With respect to CECP, as I indicated, the
14 project's design is highly efficient. The plant has a
15 nominal design efficiency of 48 percent as compared with
16 efficiencies of 20 to 38 percent for simple-cycle plants.
17 That's a substantial improvement.

18 The CECP design does result in roughly a five- to
19 seven-percent efficiency penalty, not percentage point,
20 but percent efficiency penalty as compared with
21 traditional combined-cycle units. CECP, however, is not
22 likely to displace those more efficient combined-cycle
23 unions in the dispatch order, and thus this efficiency
24 penalty will not result in an increase in greenhouse gas
25 emissions.

1 Finally, CECP is substantially more efficient
2 than legacy gas-fired boilers, which typically have an
3 efficiency in the range of 30 percent.

4 MR. NESE: How does this project address the
5 criteria in the Commission's GHG framework report, also
6 known as the MRW report for gas-fired generation?

7 MR. RUBENSTEIN: For the record, that report is
8 Exhibit 212.

9 The project design meets several criteria in the
10 greenhouse gas framework report for California's future
11 gas-fired generation. First, it provides intermittent
12 generation support, meaning it provides support for
13 intermittent renewable resources, such as wind and solar,
14 with fast-start and rapid-ramping capability.

15 Second, to a certain extent it provides some
16 amount of local capacity support as indicated in the final
17 staff assessment at pages 4.1-113 to 114. The plant will
18 provide grid operation support, in particular provide
19 support for grid operations through fast-start and
20 rapid-ramping capability, voltage regulation, spinning and
21 non-spinning reserve.

22 The plant will provide support for extreme load
23 conditions, such as summer peaks and emergencies, again,
24 through its rapid-start capability without the need to run
25 overnight, as is the case with legacy boilers and some

1 conventional combined-cycle plants.

2 And finally, the project will provide general
3 energy support. While not as efficient as optimized
4 combined-cycle units, it is far more efficient than
5 simple-cycle plants and legacy steam plants, and it is
6 these plants that CECP is likely to displace during
7 dispatch.

8 The key here is that there is no need for
9 overnight operation when demand is typically lower, and as
10 a result, there will be reduced greenhouse gas emissions
11 as compared with traditional combined-cycle and legacy
12 steam plants that have to remain online at low loads
13 overnight to remain available for following day's peaks.

14 MR. NESE: Gary, are you familiar with the
15 criteria set forth in the Commission's decision regarding
16 the Avenal Energy Project for the assessment of GHG
17 emissions from gas-fired generation?

18 MR. RUBENSTEIN: Yes, I am.

19 MR. NESE: And how does the CECP address those
20 criteria?

21 MR. RUBENSTEIN: CECP meets the three criteria
22 set forth in the Avenal decision at page 111.

23 First, the CECP will not increase the overall
24 system heat rate for natural gas plants. CECP's efficient
25 design is combined with the efficiency benefits comparable

1 to a conventional combined-cycle power plant and combines
2 that efficiency with quick-start performance of
3 simple-cycle plants resulting in the ability to provide
4 daily cycling if necessary without the need to run
5 overnight.

6 Second, CECP will not interfere with renewable
7 generation nor with the integration of new renewable
8 generation into the grid. In fact, CECP will facilitate
9 the addition of new renewable generating resources into
10 the grid by providing clean and efficient burning
11 capability.

12 And then finally taking into account the first
13 two factors, CECP will reduce system-wide greenhouse gas
14 emissions and will support the goals and policies of
15 AB 32, and it will do so through its efficient design and
16 quick-start capability.

17 MR. NESE: Gary, have you reviewed the four
18 documents offered as exhibits by intervenor CBD related to
19 climate change? And those are Exhibits 614, 615, 616, and
20 617.

21 MR. RUBENSTEIN: Yes, I have.

22 MR. NESE: And have you reviewed the documents
23 offered as exhibits by the Applicant also related to
24 climate change, Exhibit 192?

25 MR. RUBENSTEIN: Yes, I have.

1 MR. NESE: Do you believe any of these documents
2 are relevant to this proceeding?

3 HEARING OFFICER KRAMER: You said two documents,
4 and then just named one? Did you mean --

5 MR. RUBENSTEIN: That's correct. Both documents
6 are actually -- were submitted under the same exhibit
7 number, 192.

8 HEARING OFFICER KRAMER: Oh, okay.

9 MR. RUBENSTEIN: I believe that, no, generally I
10 do not believe that these documents are relevant to this
11 proceeding. I believe that the documents filed by the
12 Applicant are relevant insofar as they rebut the four
13 documents listed and proposed by CBD.

14 All of these exhibits are related to the science
15 of climate change. And I distinguish climate change from
16 greenhouse gas emissions inasmuch as there's a state law,
17 AB 32, that requires the California Energy Commission,
18 among other agencies, to focus on methods to reduce
19 greenhouse gas emissions in California.

20 The extent to which greenhouse gas emissions are
21 related to climate change is not relevant, in my opinion,
22 to any individual siting case. However, if the committee
23 believes that this issue is, in fact, relevant to this
24 case, I believe that all of these exhibits, including the
25 two exhibits -- the two papers included as Exhibit 192,

1 should be included in the record to present a more
2 complete picture of the debate regarding the accuracy of
3 climate change models in forecasting the future.

4 But again, to emphasize, I believe that in any
5 individual siting case, the real question is related to
6 greenhouse gas emissions, and therefore none of these
7 exhibits are necessary to address that issue.

8 MR. NESE: And can you briefly summarize the main
9 conclusions of your testimony regarding GHG emissions?

10 MR. RUBENSTEIN: Yes. I think the important
11 thing to keep in mind is the focus on the reasonably
12 foreseeable impacts of the construction and operation of
13 CECP, and those reasonable foreseeable impacts most
14 significantly include the displacement of other gas-fired
15 generation.

16 In the worst case, CECP will not displace other
17 more efficient gas-fired generation, and as a result it
18 will not be operated. While that will be very unfortunate
19 for NRG and might cost Mr. Piantka his job, it does not
20 result in any increase in greenhouse gas emissions.

21 In the most likely case, CECP will operate as
22 needed within the dispatch order to provide clean,
23 efficient generation. CECP's operation will always be
24 within the realm of other gas-fired generation, meaning
25 there will be some plants more efficient than CECP and

1 some plants less than CECP. And CECP will operate only
2 when it is displacing less-efficient generating resources.

3 California's preferred dispatch order relies
4 first on energy conservation, then on in-state nuclear and
5 hydro, then on intermittent renewable resources, and on
6 gas fired generation and imports only as needed to match
7 demand.

8 During periods of low demand, particularly during
9 spring times and high hydro years and nighttime pretty
10 much year round, CECP does not need to run, thus providing
11 the energy benefits when it does run of combined-cycle
12 technology without the adverse environmental impacts,
13 including increased greenhouse gas emissions associated
14 with overnight operations when power is simply not needed
15 and might otherwise displace other resources that have
16 lower green gas emissions.

17 In short, I believe that CECP's ground-breaking
18 design provides significant greenhouse gas benefits
19 furthering the goals and policies of AB 32 to reduce
20 greenhouse gas emissions in California.

21 MR. NESE: That concludes our direct.

22 HEARING OFFICER KRAMER: Thank you.

23 Staff.

24 MR. RATLIFF: Mr. Kramer, do you want us to go --
25 we have five witnesses. I suspect that each in turn will

1 be about 40 minutes. Do you want to do the whole panel
2 now, or do you want to break now for lunch, or do you --
3 how do you want to do this?

4 HEARING OFFICER KRAMER: Well, Mr. Rostov, we
5 could probably fit your witnesses in. I'm not trying to
6 force you to do that though, but would that be acceptable
7 to you?

8 MR. ROSTOV: I'd be happy to do Mr. Cox.

9 Mr. Hunt is a rebuttal witness to Mr. McIntosh,
10 so it would probably make more sense if he went after
11 Mr. McIntosh. But I could do both or -- it's up to you.

12 MR. RATLIFF: I do want to keep everyone aware of
13 the constraint that we have with the ISO witness. He has
14 to leave at, I believe -- you have to leave the hearing at
15 5:00; is that right?

16 So we have him for the afternoon, but then he
17 disappears and -- well, I just want to make sure you're
18 aware.

19 HEARING OFFICER KRAMER: Why is it critical that
20 your panel not be broken up?

21 MR. RATLIFF: You mean -- you mean start with one
22 now and then proceed after lunch?

23 HEARING OFFICER KRAMER: Right.

24 MR. RATLIFF: Well, we could do that.

25 HEARING OFFICER KRAMER: Okay.

1 MR. ROSTOV: Mr. Kramer, we're willing to go
2 now --

3 HEARING OFFICER KRAMER: Okay.

4 MR. ROSTOV: -- if it would make it simpler.
5 There might be a little more flow to it, if that's what --
6 that's what you were trying to imply, right?

7 MR. RATLIFF: Yeah, but we can do it either way,
8 I'm not -- I just wanted to make sure -- however you want
9 to do it, it's fine.

10 HEARING OFFICER KRAMER: Well, Mr. Rostov, if
11 you're willing to go ahead.

12 MR. ROSTOV: Yeah, I'm definitely going to do
13 Mr. Cox. I still would like to do Mr. Hunt -- so could I
14 do one now and one later?

15 HEARING OFFICER KRAMER: Certainly. And then
16 Ms. Siekmann, Mr. Sharman, does he need to follow the
17 staff at all? Or can he go --

18 MS. SIEKMANN: He can go now.

19 HEARING OFFICER KRAMER: Well, we'll have Mr. Cox
20 first, and then Mr. Sharman, and then we'll break for
21 lunch.

22 MR. ROSTOV: Thank you, Mr. Kramer.

23 DIRECT EXAMINATION

24 MR. ROSTOV: Thank you for appearing, Mr. Cox.

25 Would you just briefly describe the purpose of

1 your testimony.

2 MR. COX: I'm here to discuss the likelihood that
3 the Carlsbad Energy Project will use natural gas derived
4 from the Costa Azul LNG import terminal in Mexico, and
5 also to discuss the greenhouse gas implications of using
6 that fuel.

7 MR. ROSTOV: Could you please define "LNG" for
8 us.

9 MR. COX: Liquefied natural gas is -- it's really
10 a technology by which you can take natural gas in its
11 gaseous state, super cool it to negative 260 degrees
12 Fahrenheit, at that point the gas becomes a liquid, which
13 amongst other things enables you to load it onto a
14 specially designed tanker and move the natural gas from
15 one continent to another. And at that point it becomes
16 regasified, turning it back into a natural gas, and is
17 sent out as natural gas into an existing natural gas grid.

18 MR. ROSTOV: Could you just briefly describe your
19 current job and your qualifications for this testimony.

20 MR. COX: Sure. My title is I'm California
21 Program Director at an organization called Pacific
22 Environment. I've had that position for about four years
23 now. And it's a public-interest nonprofit environmental
24 advocacy organization.

25 My job has been to be a clean energy advocate.

1 And one of the things that we identified as not clean
2 energy was this whole idea of importing liquefied natural
3 gas into the State of California, be it through
4 California, through Mexico, or through Oregon.

5 MR. ROSTOV: Did you author a report on LNG
6 entitled "Collision Course"?

7 MR. COX: Yes, I coauthored that report.

8 MR. ROSTOV: Can you briefly describe the report
9 and its conclusions.

10 MR. COX: Sure. The report discusses the
11 environmental impacts of importing LNG, which include the
12 greenhouse gas emissions, the upstream impacts abroad as
13 well as the safety impacts for communities that would host
14 an LNG import terminal as well as the displacement of
15 investment going into a new fossil fuel import
16 infrastructure when there are all signs that state law and
17 public will would like to see that investment go into
18 clean, renewable sources of energy.

19 MR. ROSTOV: Okay. Great. Just for the record,
20 that was -- the report is Exhibit 618, if you're more
21 curious.

22 When you prepared this report, were there any LNG
23 facilities built on the west coast?

24 MR. COX: Well, as our report was being prepared,
25 the one LNG terminal that's on the west coast was being

1 finished up. I think they may have -- I think our report
2 may have come out around the same time that LNG terminal
3 opened, or became operational anyway. And that LNG
4 terminal is about 80 miles south of here on the baja
5 coast, and it's called Costa Azul, operated by Semptra and
6 Shell.

7 MR. ROSTOV: Okay. And in your opinion is that
8 project designed to deliver LNG to San Diego?

9 MR. COX: Yes, absolutely. There is a natural
10 gas pipeline network connecting that terminal to southern
11 California at a couple of different receipt points. One
12 of those receipt points is called Otay Mesa, near Tijuana.
13 And at that receipt point it transfers from the gas grid
14 that's in Mexico into the gas grid that's in the SDG&E
15 service territory.

16 And there are several other reasons why I believe
17 it's designed to serve the SDG&E territory, which is that
18 Semptra, the owner of the terminal and the parent company
19 of SDG&E, went through considerable effort through the
20 regulatory agencies to ensure that that LNG could be sold
21 into their territory, and that they approached the PUC
22 about allowing that to happen, not only allowing LNG -- or
23 the natural gas from that project to go into the SDG&E
24 territory, but at the same time ramping down their use of
25 domestic natural gas from existing sources in the U.S.

1 southwest to actually make room for this imported natural
2 gas.

3 In addition, they've also gone through some of
4 the -- they've added equipment at the terminal to take out
5 some of the more -- some of the elements of the LNG that
6 would not comply with the Air Quality Management District
7 rules so that it could be burned in the southern
8 California area.

9 MR. ROSTOV: Are you referring to the Wobbe
10 Index?

11 MR. COX: Right, the Wobbe Index.

12 MR. ROSTOV: If you would just explain, there was
13 a PUC proceeding regarding the Wobbe Index, so would you
14 explain that a little more?

15 MR. COX: Right. Well, the Wobbe Index was --
16 and I don't remember the exact numbers, I'm sorry, but --

17 MR. ROSTOV: That's fine.

18 MR. COX: -- but that is a number which measures
19 the -- I believe it's the nitrogen content and the carbon
20 content and some of the other byproducts of methane that
21 you get with imported LNG. That number indicates where
22 that -- where those impurities -- how high those
23 impurities are. The higher the number, the dirtier the
24 fuel burns once it gets to a power plant.

25 So there was an effort by Sempra to actually

1 change that standard of the PUC, which happened; and then
2 there was also the facility to clean up some of that
3 natural gas at the point of receipt.

4 MR. ROSTOV: And in your job you follow the LNG
5 market, so you've reviewed numerous statements by Sempra
6 and power points. And is your conclusion also based on
7 the fact of information provided by Sempra?

8 MR. COX: Yes, it is, both to shareholders, to
9 the press, and, you know, to various agencies.

10 It's pretty clear that Sempra has intended to use
11 this natural gas in the SDG&E territory for use in power
12 plants.

13 MR. ROSTOV: Are they delivering LNG currently to
14 San Diego?

15 MR. COX: As far as I know, there has only been
16 one shipment since that terminal went online.

17 MR. ROSTOV: Okay. And do you anticipate that
18 the Carlsbad project, we'll call it the CECP, will receive
19 LNG over the next 30 years of the lifetime of the project?

20 MR. COX: Yeah, I believe that's a reasonable,
21 likely outcome considering all the effort that Sempra has
22 put into ensuring that that happens, beginning with the
23 LNG import terminal itself. And once the natural gas
24 passes Otay Mesa, there's no way to parse it out on a
25 power plant level that I know of.

1 MR. ROSTOV: So what are the possible climate
2 change effects of using LNG rather than natural gas, so
3 the regasified LNG in the San Diego region rather than
4 natural gas?

5 MR. COX: Sure. Now, that process of getting
6 natural gas from one continent to another adds a
7 significant greenhouse gas penalty in the form of extra
8 GHG emissions. That happens at the point of production.
9 The carbon content of the natural gas in some parts of the
10 world is higher than it is in North America, so there's an
11 addition there. There's the liquidation process, which
12 happens at the export terminal. There's transporting the
13 LNG overseas. And then the actual regasification project
14 on the import side.

15 Cumulatively that can add to, there's a pretty
16 good consensus out there of research that indicates that
17 that can add up to 25 percent extra emissions over what
18 you get with pipeline natural gas in North America.

19 MR. ROSTOV: When you say "extra emissions,"
20 you're talking about extra carbon emissions?

21 MR. COX: Extra greenhouse gas, carbon equivalent
22 emissions, yes.

23 MR. ROSTOV: And I want to step back to that
24 question before.

25 You said that there's only been one shipment so

1 far, and you anticipate shipments coming in the future;
2 why aren't their shipments occurring now, and why do you
3 anticipate that occurring in the future?

4 MR. COX: Well, currently the natural gas market
5 in general is pretty -- there's a -- both on a domestic
6 and global front, there's a glut of natural gas. And the
7 price points domestically is quite cheap. So there just
8 hasn't been the incentive to use that terminal at this
9 point.

10 But given that this power plant could be around
11 for decades, and these are very cyclical, you know, the
12 gas market is very cyclical in nature, so what happens
13 next week or next year could be a lot different than where
14 we are in ten years. And again, you know, that
15 billion-dollar-plus investment has been made for a reason,
16 and that's to use it.

17 MR. ROSTOV: Right. And, in fact, the CEC just
18 not three or four years ago was predicting that there
19 would be large shipments in the near future from Otay
20 Mesa; is that correct?

21 MR. COX: Yes.

22 MR. ROSTOV: So now I want to go back to the
23 greenhouse gases.

24 You said that there would be an increase in
25 carbon equivalent emissions. Why are you concerned about

1 the increase of these carbon emissions from using LNG?

2 MR. COX: Well, I think there's a pretty broad
3 scientific consensus out there that we need to do what we
4 can to reduce carbon emissions for the sake of the
5 climate. Amongst them, James Hansen, IPCC scientist,
6 who's concluded that we need to get the atmospheric levels
7 down from 385 parts per million to 350 parts per million.
8 The EPA has recently concluded that there is significant
9 danger from unchecked climate change. I think there are
10 many other sources that -- I imagine many people in this
11 room have their own sources for this information.

12 MR. ROSTOV: So in your opinion should lifecycle
13 emissions of LNG be considered in the environmental
14 analysis of a project that uses LNG, such as CECP?

15 MR. COX: Yes, I definitely think so. This is
16 not an insignificant amount of foreign natural gas that
17 could come through the Otay Mesa receipt point. It has
18 been designed with pipeline upgrades to be up to
19 900 million cubic feet a day, which is, I think, close to
20 half of SDG&E's usage. I'm not sure of that, it changes
21 all the time, but it's on that scale.

22 So that's a significant uptick in greenhouse gas
23 emissions that would be used in the power plant, that's
24 correct.

25 MR. ROSTOV: Okay. So have there been any

1 projects in the U.S. where LNG lifecycle GHG emissions
2 have been considered in the environmental analysis?

3 MR. COX: Yes. In the case of the Cabrillo Port
4 Terminal, which was rejected by the Coastal Commission and
5 the State Lands Commission in, I think that was 2007. The
6 conclusion by both of those commissions, amongst the
7 reasons to cancel that project, were the emerging
8 greenhouse gas laws. This was right -- soon after AB 32
9 passed. And they looked at those laws, and even though
10 they concluded that this is possibly in violation of those
11 laws.

12 In addition, just last week, the chairman of the
13 Federal Energy Regulatory Commission indicated that he is
14 interested in looking at the lifecycle emissions of LNG
15 imports.

16 MR. ROSTOV: Okay. So during your research on
17 LNG, have you seen or known of any analysis by the
18 permitting authorities in Mexico where the Costa Azul
19 terminal is located regarding the lifecycle GHG effects of
20 LNG from that plant?

21 MR. COX: No, I do not believe that's been done.

22 MR. ROSTOV: Are you aware of any GHG analysis
23 for the use of LNG from the Costa Azul facility?

24 MR. COX: Bill Powers, Powers Engineering, has
25 done some pretty extensive analysis looking specifically

1 at the supply train from Indonesia to Baja -- Indonesia is
2 where there's a contract for LNG -- and has broken down --
3 and this is shown in a map in my written testimony --
4 broken down where the increases in GHGs happen, and
5 indicates a 25-percent increase.

6 And this agrees with another study that was done
7 for a different supply train, but that was done by Richard
8 Heede, looking at the Australia to Oxnard, that supply
9 train. And he came up with a similar conclusions.

10 MR. ROSTOV: And is there a Carnegie Mellon study
11 that's also on this topic?

12 MR. COX: Yes. Carnegie Mellon has done a more
13 general, not so site-specific, study which also indicated
14 up to, I believe, a 28-percent increase of emissions.

15 MR. ROSTOV: And in your experience, is that the
16 definitive report on LNG lifecycle emissions or one of the
17 more respected ones?

18 MR. COX: Oh, sure. I mean, Carnegie Mellon is
19 certainly a well-respected university. And I think just
20 that there is such similarity in the conclusions of all of
21 these reports, I think indicates to me that this is --
22 this is pretty unimpeachable.

23 MR. ROSTOV: Okay. And just for the record, that
24 was Exhibit 620.

25 So that methodology could be used, for example,

1 in this siting proceeding, the methodology used in
2 Exhibit 620 could be used here to do the greenhouse gas
3 analysis, in your opinion.

4 MR. COX: Yes.

5 MR. ROSTOV: This is my final question.

6 Is it reasonably probable that the CECP will
7 receive LNG from the Costa Azul terminal and that this
8 will increase the GHG emissions of the CECP project?

9 MR. COX: Yes, it is.

10 MR. ROSTOV: Thank you.

11 HEARING OFFICER KRAMER: Commissioner Eggert had
12 a clarifying question.

13 COMMISSIONER EGGERT: Just to clarify, with
14 respect to our earlier counsel on efficiency values and
15 how we characterize them, the numbers that you'd
16 referenced, the 25-percent increase, that's reference to
17 the production portion or the full lifecycle including
18 combustion?

19 MR. COX: That is the full lifecycle, not
20 including combustion on this end. So this is just the
21 add-on, this is everything that happens --

22 COMMISSIONER EGGERT: Everything well to plant?

23 MR. COX: Right. This is everything that happens
24 from where it gets taken out of the ground in Indonesia to
25 where it becomes regasified at Costa Azul, not past that.

1 COMMISSIONER EGGERT: Okay.

2 HEARING OFFICER KRAMER: Thank you.

3 There will be cross-examination down the road, no
4 doubt.

5 COMMISSIONER BOYD: Let me ask a question or two
6 here.

7 Do you think the same kind of analysis,
8 therefore, for equity's sake, should be done on all
9 natural gas or all methane, since it's all methane,
10 delivered to any new facility that this Commission might
11 be considering licensing in the future?

12 MR. COX: I certainly think that would be to get
13 a true reading of the climate impacts of the facility,
14 yes, I do think that would be a prudent route to follow.

15 I also believe that you're in kind of a
16 special -- this is a unique situation in that this power
17 plant is so close to the one LNG import terminal that's on
18 the west coast. So it's not going to be as diluted by
19 other sources as perhaps one in the bay area. But
20 certainly think it should be accounted for.

21 COMMISSIONER BOYD: There's a lot of gas used for
22 various industrial purposes here in this entire San Diego
23 region. You, therefore, have the same concerns with
24 regard to that natural gas if it's derived from LNG in any
25 application?

1 MR. COX: Yes, because I'm concerned that -- I
2 mean, you know, we're not going to get, you know, a second
3 chance at solving the climate problem. And the only way
4 to get it right is to get it right the first time, and
5 that means a full accounting for all the factors that are
6 contributing to climate change. So yes, I would argue
7 that that would be, again, a prudent route for the sake of
8 the planet's future.

9 COMMISSIONER BOYD: Thank you.

10 HEARING OFFICER KRAMER: Thank you.

11 Ms. Siekmann, now with Mr. Sharman.

12 MS. SIEKMANN: Thank you.

13 HEARING OFFICER KRAMER: And before you start, it
14 appears that it would be appropriate to number the
15 Powerpoint presentation that he made last night as
16 Exhibit 376. So if everybody makes a note of that. And
17 then you can move it into evidence at the conclusion of
18 the topic.

19 (Thereupon, Exhibit 376 was
20 marked for identification.)

21 HEARING OFFICER KRAMER: And also, to be clear
22 for the record, this presentation was made last night
23 before the public comment, and it will be considered as a
24 part of the evidence we're receiving on this topic today.

25 MS. SIEKMANN: Thank you.

1 DIRECT EXAMINATION

2 MS. SIEKMANN: Mr. Sharman, what is your
3 education and professional training, current occupation
4 and role with the City of Solano Beach?

5 MR. SHARMAN: My training and education is as a
6 mathematician and computer scientist. I've transitioned
7 during the last five years of my career to developing
8 energy and water resources primarily in the area of solar
9 and in the area of water mitigation in the State of
10 California.

11 I founded the Borrego Water Exchange, which now
12 results in the tendering of credits instead of money for
13 mitigation in the community of Borrego Springs.

14 At Solano Beach, the City of Solano Beach, I am a
15 member of the Clean and Green Committee, and that
16 committee recently completed and I participated in the
17 review and finalization of the city's greenhouse gas
18 inventory report.

19 MS. SIEKMANN: Are there any additions or
20 clarifications you would like to make to your written
21 testimony?

22 MR. SHARMAN: Yes. What is most troubling in
23 California is it appears that existing laws, CEQA and
24 AB 32, are being applied with a double standard, and this
25 may be completely unintended, but it appears true.

1 All of us here completely understand how science
2 informs us of the urgent need to decarbonize the energy
3 stream. Great. Has this been done in a significant way
4 in 2008 and 2009? Did California meet its 20-percent RPS
5 mandate by the end of this year? Do we have a significant
6 portfolio of small, medium, and large renewable plants
7 online relative to total generation? The answer is no,
8 and I have to ask why.

9 The answer appears to me today that gas-fired
10 plants are held to a lower and more promiscuous mitigation
11 standard. By contrast, in the case of BrightSource, a
12 solar project in the desert, the project is being held to
13 mitigation standards that may destroy the project's
14 economics. There is no waiver for the BrightSource land
15 and biology impacts. I would submit that this facility
16 represents an overriding consideration for its ability to
17 generate significant power with zero GHG emissions. But
18 none of my friends of the Sierra Club agree, and this
19 project is being subject to mitigation measures greater
20 than one to one for land and biology.

21 These conditions with other project costs may
22 render it infeasible, and so yet another renewable project
23 will fail to go online.

24 But with the Carlsbad application, mitigation is
25 in the form of market and operational assumptions. All

1 with a line in some perfect pattern the plant will go
2 online, demand will be just so, and old power plants, less
3 efficient, will go offline. The mysterious and hidden
4 hand of the market. But we have learned that the market
5 does not always behave in safe ways.

6 Carbon emissions have been given a free ride as
7 an acceptable externality of the market. And economists
8 are casting doubts, serious doubt on whether cap and trade
9 is an efficient and effective way to effect urgent and
10 significant reductions in carbon.

11 One scenario for the next years is that growth of
12 electrical demands exceeds capacity forecasts. This
13 scenario results in old plants staying online. They just
14 keep chugging away, spewing their GHGs along with the new
15 ones, such as the CECP, which has admittedly a better
16 efficiency ratio and less GHGs per megawatt hour.

17 Independent economists and policy consultants
18 urge the CEC to develop policy whereby an escalating fee
19 is placed on all carbon-based energy. 90 percent of this
20 fee could be directly distributed to the public, and then
21 10 percent used to accelerate emission-free energy, a
22 simple alternative to cap and trade. These facts I have
23 efforted to make clear in my written testimony.

24 I have truthfully been informed by staff that
25 there is no guarantee of net GHG reduction as a result of

1 the plant's operation, and therefore, any rebuttal
2 testimony or claim is nothing more than this: It is a
3 claim, not a guarantee.

4 The scientific community pleads that all parties
5 renew their efforts to create an energy future that is
6 free of emissions. Whether it's carbon neutral as an
7 algae, or truly renewable, such as wind, solar, and tidal,
8 or whether it is nuclear that is also emission free, we
9 must work as partners because we have taken off with a
10 plane loaded with passengers and a leaking gas tank. We
11 need to make a 180-degree turn and get back to ground and
12 fix the plane before catastrophe strikes.

13 People like us right here and now have the
14 financial, intellectual, and political and moral capital
15 to create a future where our energy stream contributes to
16 the restoration of the climate. Bold and swift action
17 that eliminates new emissions, that sunsets existing
18 emission sources and that rewards emission-free energy is
19 the only answer for the future of California.

20 MS. SIEKMANN: Thank you.

21 Is Carlsbad threatened by GHG emissions?

22 MR. SHARMAN: Yes. I think I made that perfectly
23 clear. The break up of Greenland is ongoing, and would
24 lead to a disastrous submersion of the coastal parts of
25 Carlsbad.

1 MS. SIEKMANN: What is the growth and net
2 addition of CO2 emissions as proposed by the new plant?

3 MR. SHARMAN: Well, in just listening to the
4 testimony, I would have to say that I would probably
5 revise the guarantee of emissions, of net reduction. If
6 you look closely at the permitted plant emissions, that's
7 846,076 metric tons per year, and the decommissioning of
8 plants 1, 2, and 3 would result, based on an average
9 dating back seven years from 2002 to 2008, of 243,000. So
10 that would result in a net emissions of 600,000. But as
11 you've just heard, if the content is 25 percent greater of
12 LNG delivery, there would be no net reduction. So I have
13 to -- I have to rethink my computation on that.

14 MS. SIEKMANN: Is it your opinion that the net
15 addition of CO2 from the plant is significant, and why?

16 MR. SHARMAN: Absolutely. I think that there
17 isn't just any question any longer. I think everybody
18 here knows that any net additions is significant,
19 particularly as it pertains to power plants, fossil-fuel
20 based power plants.

21 MS. SIEKMANN: And why?

22 MR. SHARMAN: Well, simply because we all
23 understand that greenhouse gases are important, they're
24 good for the climate. But just like sugar, not too much.
25 And when you have too much, you can destabilize the

1 climate in very unintended ways. And we know that that is
2 occurring today.

3 MS. SIEKMANN: How much CO2 mitigation does the
4 Applicant propose in closing plants 1, 2, and 3?

5 MR. SHARMAN: Well, as I just stated, closing
6 plants 1, 2, and 3 is a good thing. It will reduce the
7 emission outflow on average 243,000 metric tons. However,
8 if the content of the gas coming in has a new externality
9 that has not been accounted for, then I don't know whether
10 or not any longer there is a net reduction relative to
11 that plant.

12 MS. SIEKMANN: According to the letter and spirit
13 of CEQA, is a net increase of CO2 a significant impact?

14 MR. SHARMAN: Absolutely. And this is the most
15 troubling part, because I have read and reread the
16 Applicant's testimony and rebuttal, and on the one hand I
17 hear today that it will result in a reduction, a net
18 reduction over the western grid, but I have written
19 testimony that says because the project is expected to
20 result in a net decrease, does not say it will result, it
21 says it expects.

22 And then furthermore, I read in FSA staff
23 documentation, staff revisions to their original FSA
24 report; however, dispatch order can change or deviate from
25 economic or efficiency dispatch in any one year or due to

1 other concerns such as permit limits, contractual
2 obligations, local reliability, or emergencies. These
3 deviations are likely to occur infrequently.

4 So I have no confidence any longer in the claim
5 that this will actually result in a net reduction across
6 the western grid for California and beyond.

7 MS. SIEKMANN: The power plant is deemed as a
8 fast dispatchable technology for power generation. What
9 alternatives are available to NRG, the Applicant?

10 MR. SHARMAN: This is a wonderful point in time
11 for NRG. It could submit an application for tidal energy
12 and continue to use the facility. It could transform that
13 plant into a platform for renewable energy research. It
14 could partner with a solar research division, development
15 division to use the property for distributed energy.
16 There are many, many opportunities other than this current
17 application for energy.

18 MS. SIEKMANN: Thank you, Mr. Sharman.

19 MR. SHARMAN: Thank you.

20 HEARING OFFICER KRAMER: Thank you.

21 I think we're close enough to the 1:00 hour to
22 break for lunch for an hour, so please be back here at a
23 quarter to 2:00.

24 (Lunch recess.)

25

1 AFTERNOON SESSION

2 HEARING OFFICER KRAMER: Okay. We'll get

3 started.

4 We have a procedural question.

5 Mr. McKinsey, how long to tell the hotel he

6 thinks we're going to be here this evening. We've

7 probably got, if you look at our schedule, probably eight

8 hours' worth of business, but I'm sure that everyone is

9 hoping to be a little bit quicker than that.

10 Any thoughts, Mr. Thompson?

11 MR. THOMPSON: I'm sorry, I was distracted. I'm

12 sorry.

13 HEARING OFFICER KRAMER: How long do you think

14 we're going to need to go tonight to finish up today's

15 work?

16 MR. THOMPSON: All I can go by is your time

17 estimates, with some horror.

18 HEARING OFFICER KRAMER: I think, John, to be

19 safe, you better think about 10:00.

20 That's not a license to answer yes or no

21 questions with monologs.

22 So, Mr. Ratliff, because, Mr. Rostov, you wanted

23 to wait on Mr. Hunt to follow staff --

24 MR. ROSTOV: Right.

25 HEARING OFFICER KRAMER: Okay. So we are up to

1 the staff presentation then.

2 MR. RATLIFF: Yes. Thank you, Mr. Kramer.

3 The staff has multiple witnesses today, and each
4 of them is -- each witness has a little bit of a different
5 part of the picture. And so it's -- I've been trying to
6 think about how to best -- what order to put them in.

7 I think I'll basically start with Mr. Layton, who
8 oversaw the preparation of the staff testimony, and he can
9 very briefly describe what it is; and then I'll go to
10 Mr. McClary, who is the policy witness.

11 DIRECT EXAMINATION

12 MR. LAYTON: Good afternoon.

13 MR. RATLIFF: Mr. Layton, can you basically
14 summarize the components, and, very briefly, the
15 components of the staff testimony and the witnesses that
16 we have to present today?

17 MR. LAYTON: The testimony is part of air quality
18 testimony that Mr. Walters prepared. Mr. Walters and I
19 authored the appendix on greenhouse gases. When the
20 Energy Commission started doing greenhouse gas analysis
21 for power plants, because the CO2 was a major contributor
22 to the greenhouse gas emissions from a power plant and the
23 CO2 comes out the stack, it ended up in the air quality
24 section. So as the Energy Commission has started doing
25 more and more refined greenhouse gas analyses for these

1 power plants, they've been in the air quality section.

2 Currently, the greenhouse gas impact and --
3 emission and impact analysis section has evolved
4 tremendously from when we started about six years ago from
5 a few paragraphs in the air quality section to a
6 stand-alone appendix, overlaying the improvements in our
7 analysis, our AB 32, the Global Warnings Solution Act,
8 SB 1368, the Greenhouse Gas Emission Performance Standard.

9 The Energy Commission also conducted an order
10 instituting informational proceeding on CEQA,
11 responsibilities of greenhouse impacts analysis in power
12 plant siting cases, and also the 20 and 33 percent
13 renewable standards that apply to the California purchase
14 power.

15 Mr. Walters and I prepared the greenhouse gas
16 analysis on the Carlsbad Energy Center. Our conclusion is
17 that the project would lead to a net reduction in
18 greenhouse gas emissions across the electricity sector.
19 Note that our analysis is across the electricity sector
20 that supplies electricity that California -- that includes
21 power plants throughout the western United States.

22 To that end, we have included experts on the
23 operation of the electricity system, in particular the
24 operation of the electricity system in a high-renewable
25 low-greenhouse-gas-emitting electricity system.

1 Mr. McIntosh is here from the CAL ISO.

2 Mr. McClary is here as the policy expert on one of the key
3 reports. And Mr. Vidaver here is from our electricity
4 Office.

5 That summarizes my overview of the section.

6 MR. RATLIFF: Thank you, Mr. Layton.

7 The first witness that I would like to have speak
8 is Mr. Steven McClary, who is a consultant who has
9 prepared testimony for this proceeding called the
10 MRW Report.

11 And I'll start, Mr. McClary, by asking, are you
12 the author of the -- one of the principle authors of the
13 MRW Report?

14 MR. McCLARY: Yes, I am.

15 MR. RATLIFF: And the MRW Report provides what
16 might be called a big picture perspective of the very big
17 changes in the California electric generating system that
18 is or are occurring in response to the AB 32 goals that
19 are intended to reduce greenhouse gas emissions.

20 Could you explain how you believe the electric
21 system will change in response to the AB 32 goals?

22 MR. McCLARY: Well, as you say, AB 32 sets some
23 very ambitious goals for greenhouse gas reduction in the
24 state. And the blueprint set forth by the ARB actually
25 assigns a disproportionate role to the electric sector in

1 meeting those goals. That makes greenhouse gas reduction
2 a key element in electric resource planning for the
3 foreseeable future in the state.

4 There's really two primary levers that we have in
5 the electric sector to meet those kinds of ambitious
6 goals. The first is energy efficiency or conservation,
7 simply using less electricity to accomplish the same
8 services; the second is the introduction on a pretty
9 aggressive scale of new technologies that emit much lower
10 levels of greenhouse gases.

11 In that context, primarily what we're thinking of
12 are renewable technologies, wind, solar, other, that may
13 be available. And at this point what we've done is set
14 percentage levels in the renewable portfolio standards as
15 to levels of renewable resources that will enable us to
16 achieve greenhouse gas emission reduction goals for the
17 state.

18 Those are ambitious goals, and we're looking at
19 achieving a 33-percent penetration of renewable resources
20 by 2020, which will be quite a significant change to the
21 resource system as a whole.

22 To do that, we're going to have to bring in
23 significant amounts of renewable resources while
24 maintaining the same reliability and the economics of the
25 system so that we still are able to flip the switch and

1 have the lights come on whether the wind is blowing or not
2 or whether the sun is shining or not, and that is part of
3 where gas-fired resources, such as CECP, would fit into
4 the larger electric system planning goal.

5 These kinds of flexible resources serve several
6 purposes, which are outlined in the MRW Report. A primary
7 one is to accommodate higher levels of renewable resources
8 which can be variable or non-dispatchable on the system;
9 so that if there are fluctuations in output in renewable
10 resources, you've got the ability to ramp plants up and
11 down to meet system requirements and thereby be able to
12 build higher levels of renewable resources.

13 You also have a series of operational needs on
14 the system, which flexible resources that have high ramp
15 rates can meet. Those would be things like providing
16 spinning reserves, ancillary services, maintaining grid
17 stability, and also the ability to respond to sudden
18 changes on the system, which can result from changes in
19 demand or changes on the supply side, which can be things
20 other than renewable resources as well. You can have
21 supply sources that drop off the grid; you can have a
22 transmission line that drops off.

23 To meet those kinds of conditions you need to
24 have resources that you can ramp up and down rapidly. You
25 also have a need in specific areas to meet local resource

1 requirements in order to maintain the reliability of the
2 system in an area; san Diego being one of those kinds of
3 areas where you've got a load pocket and you need a
4 certain amount of generation within that load pocket to
5 the extent you can't provide that from renewable
6 resources, gas-fired plants can make up part of that need
7 as well.

8 MR. RATLIFF: On page 28 of the MRW Report you
9 describe gas-fired facilities as, quote, the most flexible
10 units allowing their use for peaking, cycling, and some
11 baseload duty. And as such you say that they are on the
12 margin.

13 Can you explain what you mean by the term "on the
14 margin" and what that means for greenhouse gas purposes?

15 MR. McCLARY: In this context, "on the margin"
16 means that these are the plants that you are -- the next
17 plant that you are going to ramp up or ramp down in
18 response to changing system needs, whether that be from
19 demand or the supply side. So they're the marginal plant
20 in that they are the next to respond.

21 Currently the California system gas-fired plants
22 are on the margin at nearly all hours, and I think -- and
23 that will continue to be the case. As new gas-fired
24 plants are introduced to the system, they -- because
25 technology has evolved and as the efficiencies increase,

1 you can provide that kind of marginal resource with a more
2 efficient unit and provide the flexibility you need on the
3 margin with a reduction in greenhouse gas emissions
4 because you're simply providing that same kind of marginal
5 service from plants with higher efficiencies, thereby
6 burning less gas in performing that service.

7 MR. RATLIFF: Would the evaluation framework that
8 you describe in the MRW Report for gas-fired plants also
9 be applicable to describing or evaluating the potential
10 alternatives to a proposed project?

11 MR. McCLARY: Yes, it would. The report focused
12 on gas-fired generation because that's the immediate and
13 available technology to meet these kinds of needs. But
14 the same criteria of flexible generation, ability to
15 locate in areas with local capacity requirements response
16 to the grid could also be applied to other technologies
17 that might meet those same requirements.

18 MR. RATLIFF: Is the construction and operation
19 of a gas-fired power plant like CECP consistent with the
20 goal of reducing overall greenhouse gas emissions in the
21 electric generation sector?

22 MR. McCLARY: Yes, that is consistent with the
23 goal in a couple of ways. One is, as I have mentioned, in
24 accommodating a dramatic increase in the amount of
25 renewable resources, which tend to be less dispatchable

1 and also more available in their output. It enables
2 higher levels of renewable resources to be accommodated on
3 the system if you have available to you these kinds of
4 dispatchable resources.

5 It also contributes to the goal of reducing
6 greenhouse gas emissions by providing that the kind of
7 flexible generation that the system requires to maintain
8 stability and for capacity in local areas is being done so
9 with more efficient plans, lower greenhouse gas emissions
10 in providing those services, and thereby also contributing
11 to lower emission of greenhouse gases.

12 MR. RATLIFF: The CBD has provided testimony from
13 Mr. Hunt, which asserts that the market potential for
14 solar PV development, due to downtrend in prices, will
15 provide enough solar PV to meet local capacity
16 requirements in the San Diego area.

17 Do you agree with that conclusion?

18 MR. McCLARY: At this time I don't. Solar PV has
19 real potential, but it hasn't yet been demonstrated or
20 deployed widely enough to be really looked to as a
21 replacement or available alternative to the kind of
22 generation that CECP would provide.

23 In addition, it's not dispatchable in the sense
24 that you can ramp it up and down in response to system
25 conditions; in fact, it's variable and needs to be

1 accommodated. So even if we see -- and I think actually
2 we would all like to see a downward trend in market prices
3 for PV resources, you would still find that there's a need
4 for the kind of flexible generation that CECP would
5 provide in the San Diego area and more generally on the
6 system in order to meet other system needs that solar PV
7 would not provide.

8 MR. RATLIFF: What would be the consequence if
9 Mr. Hunt were correct, though, and, in fact, that solar PV
10 was sufficient to provide all the capacity needs of
11 San Diego after CECP had been built?

12 MR. McCLARY: If you have a greater penetration
13 of solar PV in the San Diego area, what would happen would
14 be that the -- that sources such as CECP would need to
15 operate less frequently, in particular to the extent that
16 they supplement -- that solar PV was able to provide local
17 reliability resources, gas-fired resources in the area
18 would need to operate less often.

19 In that event, you would have fewer greenhouse
20 gas emissions because the gas-fired plants would be
21 operating less frequently, and the net result would be a
22 reduction in greenhouse gas emissions, which, again, is
23 consistent with the state's policy goals.

24 MR. RATLIFF: I want you to elaborate a little
25 bit too on the loading order and why the loading order

1 would prevent gas-fired generation from displacing solar
2 PV generation.

3 MR. McCLARY: Well, the loading order is a way of
4 specifying the order in which resources are dispatched or
5 brought on to the system and added as resources to the
6 system. The first priority is energy efficiency, the next
7 are resources that by their economics or nature are
8 operated in baseload fashion, with nuclear being the one
9 example of that, hydro you take when you get it as well.

10 Gas-fired resources are, if you will, at the
11 bottom of the loading order, although often you would
12 reverse the order of that; but gas-fired resources are the
13 last to be dispatched because state policy has set the
14 renewable resources that provide no greenhouse gas
15 emissions ahead of it essentially in that loading order.

16 So they are -- must take, when they generate, you
17 take that generation because it's contributing to your
18 greenhouse gas emission goals, you use gas fire to fill in
19 the rest after that; and because of that, it's not
20 displacing the solar or wind or other renewable
21 development, it's supplementing and enabling other
22 renewable development.

23 MR. RATLIFF: Mr. Hunt and others have raised the
24 potential downside to investing in a -- well, basically
25 in -- the possibility that CECP, without it being needed.

1 Sometimes have used the term "merchant facility" to
2 describe that.

3 Could you describe briefly the regulatory process
4 that will consider the issue of rate-payer investment
5 before CECP could impose cost to rate payers?

6 MR. McCLARY: The way in which costs of CECP
7 would be passed on to rate payers will be determined at
8 the Public Utilities Commission. It's not directly a part
9 of the need determination process here.

10 The Public Utilities Commission will look at this
11 resource presumably as part of the long-term procurement
12 plan proceeding, which is informed by the demand and
13 supply planning that takes place at this Commission as
14 well as the system reliability and transmission analyses
15 that are performed by the California independent system
16 operator.

17 The Public Utilities Commission then reviews and
18 approves long-term plans by each of the investor-owned
19 utilities in conformance with those approved plans; the
20 utilities conduct requests for offers or competitive
21 auctions for power plants to meet the needs identified in
22 the long-term procurement plan. After the results of
23 those competitive auctions are in, the costs and the terms
24 of the contract are brought to the Public Utilities
25 Commission for final approval with an advisory process

1 that includes rate-payer groups, although it does not
2 include other market participants.

3 So at the end of that process, you have a
4 contract with -- between the operator of a plant and the
5 utility with the costs being set by the Public Utilities
6 Commission, and cost recovery is not assured to the
7 operator of the plant.

8 Frankly, the investment in a plant such as CECP
9 is dependent on their ability to compete for and win a
10 contract with the utility, it is not assured; and if they
11 do not win such a contract or if they lose money on the
12 contract with the utility, that's the power plant
13 operator's loss, not the rate payer's loss.

14 MR. RATLIFF: So if the maximum scenario, maximum
15 solar scenario should actually come to pass and the Energy
16 Commission's forecast reflected decreased demand in the
17 San Diego area, do you think it likely that the PUC would
18 approve a contract that SDG&E would enter into for power
19 from NRG?

20 MR. McCLARY: There would be two potential
21 scenarios where the PUC might be looking at that.

22 One would be whether there were payments or there
23 was a need still identified in the local area for a
24 dispatchable local reliability resource. In such an
25 event, the contract that would be signed, would be a pure

1 cost recovery, no profit, and it would be scrutinized
2 closely.

3 The scenario you're positing where there's solar
4 PV development in the San Diego area sufficient to meet
5 all capacity needs would suggest that this plant would
6 compete only on its ability to economically provide
7 regulation services, grid stability services, perhaps
8 renewable integration services statewide to the ISO and to
9 the utility, and it would have to compete with resources
10 everywhere else in the state to provide that.

11 The ability of the operator again to recover
12 their costs and compete for that would depend on what they
13 were willing to bid for it.

14 I think that competing on a statewide basis as is
15 planned -- would the -- the PUC is going to see bidders
16 responding to any RFO conducted by the utilities, and they
17 have not shown thus far -- well, I should say they are
18 responsible for seeing that the most economic set of
19 resources result from that auction process. If this plant
20 were one of those, it still could receive a PPA, but only
21 if it was deemed to be the most economic way to meet
22 utility needs by the PUC.

23 MR. RATLIFF: Mr. Hunt has testified that CECP is
24 not needed because the Energy Commission demand forecast
25 is lower.

1 Do you agree?

2 MR. McCLARY: No. A lower demand forecast in and
3 of itself doesn't solve the problems or provide the
4 services that a plant like this would provide. You still
5 need to accommodate new resources, you still need to
6 provide the kinds of grid services that a flexible
7 generation plant can provide, and you'll still have local
8 capacity needs, even with a lower demand forecast.

9 MR. RATLIFF: What about the suggestion that the
10 Energy Commission should not approve such a project until
11 further studies have been done concerning both the
12 penetration of solar or the need -- future need forecasts?

13 MR. McCLARY: I would not agree with that. There
14 are always additional studies that need to be performed.
15 The same argument about waiting for results of studies
16 could be made, in fact, for solar-generating or
17 wind-generating projects, that those decisions on those
18 should be deferred until we know whether they can be
19 accommodated and how. And I wouldn't suggest that we
20 defer those pending the results of studies that are still
21 being performed.

22 I would add to that that one of the studies he
23 mentions or one of the analyses is once-through cooling
24 and the impact that retiring plants that utilize with
25 once-through cooling will have on the system. And while,

1 again, there is still analyses underway there, it does
2 appear that the potential for this plant to displace one
3 of the once-through cooling plants in existence now at
4 Encina is very high and would suggest that it is likely to
5 be a critical component of any plan that will replace the
6 once-through cooling resources we have today.

7 MR. RATLIFF: Thank you, Mr. McClary.

8 I'd like to turn at this time to Mr. McIntosh.

9 And, Mr. McIntosh, could you please tell us what
10 your position is at the ISO.

11 MR. McINTOSH: Presently I'm the director of
12 renewable resource integration and grid architecture.
13 Part of that, for the last years I've been the director of
14 grid operations. Under that, the reliability for
15 California's energy products are under -- within my group.
16 I have a staff of a hundred people to guarantee we keep
17 the lights on and keep the grid stable 365 days a year,
18 24 hours a day.

19 MR. RATLIFF: And could you elaborate on your
20 experience with grid operation?

21 MR. McINTOSH: Certainly. I've got about 40
22 years of experience, 30 of that was with PG&E and various
23 operating positions. Before deregulation occurred, I was
24 running PG&E's control center and worked in various
25 operational jurisdictions and management jobs at PG&E.

1 When I left, I was the director of outage coordination and
2 grid scheduling.

3 I went to the ISO a year and a half after the ISO
4 started.

5 Want me to elaborate?

6 MR. RATLIFF: Go ahead.

7 MR. McINTOSH: Sure. Well, I'm a certified hydro
8 operator, steam plant operator, and utility substation
9 operator. I'm certified by NRC at the highest level of
10 reliability coordinator, and I maintain that
11 certification.

12 MR. RATLIFF: Thank you.

13 What is the purpose of your prepared testimony
14 today?

15 MR. McINTOSH: The purpose of my testimony today
16 is to elaborate on the attributes that the Carlsbad Energy
17 Center provides. They're very important. The operating
18 characteristics, the performance characteristics, and some
19 of my colleagues have already alluded to these, but let me
20 reiterate, because they're very important.

21 In the process of facilitating renewable resource
22 integration in California to meet the RPS goals -- and the
23 things that I'm talking about, you've heard others already
24 mention, but let me just say it again.

25 The operating characteristics of having the

1 ability to cycle the plant, the ramping capabilities, the
2 dispatchability of that plant, the fact that I can get
3 that 24 hours a day -- and part of the challenge of the
4 renewable integration is the fact that when you look at
5 what we're referring to as renewable in the testimony, we
6 call -- when I talk about it at NRC, is variable
7 generation.

8 The wind in California blows at night, you know,
9 we peak during the day, so that's an issue. Solar is --
10 actually follows our load period very well, but it also --
11 it's variable. We're finding as the penetration
12 increases, it's more variable. Today would be a good
13 example. You wouldn't have seen any solar generation
14 until about 10:00 right here. So we have to have
15 resources sitting on the system ready to do what we call
16 backstop generation, fill that gap so that we can
17 integrate the amounts of generation that need to happen
18 with the RPS goals.

19 MR. RATLIFF: What specific generation
20 characteristics of the proposed Carlsbad Energy Center, if
21 any, do you identify in your prepared testimony that may
22 complement the integration of renewable resources?

23 MR. McINTOSH: Most of those things I just talked
24 about. The ramping characteristics are very important,
25 because both solar and wind ramp on and ramp off very

1 quickly at ramp rates that are higher than the existing
2 facilities can handle at times. That's a very valuable
3 attribute.

4 We can put the unit on control, which means it's
5 dispatchable by what we call automatic generation control
6 algorithm that runs plants, so it's under our direct
7 control to do the load following and regulation service
8 that we refer to as ancillary services. That helps manage
9 all the variable generation outputs during the course of
10 24 hours of the day.

11 MR. RATLIFF: To what degree does rooftop solar
12 provide the same, or solar PV generally provide the same
13 benefits, even if employed on a large scale, as the
14 operational benefits that this project would provide?

15 MR. McINTOSH: I think the benefits, it does
16 offset some on-peak loading. Of course, the highly
17 visible impact would be when the sun comes up, solar comes
18 up; and when the sun goes down, it goes away. That means
19 that it's no longer a viable resource that's dispatchable,
20 basically, when the lights go down at night, until they
21 come up again the next day.

22 MR. RATLIFF: What conclusions, if any, do you
23 reach in your prepared testimony?

24 MR. McINTOSH: The project as described is
25 essential to the needs of California and to the electrical

1 grid to meet the challenges that are presented by the new
2 variable generation coming onto the system. This and
3 others like it will be needed. They're very efficient
4 units, and they meet that gap that occurs when the
5 variable generation is moving around on a minute-to-minute
6 basis.

7 MR. RATLIFF: Thank you, Mr. McIntosh. And thank
8 you for attending today.

9 MR. McINTOSH: You're welcome.

10 COMMISSIONER BOYD: Mr. Ratliff, could I ask a
11 question now, or should I wait till you're done with your
12 folks?

13 MR. RATLIFF: I encourage you to ask questions
14 whenever you want to, Commissioner.

15 COMMISSIONER BOYD: This is a question triggered
16 in my mind earlier by Mr. McClary, but Mr. McIntosh's
17 reference to backstop generation prompted me again to want
18 to ask this question.

19 Mr. McClary, I could call you Steve, we know each
20 other that well, but this is very formal, so I'll call you
21 Mr. McClary.

22 In your response to Mr. Ratliff's question
23 about -- I think he was referencing regularly Mr. Hunt,
24 but the idea that, well, what if the dream of enough solar
25 in this area to meet the need were achieved, you said

1 they'd needless of CECP.

2 And the thought that crossed my mind, that's -- I
3 would agree with that statement, but it did make me think
4 in light of this overall need for backstop generation, you
5 know, let's say universally throughout California anyway,
6 what additional need would there be for, as I call it,
7 firming power, backstop generation would be necessary
8 perhaps somewhere else if it weren't provided here? Or
9 would there be so-called backstop generation needed
10 somewhere else if it weren't provided in this particular
11 area just because of the hypothetical complete saturation
12 of photovoltaics to meet the local need? Would there be a
13 need somewhere else for an equivalent amount of backstop
14 generation?

15 That was to you, Steve.

16 MR. McCLARY: Well, I think there would be. I
17 mean, I -- what I was trying to get at in responding to
18 that question was if you had a real saturation, perhaps
19 even, you know, excess solar PV installed specifically in
20 this area, what would happen. Well, you might well
21 largely reduce or close to eliminate the local capacity
22 requirement; but as you say, statewide you still have a
23 need to accommodate wind variation, fluctuations in
24 demand, fluctuations in other resources as well. And you
25 still need to have flexibly generated resources, which

1 this plant would still be able to meet on a statewide
2 basis even if the local capacity requirement was reduced
3 greatly or completely.

4 COMMISSIONER BOYD: Okay. Thank you.

5 Excuse the interruption, Mr. Ratliff.

6 MR. RATLIFF: Our next witness is Mr. Will
7 Walters. Mr. Walters has been introduced earlier.

8 Mr. Walters, can you briefly describe your
9 involvement in the greenhouse gas testimony.

10 MR. WALTERS: Yes. I prepared the testimony
11 along with Mr. Layton. I reviewed the Applicant's
12 emission estimates and also assessed the project in terms
13 of its compliance with LORS policies and determination of
14 its overall system-wide GHG impacts.

15 MR. RATLIFF: And for a little context, could you
16 explain why the global nature of the greenhouse gas issue
17 makes your analysis different for greenhouse gases than it
18 would be for criteria pollutants.

19 MR. WALTERS: Yes. I think it's very valuable to
20 show the difference between those two analyses. The
21 criteria pollutant analysis is both a localized impact
22 analysis, fence line and beyond, and a regional analysis
23 for the air basin, because that's essentially where the
24 impacts of the project would occur.

25 However, for greenhouse gas emissions, the

1 impacts are a global nature, and therefore, when we
2 analyze the project, we analyze it in how it integrates
3 into the system and how it would overall impact greenhouse
4 gas emissions for the electrical system.

5 MR. RATLIFF: Thank you.

6 We had some prior discussion earlier from
7 Mr. Rubenstein about the overall efficiency of the units.

8 I don't want to try to get you to repeat anything
9 that he said, so I'm just going to ask you: Do you have
10 anything add to that, or do you disagree with it in any
11 way?

12 MR. WALTERS: No, I do not disagree with any of
13 that testimony.

14 MR. RATLIFF: In your view is CECP consistent
15 with the goal of providing more energy generation from
16 renewable resources?

17 MR. WALTERS: Yes, it is consistent with that
18 goal for several reasons.

19 Number one, it allows displacement of electricity
20 imports that would otherwise be generated by coal. As
21 noticed in staff's assessment, there are quite a few coal
22 contracts that will be expiring, and that generation will
23 have to be displaced to other resources as well as this
24 facility will be able to displace higher-emitting existing
25 resources in the area. Both the once-through cooled

1 facilities as well as peaking facilities would all emit
2 considerably higher greenhouse gases per megawatt hour of
3 generation.

4 MR. RATLIFF: Is it your understanding that the
5 CECP will allow for the closure of Units 1 through 3 at
6 Encina as well as perhaps other once-through cooling
7 generation resources?

8 MR. WALTERS: Yes, that is my understanding. In
9 fact, a full build-out would actually require the closure
10 of Units 1 through 3.

11 MR. RATLIFF: Is it your understanding that LNG
12 is likely to be consumed in significant quantities in
13 California?

14 MR. WALTERS: I would say it's very speculative
15 to assume that that would be the case. And there are
16 quite a few reasons why that is the case.

17 Number one, there is one facility that could
18 import LNG. The number of facilities that were originally
19 looking to site in California and through the Pacific
20 coast are essentially all stalled or have -- or are no
21 longer proposed.

22 There is a significant increase in the amount of
23 domestic gas that is now able to be produced, and there is
24 forecast that that will continue through the increase in
25 production from shale.

1 There are also proposals for additional gas
2 pipelines that will increase the domestic supply
3 availability in California.

4 So the likelihood of a significant amount of LNG
5 being used at this facility is speculative at best.

6 MR. RATLIFF: Assuming that you're wrong and that
7 LNG does become a significant component of our gas supply,
8 would that change your conclusion about the value of this
9 project from the point of view of reducing greenhouse gas
10 emissions?

11 MR. WALTERS: No. In fact, it actually helps
12 support the position, because this is a more efficient
13 source, it would actually use less of that LNG than other
14 local resources would have to for the same amount of
15 generation. So any increase that would happen with LNG
16 would actually -- that increase -- the amount of that
17 increase would be decreased by using a more efficient
18 power plant like CECP for the roles in which it's
19 envisioned.

20 MR. RATLIFF: Thank you, Mr. Walters.

21 And our last witness is Mr. David Vidaver.

22 Mr. Vidaver, could you describe your experience
23 and what you do. You can be honest about that.

24 MR. VIDAVER: Thank you. I still work in the
25 same office and enjoy the same civil service

1 classification that I did a couple of hours ago.

2 So I've worked for the Energy Commission since
3 1998 and was a consultant to the Commission for three
4 years prior to that. I currently supervise the
5 nine-person Procurement and Resource Adequacy Unit, a
6 group whose current responsibilities include but are not
7 limited to enforcing the state's emission performance
8 standard upon public utilities and developing assessments
9 of resource need in the South Coast air basin.

10 Prior to my current position, I was responsible
11 for simulation modeling of the Western Interconnect
12 analysis that included but was not limited to wholesale
13 price forecasting, forecasting the demand for natural gas
14 in the state's electricity sector, and implementation of
15 the state's renewable portfolio standard. I have roughly
16 ten years' experience with simulation models, primarily
17 production costs and market dispatch models.

18 My academic background is in economics with an
19 emphasis in applied microeconomics. I have degrees from
20 UC Berkeley and UC Davis.

21 MR. RATLIFF: Thank you.

22 Part of the difficulty of having such a wealth of
23 witnesses is I am never quite sure which one to ask which
24 question. And I previously asked Mr. McClary to explain
25 the loading order, and you heard his answer to that. And

1 I don't want you to belabor it more than necessary, but do
2 you have anything to add to Mr. McClary's statement about
3 how the loading order would prevent gas-fired generation
4 from displacing renewable generation?

5 MR. VIDAVER: I can amplify on what he said.

6 The construction of an operation at Carlsbad
7 would not lower prices, so it wouldn't increase the demand
8 for electricity, it would have no effect on the efficacy
9 of energy-efficiency programs or demand response programs.
10 As such, every hour of its operation would result in the
11 displacement of generation from another supply-side
12 resource. Hydroelectricity and nuclear are low enough and
13 variable cost such that it would not displace any of those
14 resources. And the state's renewable portfolio standard
15 requiring specified amounts of renewable energy to be
16 purchased by the state's utilities would remain in force.

17 Any renewable generation that did not have a
18 contract for sale of energy through a utility but relied
19 on market sales is almost certain to be wind and solar,
20 which have such low variable costs that the Carlsbad unit
21 would not result in any displacement from them.

22 So in sum, Carlsbad would, in the short run,
23 displace solely gas-fired generation, and in the longer
24 run would be very apt to displace coal-fired generation.

25 MR. RATLIFF: Speaking to this economic issue,

1 the term earlier I think is -- someone used the term
2 "economic dispatch," I believe. I'd like you to explain
3 that concept of what that term means.

4 MR. VIDAVER: Power plants are turned on in order
5 of -- as loads increase during the day. Power plants are
6 turned on in order of their available cost. The lowest
7 cost resources are left on all the time to meet demand at
8 night. The more energy that is needed over the course of
9 the day, the more we rely on high-cost resources to meet
10 that load.

11 As a very efficient gas-fired facility, Carlsbad
12 would be turned on instead of, in lieu of more-expensive
13 less-efficient and higher-gHG-emitting gas-fired
14 resources.

15 MR. RATLIFF: Would you expect then the Carlsbad,
16 this project, CECP, would you expect it to displace
17 less-efficient peaking facilities?

18 MR. VIDAVER: Yes, most certainly.

19 MR. RATLIFF: Another term that was used by
20 Mr. McClary was the term "load pocket." Could you explain
21 what a load pocket is?

22 MR. VIDAVER: A load pocket is an area where
23 demand, specifically peak demand, is sufficiently high and
24 the ability to import energy over transmission lines
25 sufficiently low. That reliability requires that there be

1 generation in that geographically-constrained area.

2 The ISO is required to have sufficient capacity
3 available so as to be able to meet one-in-ten-year peak
4 loads in the face of the failure of two major system
5 components, the southwest power link and a unit at
6 Palomar, for example. In order to have that generation
7 available, it must have generation within the San Diego
8 area available because the southwest power link and
9 ultimately the southwest power link and the sunrise power
10 link will be insufficient to allow for the import of all
11 the energy to meet San Diego's needs under peak load and
12 adverse outage conditions.

13 MR. RATLIFF: Would CECP provide load pocket
14 reliability for this San Diego load pocket?

15 MR. VIDAVER: It would provide the dependable
16 capacity that's necessary to satisfy these requirements on
17 the ISO.

18 MR. RATLIFF: In your opinion would the CECP run
19 most of the time?

20 MR. VIDAVER: I'm not familiar with the estimates
21 of how frequently the CECP will operate. I know that new
22 combined cycles that have come online since the energy
23 crisis in the State of California operate between 45 and
24 70 percent of the time; so I can't offer testimony as to
25 how frequently CECP would operate.

1 MR. RATLIFF: Okay. Why does building capacity
2 that runs less than most of the time make sense?

3 MR. VIDAVER: We are willing to pay for very
4 reliable service. Studies have shown that rate payers are
5 willing to pay for service that guarantees the delivery of
6 electricity all but one hour in ten years.

7 The demand in California is primarily driven by
8 residential air conditioning load. When it gets really
9 hot, the demand for electricity goes up; and we are
10 willing to pay the price of delivering electricity to us
11 on the hottest day in ten years. It's a rough rule of
12 thumb that given the load shape in California, the last
13 five percent of demand, the last five percent of capacity
14 that we are willing to pay for is needed one percent of
15 the time, and the last, I believe, ten percent is needed
16 about five percent of the time. So it's a sign of a
17 rather efficiently-built system that you have a
18 significant share of your capacity operating less than
19 five percent of the time.

20 MR. RATLIFF: There's been some discussion in
21 these hearings about the state water board policy that's
22 been referred to indirectly; not a policy really, but a
23 proposed policy which is targeted at the future shut down
24 of once-through cooling facilities with many cases target
25 dates for such.

1 Is it your understanding that that kind of --
2 that that proposal is tied to the condition that
3 replacement power be able to serve in the place that the
4 once-through cooling facilities that would be closed?

5 MR. VIDAVER: Yeah. I serve on an interagency
6 working group which advises the state water board
7 regarding the retirement or replacement of the state's
8 aging once-through cooled plants. The interagency working
9 group has made it clear to the water board that the
10 closure of the state's once-through cooled facilities will
11 in most cases require replacement infrastructure, either
12 replacement generation or replacement transmission for
13 those facilities and local reliability areas.

14 MR. RATLIFF: Were you finished? I didn't mean
15 to cut you off.

16 MR. VIDAVER: What's important, I think, to
17 realize, and something that Mr. McClary alluded to but
18 didn't discuss in detail, was that we are talking about
19 more than 20,000 megawatts of the state's generation
20 utilizing once-through cooling. And even if we use the
21 most conservative estimates of how much of that capacity
22 is going to have to be replaced, we're still looking at 11
23 or 12,000 megawatts of steam turbines that will have to be
24 replaced. And that will require the replacement of a
25 substantial amount of inertia to maintain grid reliability

1 and allow for the imports, which the state has come to
2 rely on.

3 MR. RATLIFF: Thank you, Mr. Vidaver.

4 That concludes our testimony.

5 COMMISSIONER BOYD: Question, if I might,
6 Mr. Vidaver, and this is going to sound pretty strange,
7 but I have my reasons, Dave.

8 In your discussion of what I'll call dispatch
9 order, you referenced economics and price of energy and
10 you referenced nuclear as low cost. Could I get in the
11 record that you were talking about the California fleet of
12 nuclear plants?

13 MR. VIDAVER: You can also get in the record I'm
14 referring to the variable cost, not the capital cost of
15 constructing those facilities.

16 COMMISSIONER BOYD: That's even better.

17 Thank you.

18 Another question, and I'm not quite sure to whom
19 to address this, but there's -- maybe it's -- well, David
20 may not be able to answer it, but you broached, and it's
21 been broached, the once-through cooling water dilemma, the
22 ocean water once-through cooling dilemma, and I just need
23 to ask to get on the record, is there an optional cooling
24 water supply available for this plant were it to be
25 obtainable?

1 MR. RATLIFF: I'm sorry, Commissioner, I don't
2 understand the question.

3 COMMISSIONER BOYD: Is there an alternative to
4 ocean water cooling that could be utilized at this plant?

5 MR. RATLIFF: Oh, I think I do understand your
6 question.

7 You mean the water that this facility requires,
8 could it come from some source other than --

9 COMMISSIONER BOYD: Other than ocean water.

10 MR. RATLIFF: Yes. I don't think these witnesses
11 are familiar with that issue. We do have a witness in
12 water on Thursday.

13 COMMISSIONER BOYD: All right. I'll hold my
14 question.

15 MR. RATLIFF: But I can answer it very generally;
16 and that is that we've written the conditions -- we've
17 provided conditions in the FSA which would allow this
18 facility to also use recycled water for its needs if such
19 is available or becomes available. But currently we're
20 told by the City of Carlsbad it is not available.

21 COMMISSIONER BOYD: Thank you.

22 HEARING OFFICER KRAMER: Okay. Mr. Rostov then
23 with Mr. Hunt.

24 MR. RATLIFF: I'm being told that I misunderstood
25 your question.

1 MR. LAYTON: Commissioner Boyd, were you asking
2 if they could use --

3 COMMISSIONER BOYD: No, I don't think he
4 misunderstood my question.

5 DIRECT EXAMINATION

6 MR. ROSTOV: Good afternoon, Mr. Hunt. Thank you
7 for coming from Santa Barbara, by train I might add.

8 You submitted testimony in this proceeding that
9 was rebuttal to the testimony of Jim McIntosh; is that
10 correct?

11 MR. HUNT: Yes.

12 MR. ROSTOV: And did you review Mr. McIntosh's
13 testimony?

14 MR. HUNT: I did.

15 MR. ROSTOV: What is the purpose of your
16 testimony?

17 MR. HUNT: To demonstrate that the CAL ISO
18 testimony submitted by Mr. McIntosh and the related FSA
19 testimony was inadequate in a number of means.

20 Would you like me to elaborate on that?

21 MR. ROSTOV: Yes, please elaborate on those
22 means.

23 MR. HUNT: Essentially, the broader issue here
24 is, is there an adequate analysis provided to the CEC to
25 make a decision on a power plant like this. What's been

1 offered so far in the MRW Report by the CAISO and by the
2 FSA itself is purely qualitative.

3 There's minimal qualitative analysis, and to make
4 a decision on this kind of plant, my position is you can't
5 simply offer qualitative analysis, you need to actually
6 crunch the numbers and so why it's necessary in this time
7 at this place in this magnitude.

8 MR. ROSTOV: Okay. So let's step back for a
9 second.

10 What are your qualifications related to renewable
11 energy and to discuss this topic?

12 MR. HUNT: I'm a lawyer. I got my JD from UCLA
13 School of Law, and I worked for a nonprofit in Santa
14 Barbara for about five years. And I was active as a
15 intervenor at the CPUC and the CEC and the ARB for about
16 five years on various issues related to renewables. I'm
17 now a consultant and project developer focused on medium
18 scale wind and solar project development. I also teach
19 common change law and policy at UC Santa Barbara.

20 MR. ROSTOV: Can you briefly explain -- I mean,
21 we've heard a little about it -- what the 33-percent RPS
22 standard is and the 20-percent RPS requirement is?

23 MR. HUNT: Yeah. The state has ambitious goals.
24 And so the current goal to be met this year ideally is
25 20-percent renewables for all the investor utilities.

1 Everyone realizes now it's not going to happen; it's going
2 to happen by probably 2013 to 2014. The more ambitious
3 goal though is by 2020 to have 33-percent renewables
4 online, and that under the new executive order will apply
5 to IOUs and POUs around the state. So it's a dramatic
6 goal in just ten years to go from today's 11-percent
7 renewables to 33-percent renewables by 2020.

8 A related goal is the governor's order to seek an
9 80-percent reduction in greenhouse gas emissions by 2050
10 statewide.

11 So I want to stress these are dramatic goals, and
12 they require dramatic changes in policies and permitting
13 decisions. And I think to date, the CEC has not
14 internalized the nature of these goals in its permitting
15 processes.

16 MR. ROSTOV: So SDG&E is responsible for -- is
17 the utility in this area. Have they met their -- achieved
18 their RPS mandates?

19 MR. HUNT: No. They're the furthest behind of
20 the IOUs. They're about 6 percent right now.

21 MR. ROSTOV: 6 percent. And you said they needed
22 to be at 20 percent?

23 MR. HUNT: 20 percent by 2013 officially with the
24 flexible compliance mechanisms.

25 MR. ROSTOV: Okay. So isn't it true that the PUC

1 has stated, the Public Utilities Commission, that for
2 California to meet its 33-percent RPS target, that only
3 new fossil fuel generation that could be built must be --
4 that can be built in California, must be critical to the
5 integration of renewables?

6 MR. HUNT: They have, yeah. And this conclusion
7 is supported by the FSA itself, and it's not really that
8 hard a calculation to make. We need to have, essentially,
9 about 70,000 gigawatt hours per year of new renewables by
10 2020 to meet that 33-percent goal. That means all new
11 generation on a net basis has to be renewable. It also
12 means you've got to retire about 36,000 gigawatt hours per
13 year of fossil fuel generation.

14 And in fact, if you throw in other policies, and
15 basing natural reduction and demand from the recession,
16 et cetera, you're probably going to have more like 45,000
17 gigawatt hours retired per year by 2020 of fossil fuel
18 generation. That again, is a dramatic change, and it
19 highlights the fact that when you have basically 45
20 percent of California's electricity today coming from
21 natural gas, you have a large surplus of natural gas left
22 because of dramatic decline and demand.

23 Yes, we have a lot of OTC plants being retired.
24 There's no deadline for retirement; we don't know when
25 they're going to be retired. So again, this highlights

1 the fact you need to have a quantitative analysis across
2 the board for all these plants and figuring out where you
3 need the plants.

4 The subtext here is cost. So the CEC and the ARB
5 and the PUC and the governor and the legislature have all
6 decided that we need to meet ambitious goals for
7 renewables and GHG reduction. So the key things for the
8 system as a whole, for electricity, are reliability, we'd
9 all agree; meeting these ambitious reduction goals; and
10 cost.

11 And right now, we're not looking at cost in this
12 proceeding at all because these plants, when they're
13 approved, do incur costs to rate payers no matter what
14 happens. If they're built, they have a contract, those
15 contracts incur costs. If plants are built needlessly
16 willy-nilly without any quantitative analysis, then you
17 have potential dramatic increases in costs for rate
18 payers.

19 And again, I don't know what will happen in this
20 case, because we don't have the numbers to see what will
21 happen.

22 MR. ROSTOV: Okay. And you're talking about how
23 there could be all this excess natural gas generation.

24 Are their studies being conducted right now that
25 would provide the necessary information for determining

1 whether the CECP is critical to the integration of
2 renewables?

3 MR. HUNT: I think there are. There are three
4 major studies underway right now. The California
5 Transmission Planning Group, the CAISO zone. Their groups
6 in RPS analysis by 2020, and the interagency working group
7 on OTC issues. And it's not entirely clear right now if
8 those studies will result in a clear answer with respect
9 to this plant. I think probably not, but certainly they
10 will help in that decision-making process.

11 And the broader background here is that you have
12 a detailed report issued in 2008 by the CAISO looking at
13 local capacity requirements, and has not been updated in
14 light of the dramatic recession in California or any
15 efficiency policies. And so the CEC came out with a
16 report a couple weeks ago looking at incremental impacts
17 of energy efficiency policies as they relate to the energy
18 demand forecast.

19 When you combine both the energy efficiency
20 impacts on the recession with the incremental impacts from
21 the energy efficiency policies by the IOUs, et cetera, you
22 actually get about 12 power plants mooted of the same size
23 as the CECP by 2020. So to say that more clearly, under
24 today's policies you basically are looking at the
25 elimination of the need for 12 power plants the size of

1 the CECP around the state. And that kind of thing is not
2 being considered in this FSA today or by or the CAISO
3 testimony.

4 MR. ROSTOV: And Mr. Ratliff asked, I believe it
5 was Mr. McClary -- is that the correct pronunciation of
6 your name -- whether -- his opinion on whether there's
7 more study needed now for licensing to go forward. But
8 isn't it your point that this licensing proceeding needed
9 a lot more analysis and needed a lot more information that
10 is available or will be available in the near future that
11 would inform the questions that will be presented about
12 reduction of greenhouse gases and once-through cooling?

13 MR. HUNT: Definitely, yeah. And as I think
14 Mr. Layton highlighted, there has been an evolving process
15 at the CEC regarding GHG analysis in power plant
16 permitting. And it's obviously improved a lot in the last
17 six and a half years, but I think everyone would agree
18 here in this room it's got a ways to go.

19 And so my broader point, again, is that there is
20 no framework provided in the FSA or the CAISO testimony
21 that would allow you to come to a decision, yes or no,
22 based on an established step-by-step procedure; it's all
23 qualitative, it's kind of hand waving.

24 And I think to have a robust analysis, you have
25 need to have a defined framework that quantifies where,

1 when, and how much you need for local capacity for
2 integration, et cetera. This is being done to some degree
3 by CAISO, and a more detailed analysis that will come out
4 hopefully next year, and, of course, in the local capacity
5 requirement decisions also. But it's not been provided in
6 the FSA or in the current testimony by the CAISO.

7 MR. ROSTOV: And when you were listening to
8 Mr. McClary, did he provide any similar test, or do you
9 have the same critique of his testimony?

10 MR. HUNT: No. The MRW Report on its own terms
11 says it's purely qualitative, and it says about three
12 times you need to have a detailed quantitative study done
13 for specific projects. And so I was surprised to hear him
14 today say that this is actually the framework for this
15 process here today, because the report itself on its face
16 says it's not. It says you need a quantitative analysis
17 done, and it has not been done.

18 MR. ROSTOV: So just to make sure I understand
19 your testimony, you're saying what the witnesses are
20 essentially saying is there are these general
21 characteristics of natural gas generation plants, but they
22 have not -- well, I'll ask it -- have they shown that
23 the -- have they shown that the CECP is needed in this
24 specific location -- is needed and is needed in this
25 specific location?

1 MR. HUNT: I would say no. And again, the same
2 response. I think it's been qualitative, not
3 quantitative. And to make a decision on this plant and
4 more generally for the CEC's permitting process, you need
5 to have a quantitative framework that allows you to say in
6 a given situation, yes or no based on this analysis.

7 The analysis provided so far by the FSA and the
8 CAISO, I think, would fail in almost every case to give
9 you a no answer on a proposed natural gas plant. How you
10 say no to a plant that has modern features under the
11 analysis to date, you couldn't, because you can say
12 truthfully, well, yes, it will help with renewables as a
13 backstop resource, yes, it will help with LCR, et cetera,
14 et cetera; but the question is how much, where and when.
15 Those are the answers you should be seeking in the
16 analysis.

17 MR. ROSTOV: So what alternatives could meet the
18 objectives of the proposed CECP?

19 MR. HUNT: Well, there are various possible
20 scenarios. The one I focus on in my testimony is a
21 combination of any deficiency and solar PV. And I've
22 already mentioned the dramatic decline in projected demand
23 statewide from the recession and from the incremental
24 policy and facts from the IOUs and POUs and building
25 standards, et cetera. And the CEC has a report on this

1 from about two weeks ago. So that moots about 12 power
2 plants right there statewide.

3 More specifically, in San Diego, I calculated
4 looking at the California Solar Initiative, looking at the
5 SDG&E Initiative, looking at the wholesale DG potential
6 for solar in this region, looking at the large analysis by
7 the PUC and looking at the parking lot potential for PV in
8 this region. You could in a realistic sense achieve about
9 700 megawatts of new PV generation by 2020 in San Diego,
10 the load pocket.

11 The CECP is being built as necessary to meet the
12 local capacity requirements of about 400 megawatts, and so
13 if Encina 1 to 3 is shut down, then you need about 400
14 megawatts to meet the LCR requirements by 2013. In that
15 case, essentially 700 megawatts of PV would more than
16 satisfy that requirement.

17 And again, that analysis was not done in the FSA
18 or the CAISO testimony, is a very cursory analysis and
19 ignore the fact that we have a very real market potential
20 for PV in a major way, and that could be a reliable peak
21 power resource.

22 MR. ROSTOV: Okay. And does the final staff
23 assessment suffer from the same flaw that you're
24 discussing, the flaw really looking at the generalities of
25 the plant, the characteristics, the qualitative

1 characteristics versus quantitative?

2 MR. HUNT: It does, yeah. I think the same
3 points I've made so far apply both to the CAISO testimony
4 and to the FSA itself; but the key point being there is no
5 established framework here or suggested framework that
6 would allow you to make a yes or no decision based on real
7 quantitative analysis.

8 MR. ROSTOV: So in your opinion does
9 Mr. McIntosh's testimony provide sufficient analysis to
10 determine whether -- and you might have already said this,
11 but let's just put it for the record. Does Mr. McIntosh's
12 testimony provide sufficient analysis to determine whether
13 the CECP will be critical to integration of renewables or
14 provide for local reliability?

15 MR. HUNT: No, it doesn't. And again, I can't
16 say right now sitting here whether it is required. And
17 that's kind the broader point, is that we don't know, we
18 don't have enough information to say if it's required or
19 not. And again, I was surprised to hear from the CEC
20 staff really today that the PUC is responsible for
21 determining need. If you're looking at need for this
22 power plant at all in the FSA, then it needs to be looked
23 at in detail and in a rigorous way, and it can't be passed
24 off to the PUC to make that decision.

25 So in this case, again, there's no framework

1 provided to really assess whether it's needed or not. And
2 I think that should be provided by the FSA in this case as
3 a model for future power plant decisions.

4 MR. ROSTOV: And wouldn't the -- the CEC is
5 responsible for doing the environmental analysis, so it's
6 more appropriate for the CEC to determine their
7 environmental analysis including whether the plant's going
8 to be built in the first place.

9 MR. HUNT: I agree.

10 And one last comment on an issue.

11 One of the written responses to comments on the
12 FSA essentially said it's not our role to be looking at
13 the 80-percent reduction by 2050 for greenhouse gas
14 emissions, that's the EPA's role. And in this case, if
15 the CEC permitting process is going to ignore the broader
16 background goals, such as AB 32 and the longer-term
17 non-legislative goal of 80 percent reductions by 2050, I
18 think, again, it advocates CEC's role. I think the CEC
19 needs to consider these issues in the permitting site
20 process.

21 Did that answer your question?

22 MR. ROSTOV: Yeah, that did. I'm just deciding
23 if I have one more question.

24 We'll leave it at that. Thank you for your
25 testimony.

1 HEARING OFFICER KRAMER: So did you turn it over
2 to me?

3 MR. ROSTOV: Yes.

4 HEARING OFFICER KRAMER: Well, thank you.

5 To be clear, you -- at times I heard you say
6 "Kaiser"?

7 MR. HUNT: CAISO.

8 HEARING OFFICER KRAMER: CAISO, okay. That's
9 what I thought you meant.

10 I think that's all the direct testimony.

11 COMMISSIONER BOYD: Can I ask a question at this
12 point?

13 HEARING OFFICER KRAMER: Certainly.

14 COMMISSIONER BOYD: Oh, that's right, you say any
15 time.

16 HEARING OFFICER KRAMER: Well, that was
17 Mr. Ratliff.

18 COMMISSIONER BOYD: That was Mr. Ratliff, yeah.

19 Mr. Hunt made reference to the fact that the CEC
20 staff said, and sometime in its recent testimony, that the
21 PUC determines need. I need to ask the CEC staff if
22 indeed somebody made that statement that way.

23 MR. RATLIFF: I was wondering whether I should
24 object to that construction of our testimony. I think it
25 was much more nuanced when Mr. McClary, I believe it was,

1 provided an answer regarding how the procurement process
2 works and how that is calculated to prevent the utilities
3 from entering into contracts for power that would just be
4 burdensome to rate payers, which was the issue that had
5 been raised. So Mr. McClary gave an answer, I don't think
6 that was the -- assuming he's speaking for the CEC staff,
7 I don't think -- you can ask him, but I don't believe that
8 was the answer he gave.

9 COMMISSIONER BOYD: Well, my ears are super tuned
10 to any discussions of need and need analysis, and I just
11 didn't hear it, but it's quite possible I missed, and I
12 wanted to make sure that it wasn't quite said that way.

13 Mr. McClary, I didn't hear you say that. I don't
14 think I heard anybody say that, but I want to be sure
15 here.

16 MR. McCLARY: No, and I did not say that. What I
17 said was that the determination of how costs are paid by
18 rate payers is a PUC determination and that it is not part
19 of the Energy Commission's need determination. I did not
20 say the Energy Commission doesn't determine need.

21 COMMISSIONER BOYD: Thank you.

22 HEARING OFFICER KRAMER: Okay. Let's begin our
23 cross-examination then. The Applicant specifically wanted
24 to cross-examine Mr. Cox.

25 MR. MCKINSEY: I'm sorry, I meant to -- we're not

1 going to exercise that. We have no cross-examination.

2 HEARING OFFICER KRAMER: Okay. At all?

3 MR. McKINSEY: None.

4 HEARING OFFICER KRAMER: Okay.

5 City did not have any.

6 That would bring us to staff.

7 And, Mr. Simpson, just so you know, I'm going to
8 put you at the end because you seem to always run up
9 against your time limits, and I'm thinking that perhaps
10 some of your questions will be asked for others and you
11 won't have to spend your time on those subjects.

12 MR. SIMPSON: Thank you. I will have to leave in
13 about 40 minutes.

14 HEARING OFFICER KRAMER: Okay. So let's at least
15 let staff go, and then we'll see how the time is running.

16 And we'll make sure that you have your 15 minutes.

17 MR. RATLIFF: Yes, Commission, my principle
18 concern is that you get your questions answered; and so
19 while we have these witnesses, I hope you will feel free
20 to ask your questions at any time, because I think it's a
21 fairly unique opportunity that you have for a short window
22 of time to get them answered.

23 I have only very brief cross-examination.

24 CROSS-EXAMINATION

25 MR. RATLIFF: I wanted to ask Mr. Hunt -- good

1 afternoon, Mr. Hunt.

2 MR. HUNT: Good afternoon.

3 MR. RATLIFF: In your testimony, or at least in
4 your oral testimony now but also in your written
5 testimony, you repeatedly said, and I think I understood
6 what you're saying, but I wanted to check, you repeatedly
7 said that the more recent Energy Commission forecast shows
8 that 12 power plants can be shut down. Can you tell me
9 which power plants those are?

10 MR. HUNT: I didn't say that. What I said is
11 that the recent forecast showed a decline in demand
12 equivalent to six power plants the size of the CECP.

13 MR. RATLIFF: I'm sorry, six, okay.

14 MR. HUNT: Equivalent to. And I added that the
15 recent report from the CEC looking at incremental policy
16 impacts for energy efficiency from utility programs,
17 buildings, et cetera, et cetera, showed the decline in
18 demand of another six power plants the size of the CECP.
19 So a total of about, I think, 25,000 gigawatt hours by
20 2020.

21 These are not accounted for in the FSA because
22 that had come out by the time the FSA was filed, and the
23 more recent incremental impacts report came out only two
24 weeks ago.

25 So the broader point here is that the demand

1 forecast in general in California has dipped considerably.

2 MR. RATLIFF: Yes, yes, I understand. But when
3 you convert that into power plants, I just want to check,
4 you're basically taking a megawatt hour reduction and then
5 translating that into some -- some form into kind of --

6 MR. HUNT: Yeah --

7 MR. RATLIFF: And it's not any specific power
8 plant.

9 MR. HUNT: I'm assuming a 47-percent capacity
10 factor for CECP. And that's equivalent to about 12 CECPs.

11 MR. RATLIFF: Okay. Thank you.

12 That's all I have.

13 HEARING OFFICER KRAMER: Okay.

14 COMMISSIONER BOYD: Let me quickly ask if
15 Mr. McIntosh would want to respond to any of what he's
16 heard about the number of plants that could be shut down.
17 I mean, I'm very sensitive to CAL ISO's needs; I hear
18 repeatedly that they want to keep the lights on. I always
19 figure they're first in line to get the spear if they go
20 out, which is why they're quite sensitive to reliability
21 and how much generation is needed and what have you. And
22 I just wanted to give you one last chance to say anything
23 more, since it wasn't invited by counsel.

24 MR. McINTOSH: Yeah, thank you. I think it would
25 be speculative of me at this point. I think there's a lot

1 of work that needs to be done to figure out exactly which
2 OTC plants will go off and where they go off. So my --
3 and you're exactly right, when the lights do go off, we're
4 the ones that find out about it and hear from the
5 governor's office and Washington D.C. within minutes,
6 quite frankly; so we're very sensitive to the fact of
7 keeping the lights on.

8 There's a lot of work that needs to be done in
9 order to get those numbers right and where the plants are
10 that will actually be going down. But as you've heard,
11 that's a lot of generation on the coast going on.

12 COMMISSIONER BOYD: And we're always glad to keep
13 you first in line, too.

14 MR. McINTOSH: Thank you, I appreciate that.

15 HEARING OFFICER KRAMER: And over the last few
16 days of public comment, we've received a lot of comment to
17 the effect that you don't need power plants in this area,
18 in the San Diego basin, they could all be out in the
19 desert, or I think somebody even suggested northern
20 California, to serve the needs down here.

21 So could you comment -- or just describe for the
22 record, because it will help me in responding to those
23 comments, what are some of the other things that power
24 plants -- or reasons that power plants, if there are
25 reasons, that you need to have some of them in the local

1 area near the load -- the people who are using the power?
2 I think you alluded to them earlier by rather technical
3 terms, but --

4 MR. McINTOSH: There's a term that we use. It's
5 called "reliability," an RMR unit, that's required for
6 local voltage control in the area. So it's a factor of
7 how many megawatts you can transport into an area from the
8 imports out of the area and also be able to maintain --
9 able to withstand the loss of a major facility, like in
10 this area would be a Palomar or a San Onofre unit going
11 off, and keep the grid reliable under that first
12 contingency condition.

13 So you have to have a number of plants like the
14 Encina plant here online in order to protect the local
15 area so you don't have a cascading blackout as a result of
16 that.

17 HEARING OFFICER KRAMER: And do I understand
18 correctly two of the Encina units, the newest ones are RMR
19 right now?

20 MR. McINTOSH: I believe that's the case.

21 HEARING OFFICER KRAMER: Two of the -- the newest
22 two Encina units, those would be 4 and 5?

23 MR. McINTOSH: 4 and 5.

24 HEARING OFFICER KRAMER: They are RMR. And can
25 you explain for the public what "RMR" means?

1 MR. McINTOSH: I just tried to, but apparently I
2 wasn't very clear.

3 MS. SIEKMANN: I just couldn't hear.

4 HEARING OFFICER KRAMER: Oh, okay, okay. Well,
5 then, never mind.

6 MR. McINTOSH: Did everybody get the answer, or
7 do you want me to go through that again?

8 HEARING OFFICER KRAMER: No.

9 MR. RATLIFF: Repeat it, please.

10 MR. McINTOSH: Yeah, certainly. The idea with
11 local area requirements is developed around the ability to
12 maintain voltage in your area. Local generation is
13 required in order to do that during any -- most
14 contingency events and in general just to maintain
15 reliability in the area. And there's localized pockets
16 within California. San Diego was certainly one of those,
17 the bay area is another one. Humboldt, for example, is a
18 very good example of areas where singular power plants
19 going offline would result in possibly rotating outages in
20 that area. So we maintain generation on in those load
21 pockets to keep the lights on quite frankly.

22 HEARING OFFICER KRAMER: So you could not run a
23 pocket if all of its electricity was being imported over
24 transmission lines.

25 MR. McINTOSH: In most cases, that's correct.

1 COMMISSIONER BOYD: And for those who still
2 didn't understand what "RMR" was, it's an old term,
3 reliability must run; and it is all that Mr. McIntosh just
4 described, but didn't define the term. It's an old term,
5 almost has become passe.

6 MR. McINTOSH: I guess we both showed our age
7 there, huh?

8 COMMISSIONER EGGERT: Just a couple questions for
9 Mr. Hunt.

10 Do you feel that there currently exists the
11 quantitative data that would allow you to make the
12 determination that you're suggesting is needed for this
13 facility?

14 MR. HUNT: No, I don't. I think in a year,
15 approximately, there will be enough data to say if the
16 CECP is necessary for the various needs we've talked about
17 today, local capacity, renewable integration, et cetera.
18 Right now, there's really not the data.

19 You have the OTC issues, as Mr. Vidaver talked
20 about, you have local capacity requirements, which are
21 changing year to year. And we have basically a dramatic
22 change in the renewables market right now, we're at an
23 inflection point for solar PV in particular where we have
24 massive amounts of PV set to come online because cost has
25 come down quite a lot in the last few years and policies

1 have finally caught up. And so I'd say in a year or so
2 we'll have enough data to say for sure, or, you will, as
3 CEC.

4 And what I urge in my testimony is that,
5 essentially, because you have more breathing room now due
6 to the decline in demand through 2020 from the recession
7 and the energy efficiency policies, you have some time to
8 make a determination. There's no great hurry to make a
9 determination on the CECP.

10 COMMISSIONER EGGERT: So just to -- and your
11 recommendation would be to postpone decision as opposed to
12 operate on interim criteria?

13 MR. HUNT: I think so. And I think in this case,
14 because it is an evolving process for looking at GHG
15 emissions and permit decisions in the light of the state's
16 ambitious goals for renewables and GHG reductions, I think
17 this is basically the opportune time to create that
18 framework in this proceeding and use as a precedent for
19 future plant siting.

20 COMMISSIONER EGGERT: Thanks.

21 MR. SHARMAN: Can I elaborate on that answer?

22 COMMISSIONER EGGERT: Certainly.

23 MR. SHARMAN: I think in the next few years
24 there's going to be some dramatic changes in the energy
25 generation landscape adding to dispatchability of

1 renewables. And dispatchability of renewables is a very
2 exciting process. And I view this plant much like, or
3 this application much like when I was young and the
4 mainframers said, no, you've got to put a mainframe in
5 that little office of yours, and then the mini guys and
6 then the PC guys were actually coming in and showing how
7 it could be done without a mainframe.

8 And so thermal storage, hydrogen cells, fly
9 wheels, very advanced battery technology is coming online
10 to provide dispatchability. And so that dispatchability
11 with zero emissions is, I think, a very, very important
12 consideration that the CEC is looking at and will look at
13 and continues to look at, and should be quantified in this
14 framework that Tam was discussing needed to be done, when,
15 where, and how much.

16 HEARING OFFICER KRAMER: Mr. McIntosh, this may
17 call for speculation on your part, but what would it take
18 to allow the RMR contracts for Units 4 and 5 to be
19 canceled and perhaps allow those units to be retired as
20 well as 1 through 3?

21 MR. McINTOSH: Sir, you're right, it would be
22 speculation on my behalf, but with my years in the
23 industry, it would require something that is electrically
24 equivalent to creating the value that those plants bring
25 now.

1 HEARING OFFICER KRAMER: So another power
2 plant -- and it would have to be a power plant in the
3 basin basically?

4 MR. McINTOSH: Well, it might not have to be a
5 power plant, but it could be some means of stabilizing the
6 voltage in the San Diego area. Not transmission.

7 HEARING OFFICER KRAMER: Okay. Thank you.

8 To continue the cross-examination then, we
9 will --

10 MR. THOMPSON: Mr. Kramer, I realize that I did
11 not have any time, but I have some time reserved for
12 tomorrow, and I understand that Mr. McIntosh may not be
13 here tomorrow; is that correct?

14 MR. McINTOSH: That's correct.

15 MR. THOMPSON: Could I take one question today
16 from Mr. McIntosh in case I don't get him tomorrow?

17 HEARING OFFICER KRAMER: Your one question, and
18 then we'll go to Mr. Simpson so he can catch his flight I
19 gather.

20 CROSS-EXAMINATION

21 MR. THOMPSON: Mr. McIntosh, you described the
22 benefits that can be achieved with this type of generation
23 facility enabling renewable generation to be bled into the
24 grids and offer such benefits as voltage support, start
25 up, shut down, and ramping.

1 Would those same benefits be available if the
2 CECP were not in this exact location but a mile or two or
3 more -- is it absolute site specific is my question?

4 MR. McINTOSH: No. My testimony is that you can
5 get those attributes at other locations; I'm just talking
6 about those are the types of machines we need.

7 MR. THOMPSON: Got it. Thank you very much.

8 HEARING OFFICER KRAMER: Okay. Mr. Simpson.

9 MR. SIMPSON: Thank you.

10 CROSS-EXAMINATION

11 MR. SIMPSON: First question is for staff.

12 On page 4.1-110 it states gas-fired plants are
13 necessary to provide reliability. This is because
14 electricity demand is instantaneous and because
15 electricity cannot be stored in large quantities.

16 Is that still your testimony?

17 MR. VIDAVER: I certainly agree with the
18 statement that energy cannot be stored in large quantities
19 presently, yes.

20 MR. SIMPSON: Thank you. So if I understood the
21 testimony about if renewables take off and this plant is
22 built and there's no need for this plant, it just simply
23 won't operate. But it will still have the greenhouse gas
24 effects of the construction of the plant; is that correct?

25 MR. WALTERS: Yes, that would be correct. Of

1 course, the magnitude of the construction emissions are
2 minor in comparison with magnitude of the operating --
3 impacts in terms of the direct GHG emissions.

4 MR. SIMPSON: The construction emissions don't
5 include the materials, the concrete, that sort of thing,
6 do they?

7 MR. WALTERS: Not the direct emission estimates
8 that staff has provided.

9 MR. SIMPSON: Thank you.

10 Mr. Rubenstein, it sounds like you've been
11 involved in a number of sitings, the H class engines, the
12 Avenal plant last year, and each of these are different
13 technologies. So have you ever testified that the
14 technology proposed by one of your clients was
15 inappropriate?

16 MR. MCKINSEY: I find that question fairly
17 argumentative. I think he's asking him if he's ever lied,
18 I think.

19 Or are you just asking if he ever reached a
20 conclusion?

21 MR. SIMPSON: Yes.

22 MR. MCKINSEY: That something didn't fit
23 somewhere?

24 MR. SIMPSON: Well, I see different technologies.
25 The Avenal plant was a significantly different technology

1 than this year without a PPA, same sort of situation, much
2 higher efficiency, and I don't understand why that plant
3 is appropriate there, the H class was appropriate in this
4 location and this plant is appropriate here. Well,
5 neither of these last two plants seem to have a PPA that
6 guides you to what the need for the plant is.

7 HEARING OFFICER KRAMER: So is that the question
8 or just an explanation of the question that called for a
9 yes or no answer?

10 MR. SIMPSON: I guess I was trying to explain the
11 question a little more.

12 MR. MCKINSEY: I think I understood the question
13 better when he just asked it, but I'm not sure if my
14 witness did.

15 MR. RUBENSTEIN: I'm not completely confused as
16 to what the question is.

17 HEARING OFFICER KRAMER: You are or you're not?

18 MR. RUBENSTEIN: I am.

19 MR. MCKINSEY: Okay.

20 MR. SIMPSON: Well, let's go back to the original
21 question.

22 Have you ever testified that technology proposed
23 by one of your clients was inappropriate?

24 MR. RUBENSTEIN: Not that I recall.

25 MR. SIMPSON: I see. And have you ever

1 recommended to your clients that they violate the
2 Clean Air Act?

3 MR. MCKINSEY: Okay. Now, I am going to object
4 to this question as being argumentative and asking him if
5 he's ever told somebody to break the law, which I don't
6 think is a relevant or appropriate question for my
7 witness.

8 HEARING OFFICER KRAMER: Well, I don't think it's
9 going to get anywhere, but it's -- the objection is
10 overruled.

11 MR. RUBENSTEIN: No.

12 MR. SIMPSON: Did you note to PG&E within the
13 context of a gateway facility, that under EPA policy, once
14 a facility starts up, a non-major amendment no longer
15 requires PSD review and public notice? So if amendment
16 issuance were to be delayed till after start up, the PSD
17 issues could be moot?

18 MR. MCKINSEY: Can I ask to see wherever the
19 evidence of this information is, because I don't
20 understand its relevance. He's quoting him from
21 something, I think, but I don't know what it is.

22 HEARING OFFICER KRAMER: Well, I don't understand
23 the question.

24 MR. SIMPSON: There's presently an action between
25 the United States Department of Justice and PG&E for

1 operating a gateway facility without a PSD permit on
2 Mr. Rubenstein's recommendation that's been introduced as
3 evidence in the gateway --

4 MR. RUBENSTEIN: That is an incorrect statement.

5 MR. SIMPSON: -- that's been introduced to the
6 CEC in the gateway compliance proceeding in the Department
7 of Justice action. And it's a quote from Bay Area Air
8 Quality Management District regarding a meeting with
9 Mr. Rubenstein.

10 MR. MCKINSEY: And so even if I assume all that
11 stuff is accurate, I want to see --

12 MR. RATLIFF: But it's not accurate. I mean --

13 MR. MCKINSEY: And it's not, but I don't even see
14 how it's relevant unless he's trying to say that he's
15 lying here today or something like that.

16 MR. RATLIFF: It's just a complete
17 misconstruction of a different proceeding. He's talking
18 about a gateway proceeding. Actually, there's an EPA
19 proceeding concerning the issue regarding the expiration
20 or alleged expiration of a PSD permit for the gateway
21 facility, but it's entirely unrelated to this, and I think
22 it was quite mischaracterized by Mr. Simpson. I mean, we
23 can deal with these --

24 HEARING OFFICER KRAMER: Well, if your objection
25 is that the question lacks a foundation as to the

1 underlying premises of the question, that would be
2 sustained.

3 MR. MCKINSEY: I'm objecting that it lacks a
4 foundation as to the underlying premises of the question.

5 HEARING OFFICER KRAMER: Good memory.

6 Mr. Simpson, you have to establish the underlying
7 premises. I gather that you are trying to impeach this
8 witness and suggest that his credibility is suspect.

9 MR. SIMPSON: Yes, sir, that's what I was doing.
10 What I'd like to do is -- is discontinue my questioning,
11 cede the rest of my time to the other intervenors for
12 biological resources tomorrow.

13 Thank you.

14 HEARING OFFICER KRAMER: Now, by that you mean
15 that you are going to ask questions in bio or --

16 MR. SIMPSON: I would like to allow the other
17 intervenors to use the rest of the time that I didn't just
18 use during biological resources tomorrow.

19 HEARING OFFICER KRAMER: Oh, okay. Because you
20 will not be with us tomorrow; is that correct?

21 MR. SIMPSON: Yes.

22 HEARING OFFICER KRAMER: Okay. And that would be
23 about -- be about ten minutes then that they can have.

24 Thank you. No further questions?

25 MR. SIMPSON: No further questions.

1 HEARING OFFICER KRAMER: Okay. Have a safe
2 flight.

3 MR. SIMPSON: Thank you.

4 HEARING OFFICER KRAMER: Then that would bring us
5 to Mr. Rostov. I'm hoping you are going to be done in
6 less than 150 minutes. If not, there will be a bio break
7 at some point there.

8 MR. ROSTOV: Can I call the bio break?

9 I just want to -- for the record, Mr. McIntosh,
10 you're only here for a few more minutes or --

11 MR. McINTOSH: I have to leave at 5:00.

12 MR. ROSTOV: Oh, at 5:00?

13 HEARING OFFICER KRAMER: Then that's a good
14 point. Because you may not be done when he needs to
15 leave, perhaps we should let the other parties ask any
16 questions they may have of Mr. McIntosh.

17 And Ms. Siekmann, you're suggesting that you do?

18 MS. SIEKMANN: Is that okay?

19 HEARING OFFICER KRAMER: And does anybody else
20 have questions?

21 Okay. So Ms. Siekmann, then followed by Dr. Roe.

22 CROSS-EXAMINATION

23 MS. SIEKMANN: I'm so sorry. It will just take
24 me a minute --

25 HEARING OFFICER KRAMER: And get closer to your

1 mic, please.

2 MS. SIEKMANN: Mr. McIntosh, I feel honored to
3 actually be able to talk with people on this panel. Thank
4 you so much.

5 Does CAL ISO choose from plants in a region based
6 on efficiency of operation?

7 MR. McINTOSH: Can you repeat the question --

8 MS. SIEKMANN: Yes.

9 MR. McINTOSH: -- I'm not sure I understand
10 exactly what you're asking.

11 MS. SIEKMANN: Does CAL ISO choose from plants in
12 a region to run and make electricity based on the
13 efficiency of the plant, the efficiency of how they burn
14 fuel, the heat rate?

15 MR. McINTOSH: The heat rate of the unit?

16 MS. SIEKMANN: Yeah.

17 MR. McINTOSH: That's not the only criteria.
18 They actually bid in a price of their energy into our
19 market, with the exception of the RMR units that we talked
20 about, that come on to protect the reliability of the
21 area, local area like here. So it's not always heat rate
22 driven.

23 MS. SIEKMANN: What would be the first choice?
24 Would it be heat rate or cost or --

25 MR. McINTOSH: It's cost.

1 MS. SIEKMANN: Cost. Cost is first. Okay.

2 Thank you.

3 Cost of what?

4 MR. McINTOSH: Of their bid for their energy.

5 They bid in their energy with the exception of locally
6 required units like the Encina units that have to be on to
7 keep the voltage of the area on.

8 MS. SIEKMANN: Yes. Yes.

9 MR. McINTOSH: Let me just add to that.

10 In this particular area we also have transmission
11 constraints. So we have to put units on for southern
12 California import transfer capability. That's another
13 criteria.

14 MS. SIEKMANN: Okay. Is the cost of the gas
15 relevant to that?

16 MR. McINTOSH: It's a bid price.

17 MS. SIEKMANN: It's a bid price, okay.

18 Okay. If so, would -- CAL ISO would call in the
19 CECP as often as possible because of its efficiency over
20 an older plant?

21 MR. McINTOSH: The way it comes into the market
22 is on need. They would bid in their availability and
23 their price. We call those ancillary services. We call
24 on the unit at various times during the day from a day
25 ahead forecast of need for the state and also for the need

1 for ancillary services for the grid.

2 MS. SIEKMANN: Okay. Do you -- is being in your
3 position -- is studying plant efficiency part of your job?

4 MR. McINTOSH: That's part of the planning
5 criteria.

6 MS. SIEKMANN: Do you study different types of
7 plants, turbine units, or do you just study the ones that
8 are available to you?

9 MR. McINTOSH: We study anything that
10 interconnects with the grid.

11 MS. SIEKMANN: What is your opinion of the
12 efficiency of this plant versus a GE unit, similar GE
13 unit?

14 MR. McINTOSH: They all have different
15 attributes. I mean, the ramping capability, the start-up
16 capability, there's a whole number of things that -- and
17 you're actually -- I'm the operator. Those things are
18 decided at the engineering and planning level.

19 MS. SIEKMANN: Okay. Thank you.

20 MR. McINTOSH: You bet.

21 MS. SIEKMANN: If this plant was placed in
22 another location in San Diego County, would it support the
23 benefits of the area as well as in the coastal location
24 as -- would it support just as easily in a different area
25 of the county as at the coast?

1 MR. McINTOSH: It could.

2 MS. SIEKMANN: Are you still using RMRs?

3 MR. McINTOSH: Yes, we are.

4 MS. SIEKMANN: You are.

5 MR. McINTOSH: We're trying to get rid of them.

6 MS. SIEKMANN: Okay. So you still put them on
7 new plants? Do you put RMRs on new plants?

8 MR. McINTOSH: It's based on the local needs. If
9 there's a requirement to maintain grid reliability in that
10 area and a plant is there to support that, we're going to
11 RMR the units.

12 MS. SIEKMANN: Do you predict the needs in an
13 area and then have the local utility make the decision on
14 who to offer contracts to?

15 MR. McINTOSH: We determine the need, that's
16 correct, and the utilities contract for the power.

17 MS. SIEKMANN: Thank you. Those are all my
18 questions. Thank you so much.

19 MR. McINTOSH: You're welcome.

20 HEARING OFFICER KRAMER: Thank you.

21 Dr. Roe, how long do you have do you think?

22 DR. ROE: Excuse me?

23 HEARING OFFICER KRAMER: How long do you think
24 you have?

25 DR. ROE: Depends on how fast Mr. McIntosh

1 answers. Not very long.

2 HEARING OFFICER KRAMER: Okay. And then we are
3 going to have a bio break we decided.

4 CROSS-EXAMINATION

5 DR. ROE: Mr. McIntosh, I'm not clear on your
6 role here. Are you here as an official representative of
7 CAL ISO or as an expert witness called by the CEC staff to
8 testify?

9 MR. McINTOSH: I think I'm in -- I have both
10 those hats on. I'm representing the ISO as the
11 operational expert that understands the requirements of
12 generating facilities that interact with the grid.

13 DR. ROE: Thank you. And I had a number of
14 questions which I no longer need to ask because I think
15 they were adequately covered by Mr. Hunt, namely about the
16 generalities of your testimony, written testimony. And,
17 frankly, I was surprised, because I know that CAL ISO is
18 famous for running simulations to anticipate shutdowns and
19 needs in various parts of the grid. And I would have
20 assumed that they would have done the same thing for this
21 particular plant if you were going to testify as to the
22 merits of this plant in the system. But as I say, that
23 was covered by Mr. Hunt.

24 MR. RATLIFF: Could the witness respond to that
25 if he thinks there is a response?

1 DR. ROE: No. I'm just telling him why I'm not
2 asking the same questions.

3 On page 7 and in other places of your written
4 testimony, you present a scenario which looks ideal, which
5 I would love to see, and that is you say that the CECP
6 configuration allows the power plant to reach full load
7 and operate at a combined efficiency of approximately
8 55 to 56 percent in approximately 45 minutes. That's
9 wonderful. I'd like to see the CECP meet both of those
10 requirements.

11 But are you aware that the FSA indicates that the
12 CECP will not have a 55 percent efficiency but a much
13 lower efficiency of 40- -- they say 48 percent, I say 47.7
14 or less percent. If you knew, in fact, when you wrote
15 this testimony that CECP would not have that glorious 55
16 or 56 percent that you quote in at least three places in
17 your testimony, would you have made the same
18 recommendation or statement?

19 MR. McINTOSH: Yes, I would.

20 DR. ROE: You have experience, and I respect it,
21 in operating a plant and starting up, and you know that
22 normally -- I assume you know, and I'll ask if you know --
23 that it's not preferred, even for the so-called
24 fast-start-up type of plants, it's not preferred
25 operational procedure to ramp up at very rapid rates

1 because this may affect indeed the life of the units. And
2 so in my experience, and I trust in yours too, that the
3 preferred method of ramping up is a slow ramp up.

4 And you also know that in the normal procedures
5 of CAL ISO, they give advance notice, at least two hours
6 of advance notice, I understand, to plant operators about
7 when they can anticipate coming online.

8 So it appears that the so-called benefits from
9 fast start ups that is attributed to the CEC plant won't
10 occur on a daily basis, it won't occur -- it will occur
11 only, as you say, if there's none other available storage
12 capacity to compensate for solar power not being available
13 on quick notice.

14 Has CAL ISO done any studies to indicate how
15 frequently such potential quick start ups will be needed,
16 and specifically have they done it for this power plant?

17 MR. McINTOSH: There's about a half a dozen
18 questions here.

19 DR. ROE: Yes. You can pick which one you want
20 first.

21 MR. McINTOSH: Let me just start with your
22 analysis on fast ramping.

23 The new technologies allow that, it's been an
24 attribute that we've been seeking for grid reliability for
25 quite some time. The new facilities actually -- and I

1 understand your concern, the older facilities didn't like
2 to do that because there's a lot of maintenance and a lot
3 of wear and tear on the units, lot of physical and heat
4 stress on units when they did that. It's no longer the
5 case, so that's not an issue. And that's the way they've
6 designed these particular new units.

7 Did you have something else to add?

8 DR. ROE: Well, how many fast-start-up plants are
9 there in the country right now?

10 MR. McINTOSH: Well, I've got 4,000 megawatts of
11 gas turbines in California that are either combined cycle
12 or GT that would be considered fast start. And we need to
13 qualify fast start.

14 The best fast start happens within ten minutes.
15 There's a fleet of those that are at the 49 megawatt level
16 that we utilize for fast start, fast ramp capability. The
17 other ones are combined-cycle units. Some of them, the
18 new and very efficient units, as this one is designed,
19 come on rapidly, ramp up quickly, and that's why
20 they're -- when I mentioned these are the type of units
21 that we need, that's what we need for variable resource
22 integration.

23 DR. ROE: I think that's the gist of my
24 questions. Thank you, Mr. McIntosh.

25 MR. McINTOSH: You're welcome, sir.

1 HEARING OFFICER KRAMER: That prompted a
2 follow-up question from Commissioner Eggert.

3 COMMISSIONER EGGERT: Yes. And as the one who
4 requested the break, I'm going to try to be brief.

5 I also just want to say that very much appreciate
6 Mr. McIntosh here, your being here. Your expertise and
7 your knowledge, I think, is very useful to our decision.

8 Kind of, I guess, going a little bit back to the
9 previous discussion with Mr. Hunt, based on what you heard
10 from his testimony and thinking about the modeling
11 analysis capabilities of CAL ISO, I would just be curious
12 to get your perspective on what more would he might know
13 in a year in order to make sort of these determinations,
14 evaluating more specifically or quantitatively the impacts
15 of fast-ramp capabilities within different load pockets.

16 MR. McINTOSH: Yeah, I think we -- and I would
17 agree with him. I think additional quantitative analysis
18 is the correct thing to do. We're in the process of doing
19 a fleet characteristic study for the existing fleet.
20 We're also doing a characteristic study for what's
21 required on the 33 percent. Those are both studies that
22 will come out probably in the first quarter. It will give
23 us some of the data that we've been looking for and trying
24 to quantify.

25 COMMISSIONER EGGERT: And is that sufficiently

1 detailed to look at individual load pockets within the
2 state, or is it more generic or aggregated?

3 MR. McINTOSH: I'm not sure how to answer that
4 because I haven't seen the studies, but the intent is to
5 give direction to the Energy Commission and the PUC and
6 the utilities on what are the attributes we'd like to see
7 based on the fleet characteristic changes that are
8 proposed in the next ten years.

9 COMMISSIONER EGGERT: Okay. Thank you.

10 MR. McINTOSH: You bet.

11 HEARING OFFICER KRAMER: One more quick
12 follow-up.

13 In your eyes, as the system operator, is this
14 turbine machine and equipment equivalent, as far as
15 performance goes, with the older LM6000s and LS100s?

16 MR. McINTOSH: No. It's a superior machine to
17 those.

18 HEARING OFFICER KRAMER: In which ways?

19 MR. McINTOSH: Its fast-start capability, its
20 ramping capability. And I'm not sure about the heat
21 rates, but this is a very efficient unit; and all the new
22 combined cycles and the gas turbines have much better heat
23 rates than the old LM6000 machines.

24 HEARING OFFICER KRAMER: Thank you.

25 DR. ROE: Can I recross on that?

1 HEARING OFFICER KRAMER: Go ahead.

2 RE-CROSS-EXAMINATION

3 DR. ROE: Yes, in the combined-cycle operating
4 mode, they are high efficiency, but I understand that the
5 turbines in this particular project decoupled from the
6 HRSG and steam generator, so when they're operating -- in
7 order to be able to operate on a fast ramping situation,
8 and when they're operating without the HRSG and the steam
9 generation, their efficiencies are probably similar to the
10 older units that you asked about.

11 HEARING OFFICER KRAMER: Do you agree with that,
12 Mr. McIntosh?

13 MR. McINTOSH: I haven't really completely
14 studied the design other than the fact I know it's a -- I
15 know how the cycle works, and in most cases we ramp the
16 units up to get the steam unit because it is the highest
17 efficiency, and it provides the regulating services that
18 we really want to see out of the plant. So it's a briefer
19 period of time in the ineffective ranges. I would look at
20 it in that aspect.

21 HEARING OFFICER KRAMER: Regulating services, is
22 that this concept of momentum I think I read about
23 somewhere?

24 MR. McINTOSH: No. This is where I actually have
25 digital control of the unit, and they tell me that they

1 can operate between 150 and 275 megawatts, and I send them
2 the signal, depending on where I would like them to go
3 within that range, and they respond to that.

4 HEARING OFFICER KRAMER: And then you can change
5 that --

6 MR. McINTOSH: We change it every 15 minutes or
7 more if required. We give them a dispatch instruction
8 that often.

9 HEARING OFFICER KRAMER: Okay. Thank you.

10 Let's have a five-minute bio break.

11 (Recess.)

12 HEARING OFFICER KRAMER: Let's get started again.

13 And, Mr. McIntosh, I think Mr. Rostov was going
14 to try to finish with his questioning of you fairly soon,
15 at least at the beginning of his cross-examination, so
16 that you might even be able to leave a little early.

17 MR. ROSTOV: Correct. And, Mr. Kramer, can I
18 make my other request?

19 It sounds like Mr. Roe wants to cross-examine
20 Mr. Hunt, and after that Mr. Hunt would be able to leave I
21 believe, because nobody else has expressed. So I would
22 cross-examine Mr. McIntosh, we would cede to Mr. Roe for a
23 second, and then I would do the rest of my
24 cross-examination.

25 HEARING OFFICER KRAMER: You mean Mr. Cox?

1 MR. ROSTOV: No.

2 HEARING OFFICER KRAMER: Mr. Hunt. Okay.

3 So when did you need to leave by, sir?

4 MR. HUNT: As soon as possible.

5 HEARING OFFICER KRAMER: Okay. Should we just
6 then take care of him first? Mr. McIntosh has a little
7 more time, I think.

8 MR. ROSTOV: That's fine.

9 MR. RATLIFF: Mr. McIntosh has asked for a
10 15-minute warning before 5:00, so we should -- I'm not
11 wearing a watch, so we should be mindful of that.

12 HEARING OFFICER KRAMER: Okay.

13 Dr. Roe, I assume you just have a couple of
14 questions.

15 DR. ROE: Yes.

16 HEARING OFFICER KRAMER: Go ahead, please.

17 CROSS-EXAMINATION

18 DR. ROE: Mr. Hunt, on page 21 of your eloquent
19 rebuttal of Jim McIntosh's testimony on behalf of CAL ISO,
20 you reproduced Figure 1 from the CEC's 2009 California
21 Energy Demand 2010, 2020, staff-revised forecasts.

22 MR. ROSTOV: Excuse me, Mr. Roe. We can put that
23 up on the screen? It's there. Figure 1.

24 Sorry, go ahead.

25 MR. MCKINSEY: Can I just note for the record

1 that I love Microsoft.

2 DR. ROE: Thank you.

3 Mr. Hunt, would you agree that for the purpose of
4 planning, when new peak power producing units are needed,
5 perhaps a more appropriate figure is Figure 74 from that
6 same report which specifically shows the SDG&E planning
7 area peak?

8 MR. HUNT: I would say both are relevant. This
9 power plant's being built as both peak and shoulder and
10 possibly even base also. As peak, certainly I agree with
11 you, certainly the SDG&E load pocket is more relevant, but
12 because it's being built as a shoulder plant also, I would
13 say statewide and local peak are relevant.

14 DR. ROE: Okay. For the purpose of my further
15 questioning, I think either one of the diagrams would be
16 adequate because the general slopes and configurations are
17 quite similar; not the same diagrams, but the slopes,
18 which are quite similar. And if I could go up to the --
19 in all the years that I was involved in planning new plant
20 facilities -- addition of new plant facilities, I would
21 have loved to have seen a drop in the projected demand or
22 need to something lower down like this, because that would
23 mean that I could postpone a very important and very
24 intensive capital investment and have a little breathing
25 room.

1 And typically what I would do is, if I say, well,
2 as an example that I needed in a year this much power --
3 it's right on this line -- if I needed this much power in
4 year 2010, then if a new forecast indicated I wouldn't
5 need that much power in 2014, then that meant I had a
6 waiting period of not one year, as you testified earlier,
7 to think about getting better analysis of whether we need
8 that plant or not and how it would integrate with solar
9 power, but it seems that we have four years.

10 Is that something you think the Commission ought
11 to take into consideration in their deliberations?

12 MR. HUNT: Yes, I think it's a valid point,
13 keeping in mind, of course, these kind of projections are
14 certainly not Gospel truth, they're projections. And, you
15 know, as you can see from the chart, the initial draft
16 projection changed by the time it was finalized because
17 the economy, of course, is changing on a regular basis.

18 I would say though more broadly, certainly the
19 CEC does have time to consider this plant because of the
20 various issues, including the recession-induced energy
21 efficiency, the incremental policy impacts, the increased
22 renewables, et cetera.

23 DR. ROE: Thank you.

24 That's my only question for Mr. Hunt.

25 HEARING OFFICER KRAMER: Okay. Thank you.

1 No further questions for Mr. Hunt, so you may be
2 excused. Thank you.

3 MR. HUNT: Thank you.

4 HEARING OFFICER KRAMER: Mr. Rostov.

5 MR. ROSTOV: Thank you, Mr. Kramer. As I
6 promised, I'll start with Mr. McIntosh.

7 I was just reorganizing my questions so these
8 might be a little slower.

9 CROSS-EXAMINATION

10 MR. ROSTOV: So, Mr. McIntosh, will the CAL ISO
11 33 percent plan for 2020 that you were discussing create a
12 plan for integrating renewables in the State of
13 California? Is that the purpose of it?

14 MR. McINTOSH: Let me go back to in my testimony
15 I refer to the 2000 and the 20-percent plan where we
16 originally took our first projection at load requirements
17 and generation requirements relative to variable
18 generation. So that's the first thing that's out there to
19 take a look at.

20 In addition to that, the plant characteristic
21 studies is another attempt at finding out how can we --
22 where's that threshold where we actually run out of
23 valuable services that I need to operate the grid. The
24 33-percent study is an attempt to find out what the
25 integration needs are so that we can tell everyone what

1 the requirements are going to be to meet that 33-percent
2 criteria.

3 MR. ROSTOV: Okay. And in that study you would
4 determine how much fossil fuel is needed to integrate
5 renewables?

6 MR. McINTOSH: It's my understanding.

7 MR. ROSTOV: Do you know how much that would be
8 at this point, though?

9 MR. McINTOSH: No, I don't.

10 MR. ROSTOV: Okay. And do you know where they
11 would be located?

12 MR. McINTOSH: No, I don't.

13 MR. ROSTOV: In your testimony you also talked
14 about how this type of power plant would provide ancillary
15 services.

16 MR. McINTOSH: Ancillary services, that's
17 correct.

18 MR. ROSTOV: Okay.

19 MR. McINTOSH: A lot of people refer to them as
20 spinning reserves.

21 MR. ROSTOV: It's a hard word for me, actually.

22 My understanding is there's really no -- well,
23 this is according to the MRW Report, there's currently no
24 public studies that provide estimates of the amounts and
25 types of those services that are needed to support

1 intermediate renewable generation. Is that true? Under a
2 33-percent renewable standard. Is that true as well?

3 MR. McINTOSH: Well, that study has been
4 completed, but our initial studies indicate that the
5 regulation ramping requirements double over the course of
6 the next five years, which would indicate that we need
7 more of these services.

8 MR. ROSTOV: Okay. Couple more questions.

9 In the MRW Report -- which I believe is
10 Exhibit 212; is that correct? -- there's a discussion
11 of -- you know, the need for, what you were talking about,
12 how we need some natural gas mid-merit power plants, but
13 it says specifically there's a general need, but it then
14 says it's hard to figure out what the specific need is.

15 And I'm just going to quote something and see if
16 you agree with this quote.

17 It says, determining if a specific new resource
18 provides this service would require extensive problemistic
19 power flow and economic dispatch modeling.

20 So in other words, do you need extensive
21 problemistic power flow and economic dispatch modeling to
22 show where a power plant would be located to provide the
23 services you were talking about in your testimony?

24 MR. McINTOSH: On an annual basis, we do planning
25 studies to see what the requirements are for the RA

1 process. So we look at that on a year-to-year basis.

2 MR. ROSTOV: And you do that for new power
3 plants?

4 MR. McINTOSH: For all needs for the utilities.

5 MR. ROSTOV: But for a plant that's being
6 proposed, do you do it for that?

7 MR. McINTOSH: We would do a study when they make
8 a request for interconnection.

9 MR. ROSTOV: But during the licensing proceeding,
10 a study like that is not completed; is that correct?

11 MR. McINTOSH: I'm not sure where it is in the
12 process. I'm not a planner, I'm an operator.

13 MR. ROSTOV: All right. I just have one or two
14 more questions.

15 So the ISO has really no environmental
16 jurisdiction; is that correct? You do no CEQA analysis
17 when you do these plans? You have no responsibility for
18 greenhouse gas emissions.

19 MR. McINTOSH: I'm not a planner. It's not an
20 operational question. I don't know the answer to that,
21 would be a better answer I guess.

22 MR. ROSTOV: Okay. Then my questions are done.

23 HEARING OFFICER KRAMER: For him?

24 MR. ROSTOV: Well, he says he doesn't have the
25 expertise to answer my questions regarding ISO. So my

1 questions for him are done, yes, just for him.

2 HEARING OFFICER KRAMER: I thought I had 140
3 minutes there in my pocket all of a sudden.

4 DR. ROE: Can I use two seconds of it?

5 HEARING OFFICER KRAMER: Did you want to ask --

6 DR. ROE: Mr. McIntire, so we can leave.

7 HEARING OFFICER KRAMER: Go ahead. McIntosh.

8 MR. McINTOSH: Thank you.

9 CROSS-EXAMINATION

10 DR. ROE: Does the 2011, 2013 Local Capacity
11 Technical Act analysis come under the category of your
12 expertise?

13 MR. McINTOSH: No, it doesn't.

14 DR. ROE: So you would not know whether the local
15 capacity needs indicative of 2013 include future renewable
16 energy?

17 MR. McINTOSH: That's correct.

18 DR. ROE: Thank you. I can pursue the rest of
19 that question with other people after you leave.

20 MR. McINTOSH: You're welcome.

21 HEARING OFFICER KRAMER: Okay. It's always good
22 to get to the airport early.

23 MR. McINTOSH: I appreciate it. Thank you.

24 HEARING OFFICER KRAMER: Any other questions for
25 this witness?

1 MR. RATLIFF: Yes, I would like to redirect
2 Mr. McIntosh just briefly.

3 REDIRECT EXAMINATION

4 MR. RATLIFF: Mr. McIntosh, one of the things
5 that we heard today from Mr. Hunt is that there is nothing
6 quantitative about the conclusion that you have low pocket
7 reliability needs in San Diego, and I wanted to ask you if
8 you think that is a correct conclusion --

9 MR. ROSTOV: I object. I'm not sure that's what
10 Mr. --

11 MR. RATLIFF: His statement was that there
12 is no -- and the staff's testimony, there is no
13 quantitative analysis.

14 MR. ROSTOV: Are you saying that's what Mr. Hunt
15 said or what Mr. McIntosh said?

16 MR. RATLIFF: That's what Mr. Hunt said.

17 MR. ROSTOV: Okay. Sorry.

18 MR. RATLIFF: And I'm asking Mr. McIntosh whether
19 he agrees with that statement.

20 MR. McINTOSH: I think the 2007 study is one
21 indication of the studies that are quantitative that he's
22 referring to. In addition to that, we study local
23 requirements on an annual basis for needs in the planning
24 side of my organization.

25 MR. RATLIFF: And that would indicate what the

1 local reliability shortages are and the need for a
2 specific -- not for a specific power plant but for a need
3 in a specific area.

4 MR. McINTOSH: That's correct.

5 MR. RATLIFF: Okay. Thank you.

6 That's all. That was all my redirect.

7 HEARING OFFICER KRAMER: Okay. Thank you. Have
8 a safe flight.

9 MR. McINTOSH: Thank you.

10 HEARING OFFICER KRAMER: Okay. Mr. Rostov, and
11 when you feel you're about 20 minutes from being done, if
12 you could let us know. Ms. Siekmann wants to let one of
13 her witnesses know when to come over for alternatives.

14 MR. ROSTOV: Okay. Thank you, Mr. Kramer.

15 I think many of these questions are going to be
16 for the staff. I'm going to try to ask a lot of yes or no
17 questions to speed things along. But having said that, I
18 think my first one is not a yes or no question.

19 CROSS-EXAMINATION

20 MR. ROSTOV: So for whoever on the staff, how
21 many tons of carbon equivalent emissions would need to be
22 emitted from a power plant project within the CEC
23 jurisdiction to be considered significant?

24 MR. RATLIFF: Can I ask for a clarification?

25 Are you asking whether we've set a threshold of

1 significance for an increase in greenhouse gases which
2 would determine significance?

3 MR. ROSTOV: That was my second question.

4 My first question was, yes, that's my second
5 question. I was wondering if you had a number.

6 MR. RATLIFF: So the question is what the number
7 is for --

8 MR. ROSTOV: Uh-huh.

9 MR. RATLIFF: -- or if we have a threshold of
10 significance for greenhouse gases.

11 MR. ROSTOV: Yes.

12 MR. RATLIFF: Is that directed to any particular
13 witness or any --

14 MR. ROSTOV: I'm not sure. It's not directed to
15 you, Mr. Ratliff.

16 MR. LAYTON: If there was an increase in
17 greenhouse gas emissions from a particular project within
18 the system analysis that we do, then we would evaluate
19 whether or not that increase was significant.

20 MR. ROSTOV: So ARB has proposed a threshold of
21 7,000 tons of carbon emissions; the South Coast has
22 adopted a 10,000 ton of threshold. Have you ever
23 considered something similar when doing power plant
24 siting?

25 MR. LAYTON: Yes.

1 MR. ROSTOV: And you have not adopted a
2 threshold.

3 MR. LAYTON: Correct.

4 MR. ROSTOV: And why is that?

5 MR. LAYTON: We do a different analysis than ARB
6 or South Coast did.

7 MR. ROSTOV: Can you explain your analysis?

8 MR. LAYTON: Excuse me?

9 MR. ROSTOV: Can you --

10 MR. LAYTON: The analysis is the system line
11 analysis that is laid out in the Appendix A of the air
12 quality staff.

13 MR. ROSTOV: Okay. When you do this analysis, do
14 you examine the science to determine what level of
15 emissions would be significant? I mean, do you go through
16 and look at, you know, just different reports? Like
17 California came out with a report called "Our Changing
18 Climate, Assessing the Risk to California," which is
19 Exhibit 621. And we put in 615, which is Mr. Hansen's
20 report. Or are you just assuming that -- are you
21 considering the science when you determine significance?

22 MR. RATLIFF: Well, again, I have to object. I
23 think the answer was we never adopted a threshold of
24 significance.

25 MR. ROSTOV: Well, no, it's a different question.

1 I mean, I think you need to -- I think
2 environmental analysis requires you to look at the science
3 to determine each time you do, if you don't have a
4 threshold, to determine if you need a threshold.

5 So my question is are you looking at the current
6 science to determine if you need a threshold? Like if one
7 ton or if ten tons of emissions is significant.

8 MR. RATLIFF: So if there were an increase in
9 emissions, how would we or what would look at to determine
10 whether that was significant? Is that the question?

11 MR. ROSTOV: Right. Or I can even ask -- yes.
12 Or since there was an increase, did you do any of that
13 analysis?

14 MR. LAYTON: We acknowledge in this section that
15 we believe that climate change is occurring and that
16 manmade activities do contribute to that climate change.
17 But what is overlaying on our analysis is AB 32 and the
18 other efforts by the state policies to reduce greenhouse
19 gases. We don't want to get into a debate about climate
20 change in this section. It's a very specific look at this
21 power plant in the system. I think the debate on climate
22 change is a much broader policy that doesn't need to occur
23 inside this section.

24 MR. ROSTOV: Okay. In that section you found
25 that construction impacts were essentially de minimis.

1 There's around 4,000 tons. What was that analysis based
2 on?

3 MR. LAYTON: As I say in this section, we require
4 best practices as part of our air quality analysis, and,
5 therefore, we think that the emissions from the
6 construction activity will be limited by the use of the
7 newest equipment in construction.

8 Initially when this was first prepared, we were
9 looking at some alternative fuels or some of the
10 lower-sulfur more-advanced fuels that had different air
11 quality aspects that would also allow the use of newer or
12 require the use of newer equipment. Therefore, we think
13 that the emissions are reduced as much as possible given
14 the activity; but, again, the activity still has to occur
15 to build the plant.

16 MR. WALTERS: I would also like to augment that
17 answer.

18 We're not looking at construction alone, we're
19 looking at construction and operation together. And when
20 you factor the reductions that we anticipate from
21 operation and the very small amount of construction in
22 relation to that, that is more than offset by the
23 facility's operation and reduction in GHG emissions.

24 MR. ROSTOV: So did you do a ratio between the
25 amount of emissions from construction versus the amount of

1 emission from operations and say, since the amount of
2 emissions from construction was a lot smaller than the
3 emissions from operations, therefore, we're not going to
4 consider that?

5 MR. WALTERS: They're orders of magnitude
6 different. It's a real assessment to make when it's two
7 orders of magnitude difference.

8 MR. ROSTOV: But you use a ratio theory then?

9 MR. RATLIFF: That wasn't his answer.

10 He said they did a complete -- I mean, he
11 answered the question by telling you that they netted the
12 complete impact of the project itself. I know you want
13 him to say we did a ratio theory, but he answered that
14 they look at it in its totality.

15 MR. ROSTOV: Mr. Ratliff keeps answering my
16 questions.

17 MR. RATLIFF: Well, I'm sorry. I think you're
18 ignoring his question and then trying to tell him, you
19 know, what the answer is.

20 HEARING OFFICER KRAMER: So to put that in
21 objection terms?

22 MR. RATLIFF: Well, yes.

23 HEARING OFFICER KRAMER: What kind of objection?

24 MR. RATLIFF: The question was asked and
25 answered.

1 If we had a court reporter, I would have --

2 HEARING OFFICER KRAMER: There. Asked and
3 answered. Sustained.

4 MR. ROSTOV: Okay. Mr. Walters, you said you
5 adopted everything that -- I believe you said you adopted
6 everything that Mr. Rubenstein had testified to. The one
7 thing I recognize that he said, he said there is a
8 distinguishment between carbon emissions and climate
9 change. Is that the CEC's position? I mean, it seems
10 like if you're adopting the state policies, you know, that
11 emissions are carbon that affect climate change, so that
12 would be in contrast to what Mr. Rubenstein said.

13 MR. WALTERS: Well, I'm not sure exactly the
14 context of that remark, but if the context was how I
15 remember it, it was what he was identifying was
16 essentially what we're talking about, which is the net
17 change from the facility, and the carbon emissions from
18 the facility itself are not as important as the overall
19 effect of the facility within the system.

20 MR. ROSTOV: Well, actually, I believe he was
21 talking about was the carbon emissions relevant versus
22 climate change. So he was talking about certain
23 documents.

24 So the question is carbon emissions do affect
25 climate change, and that's why I was asking earlier did

1 you look at the science of climate change.

2 So do you disagree with his statement or not? I
3 guess, if he's talking about how carbon emissions should
4 be dis- -- what's the word? He's saying that carbon
5 emissions should not be considered in combination with
6 climate change.

7 MR. RUBENSTEIN: That's not what I said.

8 HEARING OFFICER KRAMER: You can complete the
9 thought if you -- actually, our protocol is that the --
10 Mr. Walters would answer first, and then you would clarify
11 by way of chiming in.

12 MR. WALTERS: I don't believe that that is what
13 Mr. Rubenstein said or meant.

14 MR. ROSTOV: Let me start over.

15 Mr. Rubenstein, you just heard my question. How
16 would you -- what was your statement about carbon versus
17 climate change?

18 MR. RUBENSTEIN: My statement in context was that
19 with respect to the review of a power plant application, I
20 thought that it was appropriate for the Commission to look
21 at greenhouse gas emissions, and the question of climate
22 science was not relevant to any particular siting case.

23 MR. ROSTOV: So my question to CEC staff is,
24 carbon emissions relate to climate science. Do you
25 believe they're relevant to climate science?

1 MR. RUBENSTEIN: I think the key here is our GHG
2 analysis is based on emissions and not climate science.
3 That's -- our analysis is an emission analysis for the
4 project and its project impacts to emissions.

5 MR. SHARMAN: May I make a comment as a
6 mathematician here?

7 HEARING OFFICER KRAMER: Go ahead. It's in
8 answer to the question.

9 MR. SHARMAN: We have a pretty irrefutable
10 relationship between the two. We know that if we have no
11 greenhouse gases, it would be very cold; if we have the
12 right amount, it's a nice temperature; if we have a little
13 too much, we have what is called a forcing effect and
14 things get warmer and glaciers melt and things like that.

15 So I think the question, the intent of the
16 question is to show that there is a cause and effect
17 relationship between greenhouse gases and temperature
18 change. And I just -- I just kind it so interesting that
19 we can't answer that question just straightforwardly yes,
20 we agree, we know that, and let's move on, but instead it
21 just seemed like there was an avoiding of that truth.

22 MR. WALTERS: Excuse me, but Mr. Layton actually
23 made that very statement that the staff recognizes that
24 there is a climate issue.

25 The question I was answering didn't seem to be, I

1 guess, quite to that point, and maybe I just wasn't --

2 MR. ROSTOV: Well, if I had asked if the
3 hypothetical, if you had found that there was carbon
4 emissions, you would say that would have an effect on
5 climate change.

6 MR. WALTERS: If we had found a net increase and
7 there were other reasons to address it, such as the fact
8 that the facility did not meet other policies and LORS, we
9 would do a very exhaustive analysis of the significance of
10 the project. But I think we've already answered the
11 question of carbon emissions and climate change are
12 related.

13 MR. ROSTOV: Okay. I'm moving on. And I'm just
14 trying to make sure the record is straight here.

15 So according to your calculations that CECP will
16 produce an estimated 846,076 -- 846,076 tons of GHG each
17 year; is that correct?

18 MR. WALTERS: That is the permit basis. And I
19 would like to note that permit basis for Units 1 through 3
20 would be two million.

21 MR. ROSTOV: But that's my next question.

22 But you used a baseline for the Units 1 through 3
23 of 243,523 tons; is that correct?

24 MR. WALTERS: We presented information on the
25 baseline for 1 through 3 as just information.

1 MR. ROSTOV: So did you net out this amount that
2 Units 1 to 3 -- when you found in net reduction, did you
3 net out that the reductions from Units 1 to 3 out of your
4 analysis to get like 600,000 emissions?

5 MR. WALTERS: No. Our analysis was broader than
6 that. It included more than just the Encina plant, and
7 that's what I've -- I think we've been trying to get
8 across for the last couple of hours, that we look at this
9 in a system-wide basis, we are not looking at this as a
10 point source, as a global impact, we are looking at it in
11 that context to make a determination of whether or not
12 there is a net emission reduction with the introduction of
13 a lower GHG emitting resource.

14 MR. ROSTOV: Right. But some of the net
15 reductions will come from the Units 1 to 3, right, and you
16 counted those -- you counted a baseline of 240,000,
17 correct?

18 MR. WALTERS: No, not exactly. As I indicated,
19 we're doing it system-wide. There will be reductions from
20 various sources, including Units 1 through 3; there will
21 be reductions from Units 4 and 5, which would need to
22 operate less; there would be reductions from other units
23 across the area, the peaking units, but we do not quantify
24 any specific unit.

25 MR. ROSTOV: So okay. Maybe that's the question.

1 Is there any quantification of the amount of GHGs
2 that would be reduced by the building of this plant?

3 MR. WALTERS: There's no specific quantification
4 because there's no specific knowledge of which plants
5 would go off at any particular time; but we know based on
6 the pecking order of the plants, that this plant would
7 come in in place of less-efficient, higher-cost
8 facilities.

9 MR. ROSTOV: Okay. And just to be clear, for the
10 greenhouse gases -- and I think you just said it -- you
11 didn't consider that existing environmental study of the
12 Encina project to be the baseline, you would consider
13 the -- what did you consider? I just want to be clear for
14 the record. The western electric grid or the --

15 MR. LAYTON: Yes, the western electric grid.

16 MR. ROSTOV: Okay. So for all other CEQA
17 analysis related to this project, the baseline specific to
18 the plant and its environmental setting; so does that mean
19 you've created a new baseline for greenhouse gas
20 emissions?

21 MR. LAYTON: This particular pollutant is
22 different in that it has a global effect. The fact that
23 it's emitted here or in Utah has the same effect. So what
24 we're trying to do is implement the policies of the state,
25 which are to reduce greenhouse gases. And we think with

1 the construction of this particular project, it will
2 displace other sources of energy throughout the Western
3 Interconnection and reduce greenhouse gases.

4 MR. ROSTOV: I understand that. So essentially
5 you're saying -- but you didn't answer my question.

6 My question was did you adopt a different
7 baseline to come up with that conclusion.

8 MR. RATLIFF: Could I just ask for clarification,
9 Mr. Rostov, are you asking him what global emissions of
10 CO2 are? I mean, is that the baseline you're asking them
11 if they quantified or -- I mean --

12 MR. ROSTOV: Not in this question. I'm just
13 saying --

14 MR. RATLIFF: But isn't that -- what are you
15 asking -- when you use the term "baseline," what do you
16 mean in the context of greenhouse gas emissions?

17 MR. ROSTOV: What I mean, baseline, I mean,
18 what's defined by CEQA, which is typically the
19 environmental setting which is typically the plant.

20 MR. RATLIFF: Which is a global -- can we agree
21 that's a global setting?

22 HEARING OFFICER KRAMER: Well, I don't know if
23 you have to agree. The witness testified that for
24 greenhouse gases it was global, and I think he also said
25 that for other pollutants it would be the local area that

1 would be influenced by the project.

2 MR. WALTERS: Local and regional.

3 HEARING OFFICER KRAMER: Depending on whatever
4 the impact is you're talking about.

5 MR. WALTERS: Correct.

6 MR. ROSTOV: So you've created a different
7 standard, a different baseline for greenhouse gases.

8 MR. WALTERS: We've created the correct standard
9 for greenhouse gases, which is different because it needs
10 to be different than from criteria pollutants or hazardous
11 air pollutants.

12 MR. ROSTOV: I'm trying to ask yes or no
13 questions just to speed this along, and you guys are
14 trying to be -- are being somewhat argumentative, and
15 that's fine with me, but I'm just throwing that out there.

16 The project description intends Units 4 to 5 to
17 operate with the CECP; is that correct?

18 MR. LAYTON: Yes.

19 MR. ROSTOV: And the project -- so in essence,
20 these less-efficient units are going to operate
21 concurrently with the new project at the same plant; is
22 that correct?

23 MR. WALTERS: At times.

24 MR. ROSTOV: But under your economic dispatch
25 theory, less-efficient power plants will operate less

1 resulting in reductions of GHGs; but here, despite, you
2 know, the once-through cooling policy in the future and
3 the building of this new plant at the site, these
4 less-efficient plants can continue to operate at this very
5 site; is that true?

6 MR. WALTERS: As needed.

7 MR. ROSTOV: So there will be over 800,000
8 emissions of greenhouse gases from this plant, and the
9 less-efficient plants at Encina may be operating.

10 So where will the other reductions come from in
11 the system? Can you identify the specific plants?

12 MR. WALTERS: The other reductions are
13 system-wide. They come from the coal that is no longer
14 dispatched. They come from the other list of peakers and
15 higher-emitting sources that are provided in our testimony
16 as well as reductions in Units 4 and 5.

17 MR. ROSTOV: Are there any constraints that would
18 limit this economic dispatch theory? The constraints I'm
19 thinking about are load pocket or a transmission where you
20 could still have higher-emitting plants operating despite
21 you have a new, more-efficient plant operating on the
22 grid?

23 MR. VIDAVER: If you had a load pocket, let's say
24 in Utah, the generation at Carlsbad couldn't be imported
25 into that load pocket. Carlsbad would have no effect on

1 generation within the -- to meet local reliability needs
2 within that load pocket. So there are circumstances under
3 which high-emitting plants would continue to operate. But
4 as long as the energy from Carlsbad could reach the load
5 that would be served by a plant, that plant, that
6 higher-emitting plant, we would expect -- or a
7 higher-emitting plant, we would expect to be turned down.

8 MR. ROSTOV: And have you done the analysis to
9 figure out if 800,000 tons of GHG emissions can be reduced
10 through this efficiency theory?

11 MR. VIDAVER: The net change in system CO2
12 emissions would be -- the net CO2 emissions would be
13 negative. There would be fewer CO2 emissions from the
14 electricity sector on a WECC-wide basis. There would not
15 only be fewer emissions on, let's say, an annual basis,
16 but on a monthly basis, whenever the Carlsbad facility
17 operated, there would be at that moment a reduction in
18 emissions from the sector. If you added all emissions
19 across the Western Interconnect.

20 MR. ROSTOV: So is it only when the Carlsbad
21 facility operates?

22 MR. VIDAVER: When the Carlsbad facility doesn't
23 operate, it will not have an impact on GHG emissions.

24 MR. ROSTOV: I'm still a little confused.

25 How do you know this if there was no

1 quantification?

2 MR. VIDAVER: It's simply the way -- plants are
3 dispatched on the WECC-wide basis economically. When
4 there are load pockets which prevent that from happening,
5 they're dispatched within the load pocket economically.
6 Any plant -- the cheapest plant that can meet local
7 reliability needs in a load pocket is dispatched to do so.
8 That's why one would conclude that Carlsbad would generate
9 in lieu of Encina 4 and 5 frequently, because it's a
10 more -- a lower-cost more-efficient provider of local
11 reliability within San Diego. It may also generate in
12 lieu of a gas-fired plant in northern California or in
13 Nevada if it were lower cost than that plant.

14 MR. ROSTOV: So this is all economic theory.

15 When you do an air analysis, you actually go out
16 and you would determine how much emissions there are to
17 how much you would need to mitigate. In this situation
18 you're really not doing that; you're just saying we think
19 it operates in this certain way, and when it operates in
20 this certain way, we think we'll have a net reduction. Is
21 that the summary of your --

22 MR. LAYTON: Mr. Rostov, in our analysis we
23 identify certain units, such as the once-through cooling
24 units that are subject to pending water board regulations.
25 We do not know the implementation date of those, we don't

1 know which plant will go out first, which unit, unit by
2 unit, therefore, you're asking us to quantify and predict
3 exactly which unit will go when. And then on the aging
4 plants, which aren't once-through cooled, same thing. On
5 the coal contracts, you're asking us to specify that with
6 great certainty that, in fact, that contract will expire,
7 and, therefore, the energy will be needed for this and
8 will be producing lower greenhouse gases.

9 Again, certain contracts may be negotiated, there
10 may be negotiated settlements with some of the
11 once-through cooled units as they try to balance
12 reliability.

13 So we've identified that there are certain
14 amounts of energy that are going to leave the system and
15 certain amounts of capacity that are going to leave the
16 system. What leaves the system is all higher emitting;
17 and, therefore, we see that there will be a net reduction.
18 But with specific details about which one's going to
19 leave, without those specific details, we cannot tell you
20 the number, this year, next year, the year after. But it
21 will be implemented.

22 MR. VIDAVER: And if I may clarify what
23 Mr. Layton said, the conclusion regarding the impacts of
24 Carlsbad on GHG emissions is not predicated on the
25 retirement of any single power plant. All existing power

1 plants could continue to operate; some would operate less,
2 those that operated less with the higher emitting plants.

3 MR. WALTERS: And let me augment that to put it
4 in layman's terms. If we put 10,000 Priuses on the road
5 and got rid of 10,000 other cars, we don't necessarily
6 know what those 10,000 other cars are, but we all know
7 that they have higher GHG emissions than a Prius.

8 And the issue is we just can't make that
9 determination, what the negative is, but we know it's a
10 negative, it's clear, it's obvious.

11 MR. ROSTOV: But the difference here -- and this
12 is argumentative, so I apologize -- is this is a CEQA
13 proceeding where there's a permit where you're required to
14 do an environmental analysis. In the Prius situation,
15 you're not.

16 But that was argumentative, and it wasn't a
17 question. I'm willing to go forward.

18 HEARING OFFICER KRAMER: The objection is
19 sustained.

20 MR. ROSTOV: So it sounds to me you're saying
21 there's no certainty that any specific reductions will
22 happen. I mean, you just --

23 MR. LAYTON: No, I said there's no certainty in
24 the timing of the reductions.

25 MR. RATLIFF: Could we get Mr. McClary to also

1 join in this answer?

2 MR. McCLARY: You know, and, frankly, I'm
3 listening to this, I'm a bit bemused. We can even go back
4 to the Priuses and say are we going to use CEQA to keep
5 those Priuses off the road. In this case, I think it's
6 clear that the analysis shows that under any set of
7 circumstances where this is being dispatched, it is
8 resulting in a net reduction. Now, at any given hour, in
9 fact, that reduction is due to the ramping down or turning
10 off of resources all across the Western Interconnection.
11 That would change from hour to hour. That in one hour
12 this plant may be displacing generation from Encina 4 and
13 5, it may be displacing generation from coal plants in
14 Utah, it may be displacing generation in northern
15 California. It will be displacing generation, and it will
16 be displacing generation with a net result of less
17 greenhouse gas emission.

18 MR. ROSTOV: I want to follow up a couple other
19 questions here.

20 When I was going through my notes I actually
21 found the FSA. And I believe it was written by
22 Mr. Layton. And I'm just going to read from page 4.1-105.

23 MR. RATLIFF: Is this by way of impeachment, or
24 is this -- this is not his testimony.

25 MR. ROSTOV: Yeah, it's a question about what he

1 said before, so it is the way of impeachment.

2 MR. RATLIFF: Okay. Go ahead. I shouldn't have
3 given you a basis.

4 MR. ROSTOV: And the quote is predicated where
5 you talk about the 2007 IEPR and talking about the need
6 for some natural growth in natural gas plants. And then
7 you say, after you quote the IEPR, therefore, even though
8 staff can't identify how many gross GHG emissions are
9 attributable to a project, it is difficult to determine
10 whether this would result in a net increase or decrease of
11 these emissions, and if so, by how much.

12 Has your position changed?

13 MR. LAYTON: I believe it has.

14 MR. ROSTOV: Why the change? Or what was the
15 change, I guess?

16 MR. LAYTON: I believe the other four people that
17 joined me on the dais can attest to how the analysis has
18 evolved and has included a much more sophisticated look at
19 the Western Interconnect system.

20 MR. ROSTOV: So is there a specific formula we
21 could look at so we, the public, could check that
22 analysis?

23 MR. RATLIFF: Well, Mr. Rostov, you've been part
24 of that analysis.

25 MR. ROSTOV: And I haven't seen the formula.

1 MR. RATLIFF: No, well, you have seen the
2 committee report that you contributed to and that --

3 MR. ROSTOV: Once again, I object to
4 Mr. Ratliff --

5 MR. RATLIFF: Well, I mean, I just want to point
6 out though, I mean, we all know that a lot has happened at
7 the Energy Commission in the discussions that have gone on
8 over how you account for changes in the electric system
9 and what the contribution or effect would be on greenhouse
10 gases and what makes a sensible CEQA analysis for that. I
11 mean, you're familiar with that, and I am too.

12 I suspect Mr. Layton's PSA was written before we
13 even held those hearings that you participated in, and
14 that's why I bring it up. I mean, this didn't happen in
15 isolation.

16 MR. ROSTOV: So at the time why did you believe
17 it was difficult to determine if it was a net increase or
18 decrease?

19 MR. LAYTON: Because it was difficult to
20 determine.

21 MR. ROSTOV: And you don't think so anymore.

22 MR. LAYTON: I believe we have a lot clearer
23 guidance on how to do a system approach, a system analysis
24 of the greenhouse gas effects of this project.

25 MR. ROSTOV: And in the FSA, that's just a

1 guidance -- is there a formula or some type of --

2 MR. LAYTON: I think if you'll look at the rest
3 of the PSA, much has changed. Many of the tables that are
4 in the FSA are not in the PSA, and it's a much more
5 qualitative analysis that brings in the once-through
6 cooling, the coal contracts. So I think it's
7 significantly changed, as I said in my introduction, that
8 this particular analysis has evolved over the last few
9 years.

10 MR. ROSTOV: So you've changed your qualitative
11 analysis and still have not done a quantitative analysis.

12 That's a yes or no question, actually.

13 MR. LAYTON: I guess I don't understand the
14 question. If it's supposed to be a yes or no --

15 MR. ROSTOV: Well, you just said that the
16 qualitative analysis of GHG has changed. And then I said,
17 so you've changed what your qualitative analysis has been,
18 but you have not done a quantitative analysis.

19 MR. RATLIFF: That's been asked and answered.
20 That's my objection. I mean, Mr. McClary just answered
21 why it was impossible to do a quantitative analysis.

22 MR. ROSTOV: I was impeaching Mr. Layton, so I
23 don't think it's been asked and answered by him.

24 MR. RATLIFF: Well, do you want to ask all the
25 quiet people on the panel or --

1 HEARING OFFICER KRAMER: Overruled. I don't
2 recall this having been specifically answered.

3 MR. WALTERS: All right. I'd like to answer.

4 It is quantitative to the point of us being able
5 to identify it as being a reduction, that there is a
6 negative value. It's not -- that is quantitative. It's
7 not specific, but it is quantitative.

8 MR. ROSTOV: Okay. Mr. Layton, in the PSA you
9 also argue that GHG regulatory efforts are, you know,
10 changing dramatically and that it might be better to do
11 something on a statewide basis rather than on an ad hoc
12 basis. Is that still your opinion analysis?

13 MR. LAYTON: That was my opinion two years ago,
14 yes.

15 MR. ROSTOV: Okay. So the FSA uses the
16 MRW Report, and on page 4-1-109 it takes a quote from the
17 MRW Report, which I'll read to you, and it's essentially
18 the reason -- the justification for using the MRW Report.

19 It says, "When one resource is added to the
20 system, all else being held equal, another resource will
21 generate less power. If new resources has a lower cost or
22 fewer emissions than existing resource emits, then the
23 aggregate characteristics will change to reflect the
24 cheaper power, lower GHG emission rates."

25 My question is, what do you mean by "all else

1 being held equal"?

2 MR. McCLARY: When you look at the incremental
3 change from adding a resource to the system, you would
4 typically do that without making other simultaneous
5 changes that would fuzz up or obscure the impact adding --
6 of the one change you were making to the system. So
7 essentially you're changing one variable and trying to
8 assess the impact of that one variable.

9 MR. ROSTOV: Right. But do electric systems work
10 like that? For example, SDG&E is at 6 percent renewables,
11 and they need to come up to 20 percent by 2020. So with
12 that -- would that justify that statement?

13 MR. McCLARY: I don't think it's got anything to
14 do with that statement. What I just said and what you
15 just said are actually quite separate. Perhaps I'm
16 misunderstanding your question.

17 MR. ROSTOV: Well, I guess I'm just asking how
18 would addition of more renewables change, would that be a
19 change -- would that be holding everything equal? We know
20 renewables are going to -- we know renewables are going to
21 be added to the system, and you say everything else being
22 held equal. So is that statement still valid if you know
23 there are other variables in the system? That's all I'm
24 asking.

25 MR. McCLARY: Wait a minute. Could you rephrase

1 that question? You're only asking --

2 MR. ROSTOV: I'm asking about all else being held
3 equal. And you're saying if you look at one variable, all
4 else is being held equal; but I'm saying in the electric
5 system, all else isn't being held equal.

6 For example, we're going to add a lot of
7 renewables in San Diego; so does that change the analysis
8 of that paragraph?

9 MR. McCLARY: No.

10 MR. ROSTOV: Why not?

11 MR. McCLARY: Because you're not actually making
12 a valid comparison here. If you were, for example, to
13 take your -- I don't know if it's a hypothetical, or your
14 example, and say you're looking at a system that includes
15 addition of renewable resources over time and you want to
16 look at if I add a resource is that going to make
17 emissions go up or down, that's what you're looking at, is
18 the addition of that resource. All else being held equal
19 includes what other conditions you are assuming about the
20 system, be that a high renewable or other scenario.

21 MR. ROSTOV: That's correct. But within the
22 electric system a lot more has happened right now. For
23 example, you're trying to integrate a lot more renewables.
24 So I guess the question is if you're adding a lot of new
25 fossil fuel while you're trying to add more renewables, is

1 that all else being held equal?

2 MR. McCLARY: That was not the point or what was
3 stated in this quote.

4 MR. ROSTOV: All right. I'm not going to argue
5 with you. I'll move on.

6 On that same page, you can say net GHG emissions
7 for the integrated electric system will decline when new
8 gas-fired power plants are added to improve the overall
9 efficiency of the electric system as one example.

10 If you added a hundred new plants, would that
11 still be true?

12 That's a hypothetical question, by the way.

13 MR. LAYTON: I think one of the things that
14 you're doing is you're confusing capacity and energy. And
15 if you -- I think Mr. Hunt also did the same thing when he
16 casually equated the energy from the Carlsbad Energy
17 Center to a certain number of plants.

18 And what the point of this analysis is, we're
19 talking about using the framework, we're talking about
20 additional capacities needed to address certain
21 requirements with integration of renewables, also the
22 reliability issues, spinning reserve, all the ancillary
23 services that Mr. McIntosh was talking about.

24 If you added a hundred plants, when one of those
25 plants operated, they would improve the system. The other

1 plants would not operate unless needed. Capacity is much
2 different than energy.

3 And again, the tables in here, Table 9, Table 10,
4 and Table 11 are very clear about talking about energy.
5 And then the framework report talks about the functions
6 and the capacity of additional gas. But if there's not a
7 need for those functions, then the plants, the gas plants
8 that you're proposing, the hundred plants, would not
9 operate.

10 MR. ROSTOV: I agree with the Energy
11 Commission -- I mean, with the staff enough to say that
12 this is the -- the GHG analysis is essentially a
13 cumulative impacts analysis with respect to the electric
14 system.

15 So my question is, does your cumulative impacts
16 analysis need to consider all future probable fossil fuel
17 electric projects in California, such as the 2,178
18 megawatts under correction and the other 6,415 megawatts
19 approved but on hold right now. I got those numbers from
20 the CEC website.

21 MR. LAYTON: Again, if they are needed, they will
22 get a power purchase agreement and they will operate. If
23 they are not needed, they may not get a power purchase
24 agreement and they will not operate. Their potential
25 greenhouse gas emissions are different than their actual

1 contribution to the system-wide average and the net
2 reduction of greenhouse gases.

3 MR. ROSTOV: So you're not analyzing all the
4 maximum potential --

5 MR. LAYTON: No, I think I said we are.

6 MR. ROSTOV: -- the maximum potential of each of
7 those plants, they emit greenhouse gases --

8 MR. LAYTON: I guess I should wait for you to
9 finish your question, sorry.

10 MR. ROSTOV: Yes, sorry. And I'll start over.

11 So you're not analyzing the maximum potential of
12 all the future probable projects, and they're probable
13 because they're already licensed, and adding that to the
14 emissions of this plant to do your cumulative impacts
15 analysis; is that true?

16 MR. LAYTON: That is true.

17 MR. ROSTOV: Okay. Did your cumulative impacts
18 analysis include the future probable projects including
19 all the fossil fuel project -- power plant projects that
20 are in the licensing proceedings right now, which is a
21 little less than 7,000 megawatts?

22 MR. LAYTON: It did not.

23 MR. ROSTOV: Okay. Does the cumulative impact
24 analysis also need to consider all the fossil fuel power
25 projects that can come online between like 2001 and 2009,

1 and that was 15,220 megawatts?

2 MR. LAYTON: Yes.

3 MR. ROSTOV: So when you did your cumulative
4 impacts analysis to calculate your GHG emissions from this
5 project, you didn't consider any of that as part of the
6 cumulative impacts analysis, correct?

7 MR. RATLIFF: Could I just ask -- I mean, when
8 you say "cumulative impact analysis," do you mean the
9 cumulative benefits of building more-efficient facilities
10 to replace -- because that's really what -- I mean, in the
11 context of what we're talking about, that's what the
12 result staff has analyzed would be.

13 MR. ROSTOV: I know what the staff has analyzed.
14 I'm asking what the statutory requirements are for
15 cumulative impacts analysis --

16 MR. RATLIFF: But -- I know but --

17 MR. ROSTOV: -- past, present, and future
18 probable projects.

19 MR. RATLIFF: But we're talking past each other
20 in terms of concepts, and that's what I'm -- I'm --

21 MR. ROSTOV: Actually, I think I've gotten my
22 answers except the answer to the last question.

23 MR. RATLIFF: I know, but we're still talking
24 past each other in terms of what we mean by that, and
25 that's why I think it's -- it's very kind of confusing.

1 MR. ROSTOV: I don't know what to say, because I
2 don't understand what you're saying. Are you making an
3 objection or --

4 MR. RATLIFF: Well, we had --

5 MR. ROSTOV: Once again, it appears like you're
6 arguing with me, which --

7 MR. RATLIFF: I'm sorry. I didn't -- go ahead.

8 MR. ROSTOV: I'm just trying to create a factual
9 basis actually.

10 So I think the last question was did the
11 cumulative impacts analysis calculate the GHG emissions
12 from all these past, present, and future projects we just
13 described in addition to the CECP total amount of carbon
14 equivalent emissions and determine how that would affect
15 climate?

16 MR. LAYTON: We did not -- as I've said several
17 times, we did not do an analysis of climate change, we did
18 an analysis of project emissions and its effect on
19 greenhouse gas emissions. The system is the system. If
20 the system changes, then the dispatch order will still
21 take that into consideration.

22 So if you're asking if we looked at whether the
23 gateway project, which is currently just started up, was
24 considered, I think the answer is no, but it's part of the
25 system and then would be an economic dispatch depending on

1 all the other variables, local need -- you know, dispatch,
2 reliability. I think we've -- I mean, the analysis, I
3 think, speaks for itself.

4 I'm not sure I understand your question, I guess.

5 MR. ROSTOV: I think you've answered my question.

6 MR. LAYTON: Thank you.

7 MR. ROSTOV: I want to move on to a slightly
8 different topic. And we have a -- we have an exhibit. It
9 would be the MRW Report, page 98.

10 Could you scroll down? It's the bottom -- yeah.
11 It's page 98. I can't read it from here, maybe I should
12 read it out loud. I'm sorry, the exhibit's not working
13 the way I thought it would work.

14 But essentially I want to know if you agree with
15 the last paragraph before the conclusion. It says,
16 "Extensive modeling would be needed to understand
17 precisely how the net GHG emissions of the electric system
18 change under various special future conditions. The
19 CAL ISO is currently undertaking extensive modeling effort
20 to understand how much, what type, and where gas-fired
21 generation will be needed to enable the integration of at
22 least 30 to 30 percent renewable energy in the California
23 system."

24 MR. McCLARY: Is the question would I still agree
25 with that statement? I would agree with it that, yes,

1 that modeling is needed to specifically, or precisely I
2 think is the word used here, I don't think it's actually
3 needed to say that it is a reduction rather than an
4 increase in the case that we're looking at here.

5 MR. ROSTOV: But it is needed to determine --
6 there's two aspects of the FSA greenhouse gas analysis, as
7 far as I understand it. And one is about integration of
8 renewables. And somehow the integration of renewables
9 would create some sort of reductions, we don't know how
10 much. And this -- this paragraph essentially says there
11 needs to be a lot more study to determine whether there
12 would be integration -- what you need for integration of
13 renewables. Is that true?

14 MR. McCLARY: I think there was -- there was a
15 fair amount in there, so I'll try to answer. And I'm
16 actually not trying to be argumentative about it, just
17 that the increased modeling or more modeling and study
18 that needs to be done would help specify where and how you
19 can best introduce renewables and where greenhouse gas
20 emissions would result from introduction of gas-fired
21 generation under various scenarios. You can't know
22 precisely how that will play out.

23 There may be better ways than others how that
24 would play out, but the need to take action is there,
25 which is why, for example, ARB has gone ahead with some

1 specification of how that's going to happen in terms of
2 renewable portfolio standards in the first place. That's
3 done without that kind of detailed analysis.

4 This kind of analysis referred to in the report
5 will help refine that policy. It might change that policy
6 in future years. But right now that policy is based on an
7 understanding that adding increased renewable resources
8 will, in fact, lead to reduced greenhouse gas emissions.

9 MR. ROSTOV: Once you add new fossil fuel plants
10 into the system, doesn't that affect the integration of
11 renewables, I mean, in a positive or negative way, but it
12 affects your ability to integrate more renewables. And
13 this paragraph says you need to do extensive modeling.

14 MR. McCLARY: It says you need to do it to
15 understand precisely how that will play out.

16 MR. ROSTOV: So in the licensing proceeding for
17 the public document in terms of CEQA, the public doesn't
18 need to know how this specific project would play out in
19 terms of integrating renewables.

20 MR. WALTERS: Our analysis identifies a net
21 benefit. Once we've done that, there really isn't a need
22 to tell the decision makers how much that benefit is
23 precisely. Once we've identified a benefit in an impact
24 area, it is what it is, it is a benefit. There is no
25 significant impact, there is no requirement for additional

1 mitigation. That is what's required under CEQA.

2 MR. ROSTOV: We obviously disagree about benefit,
3 but I'll just move on to some more questions.

4 Page 4.1-100 claims, and you were talking about
5 this earlier actually, that the CECP would in some measure
6 replace out-of-state high-GHG emitting electricity
7 generation which --

8 MR. LAYTON: Which page number? Excuse me.

9 MR. ROSTOV: 4.1-100.

10 So essentially you're saying that the CECP would
11 replace some of this out-of-state generation that's being
12 phased out because of the state's new emission performance
13 standards.

14 MR. RATLIFF: Excuse me. Could you tell us
15 where -- we're still trying to find the testimony.

16 MR. ROSTOV: Sorry. I believe it was
17 page 4.1-100.

18 MR. RATLIFF: Is that the first bullet then --
19 the last bullet on that page?

20 MR. ROSTOV: I'll have to -- I mean, it's more of
21 a general point. You're essentially -- the general point
22 is about -- maybe I have the wrong page.

23 MR. LAYTON: I'm looking at the references for
24 quality on page 100, but perhaps my numbering is wrong.

25 MR. ROSTOV: Actually, I think I just wrote down

1 the wrong number.

2 So but I don't think I need the page number to
3 ask my question.

4 I mean, essentially, and you were saying this
5 earlier, that you believe that the CECP would in some
6 measure replace out-of-state high-emitting -- GHG-emitting
7 electricity generation that must be phased out because of
8 the state's new emission performance standards, such as
9 the coal plants; is that correct? That's part of your
10 analysis.

11 MR. LAYTON: Yes.

12 MR. ROSTOV: Okay. Are you counting those
13 reductions resulting from other state policies as net
14 reductions for the CECP?

15 MR. LAYTON: What policy?

16 MR. ROSTOV: The state's emission performance
17 standard would be like SB 1368. So essentially the
18 elimination of the coal plant, out-of-state coal plants.

19 MR. RATLIFF: I don't understand the question.
20 Could you --

21 MR. ROSTOV: The question is, earlier, and in the
22 FSA, it appears that the staff is saying that emission
23 reductions are incurred because out-of-state coal
24 contracts are going to disappear. And I'm asking when you
25 do this net benefit analysis, when you say there's a net

1 reduction, are you counting these reductions that are
2 resulting from other state policies?

3 MR. VIDAVER: Let me -- let me rephrase your
4 question. I'm probably going to repeat exactly what you
5 said.

6 You're asking us if we, in coming to the
7 conclusion that there is a net GHG benefit from the CECP,
8 had to include among the subset in the set of benefits the
9 assumption that SB 1368 would go into force and utilities
10 would not be allowed to invest in out-of-state coal
11 resources, for example.

12 The answer is no, we did not -- we did not assume
13 that in coming to the conclusion that the net impact of
14 the CECP would be a reduction in greenhouse gas emissions.

15 That point is in the FSA to indicate that over
16 3300 megawatts of capacity, baseload capacity currently
17 under contract to California utilities will be divested as
18 it were, and something will have to come in and replace
19 it.

20 MR. ROSTOV: Okay. And that out-of-state
21 generation that those contracts are based on can still
22 operate, correct? I mean, they can sell their power to
23 somewhere else.

24 MR. VIDAVER: The mere divestiture of -- the mere
25 removal of those contracts from the portfolios of

1 California utilities does not -- not only does not
2 preclude their continuing to operate, but does very little
3 to deter it. It does not deter it, yes.

4 MR. ROSTOV: So in some sense you're claiming a
5 net reduction for those even though plants can still
6 operate and the new plants are going to operate as well --

7 MR. VIDAVER: No --

8 MR. ROSTOV: -- is that correct?

9 MR. VIDAVER: No, what we are saying is that even
10 if those plants continue to operate, the construction of
11 the -- and operation of the CECP will result in a net
12 reduction in GHG emissions, but this is more from the
13 perspective of resource adequacy. The ISO and POUs have
14 to maintain capacity in their portfolio to meet load.
15 3300 megawatts of that capacity is currently in the form
16 of contracts with coal plants, which state utilities,
17 utilities in the state will not be able to have in their
18 portfolios, they will need to replace it with something
19 else.

20 So this has really nothing to do with GHG as --

21 MR. ROSTOV: Right. And when something is
22 replaced, it would go through a licensing proceeding, and
23 if it's a new plant, when it goes through the licensing
24 proceeding, you would do the environmental analysis. And
25 part of the environmental analysis would be what are the

1 new emissions. And one of the new emissions in that case
2 would be GHGs, correct?

3 MR. VIDAVER: I'm sorry, I thought that's what we
4 were doing here, unless it's in the CECP -- in discussing
5 the licensing of the CECP.

6 MR. ROSTOV: We are. You didn't answer my
7 question.

8 MR. VIDAVER: I apologize. I didn't sense --
9 recognize, I apologize. I didn't see a question. You
10 were -- you made a statement, and I guess I was supposed
11 to say true or false. I apologize.

12 MR. ROSTOV: So essentially what I was saying --
13 why don't you repeat what you said, because I don't want
14 to mischaracterize your statement.

15 MR. VIDAVER: Okay. The fact that utilities in
16 the State of California have to divest themselves of 3300
17 megawatts of coal contracts is not an element in the
18 conclusion that we reached that the construction and
19 operation of the CECP would result in a net reduction in
20 GHG emissions.

21 MR. ROSTOV: But then you went on to say that
22 there are -- that energy needs to be replaced, correct?

23 MR. VIDAVER: That capacity. And it's based --
24 they're baseload plants, so it needs to be replaced in the
25 context of the portfolios of utilities.

1 MR. ROSTOV: Right.

2 MR. VIDAVER: Doesn't necessarily require the
3 construction of another plant, just has to be replaced in
4 those portfolios.

5 MR. ROSTOV: Right. So it could be replaced by
6 alternative energy, for example, correct? I mean, from a
7 non- --

8 MR. VIDAVER: Capacity.

9 MR. ROSTOV: -- from a non-GHG source.

10 MR. VIDAVER: Yes.

11 MR. ROSTOV: So if you were in a licensing
12 proceeding like we are here where you're building a new
13 fossil fuel plant that is creating new GHGs, shouldn't
14 those GHGs be considered --

15 MR. VIDAVER: But they're not creating -- the
16 whole point -- staff's analysis concluded that the
17 construction and operation of the CECP would not lead to a
18 net increase in GHG reduction --

19 MR. ROSTOV: But you're essentially taking credit
20 for --

21 MR. VIDAVER: I am not. I'm sorry, I apologize.
22 Please continue.

23 MR. ROSTOV: I mean, I -- please explain why
24 you're not taking credit for it, I guess.

25 MR. VIDAVER: All we have asserted is that the

1 construction and operation of the CECP will not result in
2 a net increase in GHG emissions; in fact, to the extent
3 that the CECP operates, it will result in a net reduction
4 in GHG emissions. The fact that utilities in California
5 will or will not remove the coal contracts from their
6 portfolios has no bearing on that conclusion. That's just
7 a statement.

8 MR. ROSTOV: Wait. You are saying that you
9 need -- that California needs other power. And since
10 California needs that other power, the production of this
11 plant will be a net reduction somehow.

12 MR. VIDAVER: I believe that all we are doing is
13 making an observation about the future, the portfolios of
14 California utilities in the future. We're not -- the fact
15 that SB 1368 will require divestiture of those contracts,
16 non-renewable of those contracts, has no bearing on the
17 greenhouse gas impact of the CECP.

18 MR. ROSTOV: So it's not a part of your
19 greenhouse gas analysis, in other words?

20 MR. VIDAVER: It does not have -- it is not a
21 necessary part or any part of the conclusion that CECP
22 will lead to net reductions.

23 MR. ROSTOV: Okay. So your analysis that this
24 power plant is more efficient than the current electric
25 system really looks at the present time frame.

1 Did you study where the efficiency rate of the
2 CECP is consistent with what will be needed 20 years from
3 now?

4 MR. VIDAVER: The efficiency is consistent --

5 MR. ROSTOV: The efficiency is consistent with
6 meeting a -- I think we all agree that we need to look to
7 the future.

8 MR. VIDAVER: Yes, we do. I'm not certain what
9 it means to be consistent with. Does the licensing and
10 operation of the CECP preclude reductions in GHG emissions
11 20 years from now?

12 MR. ROSTOV: No, that wasn't the question. The
13 question is, one of the arguments is that this is
14 increasing the efficiency rate of California and the WECC.
15 And I'm saying did you look 20 years out, when we know we
16 need to have a higher -- a better efficiency rate, and did
17 you determine if this would fit into the context of that
18 efficiency rate? Did you do an analysis 20 years out?

19 Just a simple way to put it.

20 MR. McCLARY: You know, I think, just to clarify,
21 where I see this analysis having been performed is that if
22 you look over time, if the system is operating with higher
23 overall efficiencies, and you've introduced resources,
24 which we surely will have done over the next 20 years,
25 that are in some part renewable and perhaps in some part

1 more-efficient gas-fired facilities, this plant would tend
2 to operate less because it would be operating
3 economically, and whatever the system efficiencies needed
4 to be 20 years from now, this plant will operate in a way
5 that is consistent with its costs compared to other costs
6 of -- the plant's costs -- the cost of other plants on the
7 system at that time.

8 MR. ROSTOV: Well, actually, the MRW report,
9 which you're the author of, when discussing these new
10 highly-efficient natural-gas plants, you caution on
11 page 91, that given that expected long-service life of a
12 new gas-fired power plant, decisions made in the near term
13 about new resource additions could have long-term
14 environmental implications.

15 MR. McCLARY: Did you want to -- can you point
16 out where --

17 MR. ROSTOV: Yeah, it's on page 91. Sorry.

18 MR. McCLARY: In which paragraph?

19 MR. ROSTOV: I have to pull out my report.

20 MR. McCLARY: It helps to have it in context is
21 my general --

22 MR. ROSTOV: Oh, yeah. Yeah. That's fair.

23 But it is on the screen.

24 It's the second -- last sentence of the second
25 paragraph.

1 MR. McCLARY: Yes, I see that.

2 MR. ROSTOV: Okay. I mean, I guess I'm saying
3 should we be exercising caution here when we're putting a
4 power plant in service for the next 30 years. I mean, do
5 you agree with the statement you wrote in this?

6 MR. McCLARY: I do agree with that statement.

7 MR. ROSTOV: So then do you believe that the
8 environmental analysis for this plant should have included
9 a long-term analysis of GHGs over, you know, how this
10 plant fits in over the lifetime of the project?

11 MR. McCLARY: I would state that that, in fact,
12 has been done. And in fact, I would note, the quote that
13 you asked me to agree with does say decisions made in the
14 near term. That would imply that we have to make
15 decisions in the near term based on the best available
16 information we have or our understanding of how the system
17 will evolve over time. That's exactly what's been done
18 here.

19 MR. ROSTOV: Okay. Let me ask -- I'm just going
20 to switch topics a little and then move back to talking
21 about the MRW report.

22 The FSA argues that this project may contribute
23 to the shut down of other once-through cooling plants.
24 Are there plans for the shut down of these other units,
25 and is there exhibits that describe how these -- how the

1 CECP will contribute to the shut down?

2 MR. LAYTON: I guess this particular document
3 does not contain those details, no.

4 MR. VIDAVER: The draft water board policy
5 regarding once-through cooling calls for those power plans
6 that utilize once-through cooling to mitigate the impacts
7 thereof by such time that if they are needed for
8 reliability, replacement infrastructure is in place.

9 The water board's draft policy contains a
10 schedule of compliance dates for the facilities that use
11 once-through cooling that was informed by the CAL ISO, the
12 Energy Commission, and the Public Utilities Commission.
13 The date for Encina is, I'm all but certain,
14 December 31st, 2017.

15 There are compliance dates for, I believe, every
16 once-through cooled unit in the state. Some of those
17 units have already ceased operation. I believe those
18 include two units at South Bay, the Potrero 3, Humboldt --
19 I'm not sure if Humboldt has ceased operations, I don't
20 know if the new facility -- the new infrastructure needed
21 to allow for the retirement of Humboldt is operational
22 yet. That's --

23 MR. ROSTOV: Okay. In general, in those plans,
24 they all require more generation; is that correct?

25 MR. VIDAVER: No, they require replacement

1 infrastructure which can take the form of transmission,
2 which allows for additional imports into local reliability
3 areas in which many of these plants are located. Or they
4 can take the form of no longer being necessary due to
5 reductions in load in local reliability areas. Additional
6 capacity either located in or outside a local reliability
7 area, renewable generation. So there are a variety of
8 resources that can be brought to bear on -- that obviates
9 the need for these facilities.

10 MR. ROSTOV: Could those resources have been
11 brought to bear in this situation?

12 MR. VIDAVER: The local capacity requirements of
13 the ISO with respect to the San Diego local reliability
14 area and infrastructure development has allowed for the
15 retirement of South Bay 1 and 2, or 3 and 4, two of the
16 units at South Bay. It is expected that the -- when the
17 Sunrise Powerlink comes online, that it will be possible
18 to retire the remaining two units at South Bay.

19 However, even given -- given the retirement of
20 all of the units at South Bay, the energization of the
21 Sunrise Powerlink and expected development of both
22 gas-fired peaking and renewable resources in the San Diego
23 basin, that the retirement of all five of the units at
24 Encina would require some kind of infrastructure
25 development, whether it be capacity in the San Diego area

1 or expanded transmission.

2 And I'm contradicting something that Mr. McIntosh
3 has said. He has said that transmission will not do it;
4 and I defer to his knowledge of this particular element of
5 the problem we face.

6 MR. ROSTOV: So the situation you just described
7 could also create increased generation in the future,
8 fossil fuel generation in the future; is that correct?

9 MR. VIDAVER: I'm sorry, one more time, please.

10 MR. ROSTOV: The situation you just described
11 could also create increased fossil fuel generation in the
12 future; is that correct?

13 MR. VIDAVER: I don't understand what you mean by
14 "in the future." Do you mean that fossil generation is
15 one of the infrastructure developments that obviates the
16 need that would allow for the retirement of the existing
17 Encina plant?

18 MR. ROSTOV: Yes.

19 MR. VIDAVER: Yes.

20 MR. ROSTOV: Okay.

21 MR. VIDAVER: You did use the word "could," I
22 assume; it's not would, could.

23 MR. ROSTOV: I stand corrected.

24 MR. VIDAVER: Just making sure we're -- I'm
25 answering the question I think I'm answering.

1 MR. ROSTOV: Okay. So when discussing economic
2 dispatch, the FSA states -- and hopefully I have this page
3 number right, and if I don't, I apologize -- at 4.1-112
4 that dispatch order can change or deviate from economic or
5 efficiency dispatch in one year or -- in one year or due
6 to other concerns, such as permanent limits, contractual
7 obligations, local reliability needs, or emergencies.
8 These deviations, however, are likely to incur
9 infrequently.

10 So does this mean the dispatch order doesn't
11 always work as expected?

12 MR. VIDAVER: I would say that the dispatch order
13 always works -- it doesn't say that the dispatch order
14 doesn't work as expected, it just says that there are
15 times where the dispatch order is not strictly economic
16 due to these constraints that you've described.

17 MR. ROSTOV: Okay. And when it's not strictly
18 economic, would less efficient power plants be operating?

19 MR. VIDAVER: You mean -- let me.

20 I'll answer this way: When there are the
21 constraints that you've described, any unit that can be
22 freely dispatched, any set of units that can be freely
23 dispatched will be dispatched in economic order and,
24 therefore, with the lowest possible GHG emissions.

25 If I have, for example, a power plant where I

1 have a contract that requires that it be dispatched around
2 the clock, that plant will continue to be dispatched as
3 that contract requires even though it may be more
4 expensive than an alternative. But when the entire set of
5 power plants that the operator dispatcher can choose from,
6 the lowest cost, least GHG-emitting resource will be
7 dispatched.

8 MR. ROSTOV: But in infrequent occurrence, there
9 could be more emissions than in the average occurrence of
10 economic dispatch.

11 MR. VIDAVER: I cannot think of -- I think that
12 if a more-expensive more-polluting resource were -- we
13 were to observe that dispatch, there would always be an
14 underlying constraint that prevented a less-efficient
15 resource from a more-efficient less-polluting resource
16 from being dispatched.

17 MR. ROSTOV: So what do you mean by occurring
18 frequently? Did you mean like once a year, every ten
19 years?

20 MR. VIDAVER: In some cases, the word
21 "infrequent" is probably not a -- not the right term.
22 There are transmission constraints into the San Diego
23 area, for example. So in that sense, whenever a load is
24 high enough in San Diego to require in basin generation be
25 online, less-efficient generation in San Diego will be

1 operating in lieu of more-efficient less-polluting
2 generation outside the San Diego area. So one could say
3 that this kind of non-economic dispatch due to
4 transmission constraints into San Diego is likely to occur
5 thousands of hours a year.

6 There might be other cases where a transmission
7 line outage, which one would expect to happen perhaps one
8 or two days a year or one or two days every five years,
9 would preclude the dispatch of a less-efficient plant --
10 excuse me, a more-efficient plant.

11 So some of these -- these non-economic dispatch
12 situations that you describe are just virtually constant
13 because of the way we've built out the transmission
14 system. And in other instances it only happens when
15 something goes wrong.

16 MR. ROSTOV: Okay. So does it affect the GHG
17 emissions' profile? Would it create a positive or
18 negative, or can you tell?

19 MR. VIDAVER: Do these constraints change the GHG
20 profile of the system?

21 MR. ROSTOV: Yes.

22 MR. VIDAVER: Yes, by definition. All
23 constraints change something. They make it more GHG
24 emitting, they make it more expensive, they do something,
25 because that's what makes it a constraint.

1 MR. ROSTOV: So this would be like -- so this
2 paragraph really talks a worst-case scenario?

3 MR. VIDAVER: I think this paragraph just talks
4 about the realities of the way the system operates, both
5 the way it has been built up, for example, the San Diego
6 transmission constraints, or the way it occasionally
7 breaks down. It's not really the worst-case scenario,
8 it's just a fact of life.

9 MR. ROSTOV: Would it affect your net reduction
10 conclusion?

11 MR. VIDAVER: The system is always dispatched
12 subject to constraints in a way that minimizes cost and
13 the GHG emissions. So I think the answer to your question
14 is no, but I'm trying to interpret your question. Would
15 these kind of constraints ever result in something like
16 the CECP creating circumstances under which there were
17 higher emissions; and the answer is no.

18 MR. ROSTOV: Okay. So, Mr. Kramer, I just want
19 to do a time check. I have about an hour left; is that
20 true? Not to bore everybody to death.

21 HEARING OFFICER KRAMER: You mean of the full
22 150?

23 MR. ROSTOV: Yes. I mean, I think I've gone for
24 about an hour, and I was hoping to be done in two, to tell
25 you the truth.

1 HEARING OFFICER KRAMER: I only have you at about
2 an hour and 15 minutes so far.

3 MR. ROSTOV: Thank you.

4 HEARING OFFICER KRAMER: When you're at a point
5 where you're changing topic area, that would be a good
6 time to break for dinner, I think. And we have a couple
7 people that want to try to get away to go visit the
8 Planning Commission and then come back and be with us.

9 MR. ROSTOV: Actually, I was about ready to. I
10 just have about three or four more questions on this topic
11 area, and then I can change to the MRW report.

12 So as far as I understand this economic dispatch
13 theory, it's essentially an economic theory; is that
14 correct?

15 MR. VIDAVER: Yes.

16 MR. ROSTOV: Okay. So in the last 15 years --

17 MR. VIDAVER: I was just -- it's essentially just
18 an economic theory. Do you mean that in some kind of
19 pejorative sense, like gravity or evolution. I don't want
20 to offend anybody here.

21 MR. ROSTOV: No, I didn't, but I appreciate the
22 levity. I'm sorry I haven't provided as much.

23 MR. VIDAVER: I've got numerous years of graduate
24 school, and, of all people, I recognize the limitations of
25 economic theory. Yes, it's an economic theory.

1 MR. ROSTOV: Good. Well, that leads to my next
2 questions, actually.

3 So in the last 15 years, has the California
4 energy market had any market failures?

5 That's a yes or no question.

6 MR. VIDAVER: Oh, yeah.

7 MR. ROSTOV: In other words, the economic theory
8 did not work?

9 MR. VIDAVER: No, pardon me, I didn't mean, no,
10 the economic theory did not work. The regulatory
11 framework or policy framework that was erected did not
12 anticipate how individual economic agents would react to
13 the circumstances in which they found themselves.

14 For example, during -- in 1998 to 2000, the
15 Public Utilities Commission incited the divestiture of
16 fossil plants by the utilities and then required the
17 investor-run utilities to bid all their -- to offer all
18 their power into realtime markets and then buy it back.
19 Now, what they didn't realize was that -- and then charged
20 a fixed retail price to customers.

21 What they didn't realize was that if the
22 wholesale -- the price of wholesale energy went up, the
23 utilities would go bankrupt. What they didn't realize is
24 that the delays in designing this infrastructure resulted
25 in utilities and merchant generators not building any new

1 capacity from 1995 until 2000, and that they were,
2 therefore, creating the shortage conditions which would
3 allow for market manipulation and lead to the very high
4 prices that were doomed to bankrupt the utilities.

5 So it isn't so much an economic theory failed,
6 it's that the people who implemented policy failed to take
7 economic theory into adequate account.

8 MR. ROSTOV: Right. Well, essentially what's
9 going on here is the construct of a regulatory structure
10 involving renewables, natural gas plants, GHG emissions,
11 but with an over -- with the economic theory based on that
12 economic dispatch.

13 And you're asking us to say that over the next 30
14 years the economic dispatch theory will work correctly.
15 So what faith do you have that this is going to work for
16 the next 30 years where you'll be having the net
17 reduction?

18 MR. VIDAVER: Well, simple and transparent
19 markets for -- for goods tend -- as long as the supply of
20 goods, which in this case is somewhat controlled by
21 regulators, tend to work pretty well. I mean, the biggest
22 threat to wholesale energy markets working well is not
23 having enough capacity online to create the conditions
24 necessary for competition.

25 If we, for example, were not to license any new

1 power plants for the next ten years, odds are we would be
2 in a circumstance where individual agents could manipulate
3 the market and destroy my homespun theory.

4 MR. ROSTOV: But if we didn't license a bunch
5 more that put out -- that had a lot more GHGs --

6 MR. RATLIFF: Excuse me. I think Mr. McClary --

7 MR. McCLARY: Yeah, I'd like to augment just a
8 little bit there.

9 Much as many of us might enjoy debating what
10 happened in a market failure, I actually would expand the
11 notion that economic dispatch is just an economic theory.
12 I actually would put that a different way, because, in
13 fact, economic dispatch of electric generation has gone on
14 for decades and decades and is not really a function of a
15 particular market framework or regulatory framework.

16 Utilities did this within their own systems for
17 many, many years, and it's now done by and large under the
18 aegis of the CAL ISO as operators bid their prices in.
19 But it does happen.

20 MR. ROSTOV: I'm just going to ask three more
21 questions.

22 But one, to that point, over the lifetime of
23 utility history that you were just describing, there
24 wasn't the constraint of greenhouse gases; is that
25 correct?

1 Yes or no question.

2 MR. McCLARY: There was not a greenhouse gas
3 constraint, no.

4 MR. ROSTOV: During the energy crisis, which is
5 the crisis where -- which I think we agree where the
6 economic theory didn't work, were all available resources
7 used and did emissions of criteria pollutants and
8 greenhouse gases go up dramatically?

9 MR. RATLIFF: Could I just interject that Mr. --
10 the witness that you're asking the question to, I believe,
11 did not say that the economic theory didn't work. His
12 answer was different from that. I just want --

13 MR. ROSTOV: Okay.

14 MR. RATLIFF: I mean --

15 MR. ROSTOV: It's all right. I'll rephrase.

16 During the energy crisis all available
17 resources -- were all available resources used? Did air
18 emissions go up dramatically and did greenhouse gas
19 emissions go up dramatically?

20 MR. VIDAVER: During the energy crisis, resources
21 that would not normally be used at specified levels were
22 used at higher than anticipated levels; yes, greenhouse
23 gas emissions went up, yes.

24 MR. ROSTOV: Okay. And then, Mr. Kramer, just to
25 do a little housekeeping, I have a witness that I wanted

1 to redirect one or two questions to, but I think
2 Mr. Ratliff might have had some questions for him, or --

3 HEARING OFFICER KRAMER: And you're trying to be
4 able to excuse him? Is that your --

5 MR. ROSTOV: I think so. I don't know what his
6 timing is, actually.

7 MR. COX: My timing is pretty tight. I need to
8 actually leave within about half an hour. I have a plane
9 to catch. So I'd appreciate it.

10 HEARING OFFICER KRAMER: Does anybody else have
11 questions for him?

12 Mr. Ratliff, do you?

13 MR. RATLIFF: No.

14 MS. SIEKMANN: I do.

15 MR. ROSTOV: Mr. Ratliff, I thought you were
16 going to ask your staff some questions about --

17 MR. RATLIFF: I want to redirect my staff at some
18 point, but you're still asking him questions; so do you
19 want me to wait until I've got a full page?

20 MR. ROSTOV: I guess I was hoping you could just
21 redirect on the LNG issue, which is the topic that applies
22 to him, and then I can do my redirect.

23 MR. RATLIFF: Oh, go ahead. I'm -- I don't --

24 MR. ROSTOV: Or you didn't really have LNG
25 questions?

1 MR. RATLIFF: No, I don't feel the need to do
2 that.

3 MR. ROSTOV: Okay. So thank you for your
4 indulgence for waiting today.

5 REDIRECT EXAMINATION

6 MR. ROSTOV: The lifecycle reports that you put
7 in the record today, they made it -- did the lifecycle
8 reports that you put in the record make a comparison
9 between domestic gas and imported LNG when they were
10 determining the increase in greenhouse gas emissions?

11 MR. COX: Yes, they did. In particular, the
12 actual comparison studies was the one by Bill Powers and
13 Carnegie Mellon. I don't think Heede really compared, but
14 he did analyze the, you know, the chain from Australia to
15 Cabrillo. I don't believe there was an actual comparison
16 there.

17 MR. ROSTOV: So they actually compared pipe gas
18 versus ship gas, and then that's how they got their
19 conclusion.

20 MR. COX: That's right.

21 MR. ROSTOV: Why should the LNG be analyzed for
22 this project?

23 MR. COX: Well, because, as we discussed earlier,
24 it's highly likely that the natural gas that the project
25 uses in the future, that a substantial portion of it will

1 come by way of the Costa Azul LNG terminal in Mexico.

2 MR. ROSTOV: in addition, the information to do
3 the analysis is all available; is that correct?

4 MR. COX: Yes, it is.

5 MR. ROSTOV: That's -- I'm done with my redirect.
6 I do have more direct -- I mean cross-examination, but if
7 you want to take dinner, that would be great.

8 MR. RATLIFF: I would like -- I can't resist just
9 a couple of questions of Mr. Cox.

10 HEARING OFFICER KRAMER: Sure.

11 CROSS-EXAMINATION

12 MR. RATLIFF: Mr. Cox, if the consumption of
13 liquefied natural gas is going to lead to increased
14 greenhouse gases, if we assume that to be true, wouldn't
15 it be better to use less of it rather than more of it?

16 MR. COX: It would be best to use none of it.
17 But it's better to use less, I suppose, if it's going to
18 be imported into the state. Right. I mean, the important
19 thing is that what is used is counted, that the emissions
20 burned are counted. That's the important thing.

21 MR. RATLIFF: And when you say "counted," you
22 mean --

23 MR. COX: I mean accounted for in the assessment
24 of greenhouse gas emissions.

25 MR. RATLIFF: Okay. If you burn natural gas,

1 including liquefied natural gas, in a more-efficient
2 facility as opposed to a less-efficient facility, isn't
3 that better from a greenhouse gas standpoint?

4 MR. COX: In terms of the actual numbers on a
5 facility that is -- I mean, yeah, certainly if it's burned
6 more efficiently, that's an improvement. But I think it
7 also needs to be taken into account the size of the
8 facility and is that facility actually -- is that facility
9 actually driving increased imports of LNG.

10 There's another sort of question. If we actually
11 increase the capacity of natural gas dependence in the
12 service territory, does that just mean we will import more
13 LNG because we have a greater number of more-efficient
14 plants; but, you know, the overall --

15 MR. RATLIFF: Wouldn't it follow, though, you'd
16 have higher imports if you had less-efficient
17 infrastructure using that natural gas?

18 MR. COX: Sure.

19 MR. RATLIFF: Okay. Thank you.

20 COMMISSIONER BOYD: I'm just -- I'm forced to
21 comment here just because I've been studying natural gas
22 for at least ten years now, and the comment I made earlier
23 today I think still holds true. I struggle with this idea
24 of needing to do cradle to grave of imported methane,
25 i.e., LNG, vis-a-vis doing the same for the gas that

1 everybody calls natural gas that we receive from the
2 continent. I mean, we're awash in natural gas, people
3 allege now, because of the new discoveries of shale gas
4 and the new technology -- well, not new discoveries of
5 shale gas, they've known it's been there forever -- new
6 technologies to get it. But I question, you know, when
7 they do in-depth analyses of how they get that gas,
8 whether some of it will stand up to the same kinds of
9 analyses.

10 So I struggle with their just being a
11 black-and-white comparison between imported methane and
12 land-based methane; and I just leave you with that, it's
13 not -- it may be a question, or you may see it as a
14 question, it's just an observation from studying natural
15 gas far too long I think.

16 MR. COX: And I agree with you. I think these
17 studies that were done were done before the -- you know,
18 this increased development of shale and coal bed methane,
19 and, you know, they were looking at the -- I think they
20 call them "conventional plays" is the term. And I agree
21 that I think a lifecycle of, you know, the different types
22 of natural gas production would be useful.

23 HEARING OFFICER KRAMER: Okay. Thank you. And
24 have a good flight.

25 We'll break for dinner in a moment. I'm trying

1 to get an idea of how much longer we have this evening.

2 On greenhouse gases, Mr. Rostov, can you estimate
3 how much longer you're going to need?

4 MR. ROSTOV: I'll try to shorten it some.

5 HEARING OFFICER KRAMER: And that would be more
6 questions of staff?

7 MR. ROSTOV: Mostly of staff, yes.

8 HEARING OFFICER KRAMER: Because they're about
9 the only ones left.

10 MR. ROSTOV: Right. They're the only ones I
11 really planned on asking.

12 HEARING OFFICER KRAMER: Okay. Well, I hope you
13 can make that quicker, because we also, at least in
14 theory, have four hours of alternatives; and, you know, if
15 we're going to take an hour for dinner, we're going to
16 be -- well, way beyond 10:00 when we finish this evening.
17 So think about that, parties, because we really are trying
18 to get today's topics done.

19 And we'll break for dinner and try to be back
20 here at quarter to -- let's make it --

21 MR. MCKINSEY: Can I ask one question?

22 HEARING OFFICER KRAMER: Sure.

23 MR. MCKINSEY: I just want to understand.

24 I noticed that staff has almost if not
25 essentially the same panel for alternatives as they did

1 for greenhouse gases, and also I have an hour.

2 Is a lot of the material already done, counted in
3 alternatives as well, or do you have a full hour of
4 testimony on alternatives?

5 MR. RATLIFF: No, we don't. I think our
6 testimony -- our direct testimony in alternatives in terms
7 of the time it will take is quite short. And when we
8 estimated the alternatives' time, I think we assumed that
9 it would be done all apart from the greenhouse gas
10 discussion and Mr. Hunt's discussion. So I think we've in
11 part done alternatives already, in part, and we're -- I
12 mean, this is kind of a cross-over subject; I guess that's
13 what I'm really saying.

14 And so when we're done with this panel, I think,
15 then we will have the alternatives, the locational
16 alternatives, which is, I think, the other major topic for
17 alternatives, and that's a separate group of people.

18 HEARING OFFICER KRAMER: All right. We'll meet
19 to button up the technology subpart, but we did certainly
20 cover quite a bit of that already, but I'm certainly not
21 going to say we're done with that, because that would be
22 unfair to Dr. Roe who I think was one of the people who
23 sort of held back with some of his efficiency testimony as
24 we requested.

25 MR. MCKINSEY: Can I -- I've also -- I don't know

1 if -- we don't necessarily need an hour for dinner, but
2 some people may. I just -- I didn't know if you're
3 planning on doing an hour, but I'm certainly -- we'd be
4 certainly fine with just 30 minutes.

5 MR. RATLIFF: Staff would agree to 15 minutes.

6 MR. MCKINSEY: We are bringing cookies in after
7 dinner. I'll add that.

8 HEARING OFFICER KRAMER: Okay. Well, then let's
9 be back at 6:30.

10 (Dinner recess.)

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1 EVENING SESSION

2 HEARING OFFICER KRAMER: Okay. We'll go back on
3 the record.

4 And, Mr. Rostov, you were going to continue your
5 cross-examination.

6 CROSS-EXAMINATION

7 MR. ROSTOV: Thank you, Mr. Kramer.

8 Can everybody hear me? Am I speaking into the
9 microphone well enough?

10 Okay. I want to start with Mr. McClary.

11 The report, which is Exhibit 212, is really a
12 first time to look at how natural gas-fired power plants
13 fit into the electric system and how they affect GHG
14 emissions; is that correct?

15 MR. McCLARY: I'm not sure it would be the first
16 one, but it was the beginning to develop a framework for
17 the Energy Commission on this issue, yes.

18 MR. ROSTOV: That was the intent of your report.
19 Okay.

20 On page 2, it's the last sentence above where it
21 says the policy framework. And I'll just quote it to you.
22 It says, "More detailed quantitative modeling is required
23 to provide more definitive assessments of how much, what
24 type, and where in California new natural gas-fired
25 generation may be needed in the future."

1 Has this been done?

2 MR. McCLARY: I think it's underway today, those
3 kind of detailed -- more detailed analyses, and will
4 continue to be performed over time.

5 MR. ROSTOV: So some of the studies would be like
6 the CAL ISO study that Mr. McIntosh talked about where he
7 said we don't know how much generation is needed for the
8 intended rate of 33 percent, we don't know the locations?

9 MR. McCLARY: I'm not sure I heard him say that
10 exactly. What I think he said is that the ISO is
11 undertaking the study or a more-detailed study of the
12 33-percent RPS scenario.

13 MR. ROSTOV: Right. And then I specifically
14 asked him did he know how much generation is necessary.
15 He said no. But I could ask you.

16 Do you know how much generation is necessary for
17 integrated renewables?

18 MR. McCLARY: More than we have.

19 MR. ROSTOV: Do you know the locations for those
20 type of plants?

21 MR. McCLARY: Not specifically.

22 MR. ROSTOV: Okay. Could you put up slide 29,
23 please, page 29?

24 This is a page out of your report as well,
25 Mr. McClary. And I've highlighted a couple of phrases

1 essentially. If you want to read --

2 MR. McCLARY: You said that was page 29?

3 MR. ROSTOV: 29. And it should be on the screen.

4 MR. McCLARY: Yeah, that screen's a little bit
5 far away, and this one has some bizarre backward look to
6 it.

7 MR. ROSTOV: I'm sorry.

8 Do you have a copy of the report in front of you?

9 MR. McCLARY: I do, yes.

10 MR. ROSTOV: Okay. Would you mind reading up
11 through the highlighted -- the first highlight, which
12 starts with the word "Strategically." So read the first
13 three or four sentences.

14 MR. McCLARY: Read up through there?

15 MR. ROSTOV: Yes.

16 MR. McCLARY: "As the fraction of renewable
17 resources increase with the implementation of AB 32 and
18 the state's RPS policies, gas plants and, in particular,
19 combined cycles and combustion turbines may fill a new
20 role backstopping intermittent renewable resources. While
21 wind and solar can provide a certain degree of dependable
22 power when averaged across many locations, because of
23 their intermittent nature, they will require other
24 generation resources to be online and available to cover
25 their inevitable dips in output. Strategically located

1 combined cycles can fill that role."

2 MR. ROSTOV: Okay. This might be a question for
3 the staff, and then you can fill in afterwards.

4 What analysis has been done to determine that the
5 CECP is a strategically-located plant that will fulfill
6 that role?

7 MR. McCLARY: I think the analysis --

8 MR. ROSTOV: Oh, I was going to ask staff
9 first --

10 MR. McCLARY: Are you directing that question
11 elsewhere?

12 MR. ROSTOV: I was asking the staff first.

13 So is there a document?

14 But you're happy to answer after they provide
15 their answer.

16 MR. RATLIFF: Maybe we should start with
17 Mr. Vidaver. I'm not sure who the best --

18 MR. VIDAVER: I think the one bit of analysis
19 that's certainly been performed, the ISO local capacity
20 technical studies that are performed annually that
21 indicate the need for dependable capacity in the San Diego
22 area to meet local reliability needs. It's the first
23 example that I can think of.

24 MR. ROSTOV: Yeah, but is this -- did that talk
25 about having a plan at this facility?

1 MR. VIDAVER: Specifically at the location at
2 which it's proposed?

3 MR. ROSTOV: Uh-huh, right.

4 MR. VIDAVER: No, there -- they did not.

5 MR. ROSTOV: Mr. McClary, do you want to -- it
6 sounded like you had part of an answer too, if you wanted
7 to.

8 MR. McCLARY: Well, I would just note that the
9 staff's analysis and the ISO both noted in their 2007
10 analysis of the 20-percent RPS that there would be a need
11 for increased dispatchable resources of this type without
12 identifying specific locations. But as Mr. Vidaver has
13 said, locations are part of their ongoing assessment of
14 where locally-constrained areas and what the needs are in
15 those areas. And I think the staff's analysis is
16 consistent with the ISO's identification of San Diego as
17 such an area.

18 MR. ROSTOV: The last sentence of that paragraph
19 says, "Determining if a new specific resource provides
20 this service, would require extensive probabilistic power
21 flow and economic dispatch modeling."

22 Has that been done for this facility?

23 MR. VIDAVER: For a facility at the --

24 MR. ROSTOV: Yeah, for this project.

25 MR. VIDAVER: No, it has not.

1 MR. ROSTOV: Okay. Staff essentially used
2 Chapter 7 of your report, which is Exhibit 12, to
3 determine -- Exhibit 212, sorry -- to analyze whether the
4 CECP will fit in the role for gas-fired power plants and
5 the high-renewables, low-emission electric system. And
6 from what I understand, that that chapter identified
7 qualitative assessments of natural gas plants for this
8 integration.

9 And essentially what staff did, and correct me if
10 I'm wrong -- I'm directing this to staff -- you looked at
11 Chapter 12, which is a qualitative assessment of the types
12 of plants that would be necessary, you made Table 12, and
13 said this fits the general category of plant that would
14 fit this operational characteristics.

15 Is that true?

16 MR. LAYTON: Yes, that is true. The Carlsbad
17 plant does meet some aspects of what the dispatchable
18 generation would be expected to be in a higher-renewable,
19 low-gHG environment.

20 MR. ROSTOV: But that was just -- this is for
21 Mr. McClary.

22 That chapter was really for a qualitative
23 analysis, and it wasn't a quantitative analysis for a
24 specific plant; is that true?

25 MR. McCLARY: No, I actually wouldn't describe it

1 as just a qualitative analysis. It actually is laying out
2 a framework and description of roles that such plants can
3 play in meeting system needs. It doesn't purport to be a
4 numerical analysis, but I think to -- I think in laying
5 out a framework and identifying roles is exactly what
6 staff has used it for, and appropriately so.

7 MR. ROSTOV: Could you put up a slide, page 99.

8 So I've highlighted another section. But I'll
9 just read it to you.

10 And I think this is just what you said, the first
11 sentence. "This chapter identified key attributes for
12 services that gas-fired power plants are expected to
13 provide to the state's integrated grid in the future."

14 Is that true? That was essentially what you just
15 said?

16 MR. McCLARY: That's correct. I'd stand by that.

17 MR. ROSTOV: And then, this is a quoted section,
18 "Although these attributes are identifiable, the limited
19 scope of this report does not permit the detailed modeling
20 that will might allow the conclusions to be drawn as to
21 very specific plant needs and locations."

22 Do you stand by that still?

23 MR. McCLARY: Yes. And, in fact, I think the
24 sentence speaks for itself. Perhaps it's not clear to you
25 what we meant here, but in this report we did not perform

1 that kind of detailed modeling that we refer to, and, in
2 fact, one of the issues that's been raised here and
3 elsewhere is whether it is -- to what extent it is
4 possible using more-detailed analysis to pinpoint on a
5 statewide basis or even a WECC-wide basis and western grid
6 basis, how much you should put where.

7 I think one thing that gets lost in that is the
8 Energy Commission deals with plants as they're presented
9 to them. None of our agencies get to plunk down plants
10 wherever they think they would most likely go, and so
11 doing that statewide kind of analysis on a detailed level
12 is a difficult challenge in how you use it.

13 MR. ROSTOV: Exactly. So the Energy Commission
14 is presented with a plant in a specific location, and they
15 don't have a choice about it, and then they need to do the
16 analysis.

17 And what you were just saying -- so to ensure
18 that there would be integration of renewables, you would
19 have to do this specific analysis; is that correct?

20 MR. McCLARY: No. And, in fact, this report, as
21 it states here, is laying out a framework, and the limited
22 scope of this report did not anticipate, nor did we
23 attempt to do a specific statewide kind of analysis.

24 MR. ROSTOV: Or an individual plant.

25 MR. McCLARY: This report was never intended to

1 do an individual plant analysis, this is a framework
2 report that guides -- that starts to explore how best to
3 guide assessment by the Energy Commission.

4 MR. ROSTOV: But so did the staff use Chapter 7
5 as a road map for saying as more than just a policy
6 document that this document was intended to -- in other
7 words, did the staff -- sorry. Let me just take a breath.

8 Did the staff use the qualitative general
9 characteristics of the policies embodied in this
10 preliminary report and then use that to try to do a
11 site-specific analysis?

12 MR. WALTERS: We used the general characteristics
13 identified in that report to identify the policy
14 compliance aspects of the facility, but not necessarily
15 the quantitative aspects of the facility, which are based
16 on many of the other factors, including a number of the
17 data tables provided in our section, including what's in
18 the current resource mix and how the facility will
19 integrate into that.

20 MR. ROSTOV: Okay. Then I'm trying to understand
21 how you show that this specific plant is critical to
22 renewable integration if you didn't do the specific
23 analysis.

24 MR. WALTERS: I don't think we ever said it's
25 critical. Our conclusion is that there is a net GHG

1 emission reduction. That is our conclusion, and that is
2 the finding which we are presenting to the commissioners
3 for them to make a determination of the plant and its GHG
4 and climate change.

5 MR. ROSTOV: Well, you've also made another
6 finding I think, and correct me if I'm wrong, maybe you
7 haven't; you're also trying to say that this would
8 integrate -- this plant would integrate renewables, and,
9 therefore, that also caused a net reduction, part of a net
10 reduction comes from the integration renewables; is that
11 true?

12 MR. WALTERS: We're saying that it meets many
13 roles in which -- such as meeting integrating renewables,
14 that they're positive and part of the policy goals of the
15 CEC; and that is part of our findings, but is not
16 necessarily how we derive the fact we had a negative GHG
17 impact and, therefore, a beneficial impact. There's a
18 LORS finding as well as the impact finding in terms of a
19 net emission reduction.

20 MR. ROSTOV: So the net reduction -- I just want
21 to make sure I got this straight.

22 So the net reduction is purely based on the
23 efficiency conclusion. Is that --

24 MR. WALTERS: Primarily.

25 MR. ROSTOV: "Primarily" is not yes or no. Is

1 there other factors, or is it just efficiency conclusion?

2 MR. VIDAVER: Well, to the extent that Carlsbad
3 allows a larger number of renewable resources to be
4 integrated into the system and that renewable
5 non-carboniferous resources do not emit GHGs and will
6 displace to a great extent resources that do, generation
7 that does, I think one could logically conclude that the
8 project in its capacity as a resource -- pardon the pun --
9 that will allow for the integration of more renewables,
10 reduces greenhouse gases through that mechanism as well.

11 MR. RUBENSTEIN: If I could, if the floor's open
12 to other witnesses to answer the same question if they
13 believe they have something to add?

14 HEARING OFFICER KRAMER: Yes. That's one of the
15 ground rules.

16 MR. RUBENSTEIN: I think that another part of the
17 answer, perhaps an elaboration on that answer, is that,
18 you know, this is a gas-fired power plant. It has a
19 certain efficiency. As long as there are other gas-fired
20 plants on the grid that have lower efficiencies, then this
21 plant will displace those to some certain extent, and that
22 by itself is sufficient to ensure a net reduction this
23 greenhouse gas emissions.

24 To the extent that facilitating the introduction
25 of renewable resources provides additional displacement,

1 that's an additional benefit, and I don't think either we
2 or the staff have quantified that, because directionally,
3 once we've concluded that there's a net reduction, the
4 quantification of reduction is not necessary.

5 So in terms of, you know, just how efficient this
6 plant is, no matter where it is within that range, as long
7 as there remain less-efficient plants on the grid, and
8 there are plenty of those in California as evidenced by
9 the staff and certainly enough in San Diego County, this
10 project will result in a net reduction in greenhouse gas
11 emissions.

12 MR. ROSTOV: But you can't identify the number of
13 reductions from specific plants; is that correct?

14 MR. RUBENSTEIN: The staff in the FSA has a table
15 showing the less-efficient plants in the San Diego area
16 that are most likely to be displaced; but no, I can't tell
17 you on which day which of those plants will be displaced
18 and what the reduction will be, but there are more than
19 enough megawatts of capacity that operate gas-fired
20 capacity in the San Diego area that a less-efficient plant
21 operated periodically and any time this plant operates it
22 will displace one or more of those.

23 MR. ROSTOV: I just want to ask a question about
24 the FSA. And I'm just trying to get clear on your
25 position.

1 So this is page 4.1-100. It says, while the CECP
2 would emit GHG emissions --

3 MR. LAYTON: Again, page 100 is the references
4 for the air quality section that preceded it.

5 MR. ROSTOV: It's in the introduction and summary
6 of conclusions, actually. Paragraph two.

7 MS. JACKSON: It may be that we have the wrong
8 version.

9 MR. LAYTON: You're using the old version. We
10 provided an updated version that corrected table -- well,
11 table formatting areas.

12 MR. RATLIFF: Well, unfortunately, I have the old
13 version too.

14 MR. ROSTOV: Well, I appreciate you telling us
15 that, because I was feeling very embarrassed, because
16 usually I'm very good with numbers. So citing it to the
17 wrong page number is a -- just driving me a little crazy.

18 Anyway, let me start with that sentence again.

19 It says, "While the CECP would emit GHG
20 emissions, the relative efficiency of CECP and the system
21 buildout of renewable resource of California would result
22 in a net cumulative reduction of energy and GHG emissions
23 from new and existing fossil resources."

24 So, correct me if I'm wrong, it sounds like
25 you're saying that the net benefit is really just interest

1 the relative efficiency, and then you're also trying to
2 claim some -- you're not trying to claim a reduction, but
3 you're saying, well, maybe it will help with the
4 renewables as well? Is that --

5 MR. RATLIFF: I object on the grounds that this
6 has been asked and answered.

7 MR. ROSTOV: Has it?

8 HEARING OFFICER KRAMER: I need you to restate
9 the question.

10 MR. ROSTOV: Okay. Let me try again.

11 The sentence has an "and" in it, so I'm just
12 trying to determine the meaning of the sentence. While
13 CECP would emit GHG emissions, you admit the more than
14 800,000 emissions of GHGs, you argue that the relative
15 efficiency of the CECP and the system buildout of
16 renewable resource in California would result in a net
17 cumulative reduction of energy and GHG emissions from new
18 and existing fossil sources.

19 So the question is, is it both, is it one, or is
20 it a -- or is there a hierarchy there?

21 MR. VIDAVER: I'll hazard a guess and say both,
22 as I understand your question.

23 HEARING OFFICER KRAMER: Just to be official,
24 that is a -- like digging deeper into the question, so we
25 will overrule the objection.

1 MR. ROSTOV: Thank you, Mr. Kramer.

2 Is building out -- the system buildout of the
3 renewable resources in California part of the project?

4 MR. LAYTON: It's part of the state goals, which
5 as we said previously, this analysis attempts to bring in
6 AB 32, the 20- and 33-percent renewable portfolio
7 standards. So we do assume that there would be more
8 renewables online. Those renewables will need some
9 firming or some backup. This project may provide that.

10 This project will also be more efficient than some of
11 the local units. And some of the energy from the
12 renewables will be displacing some of the other things
13 we've identified. But, you know, like the once-through
14 cooled and the contracts, the expiring contracts with
15 out-of-state coal, but this project will also be providing
16 some of that energy capacity as well.

17 And ask me in about ten minutes, I'll say the
18 same thing again. You keep coming back to the same
19 question, I guess.

20 MR. ROSTOV: Hopefully I'm doing slight
21 variations on the theme.

22 MR. LAYTON: I can't perceive it, but perhaps --

23 HEARING OFFICER KRAMER: And even at that, at
24 some point it will, and I think we're getting close,
25 appear you are simply plowing the same ground --

1 MR. ROSTOV: Actually, I have new questions.

2 HEARING OFFICER KRAMER: Okay.

3 MR. ROSTOV: I mean, I was moving on.

4 HEARING OFFICER KRAMER: Okay.

5 MR. ROSTOV: He said that, but I was going to
6 move on anyway despite his statement.

7 MR. LAYTON: I'm sorry, I jumped the gun then.

8 MR. ROSTOV: Okay. And I also recognize we want
9 to hurry, and I did shorten the rest of this.

10 Okay. The CPUC's renewable portfolio's standard
11 quarterly report from October of 2008, which we have in as
12 Exhibit 624, you know, supports essentially what the GHG
13 analysis conclusion is, that all new generation must be
14 renewable. And I'm just going to quote it. This is the
15 CPUC report.

16 It says, "If the state is required to generate
17 33 percent of its energy from renewable resources by 2020,
18 then all new procurement of new energy resources between
19 now and 2020 must be entirely renewable energy, some new
20 fossil fuel for peaking capacity and to replace aging
21 fossil fuel plants critical to renewable integration."

22 The question is, how do you show that this
23 specific plant is critical to renewable integration?

24 MR. RATLIFF: Is that a question for Mr. McClary?

25 MR. ROSTOV: No, that was a question for the

1 staff who wrote the staff assessment.

2 MR. LAYTON: Did we say it was critical in the
3 FSA?

4 I'm not sure I understand your question.

5 MR. ROSTOV: I think that if you didn't say that,
6 then I think the answer would be we did not show that, but
7 I don't want to put words in your mouth.

8 MR. LAYTON: Thank you.

9 MR. ROSTOV: Is that your answer? I mean,
10 please --

11 MR. LAYTON: I appreciate you not putting words
12 in my mouth.

13 I'm not sure what your question is yet.

14 MR. ROSTOV: I'll repeat my question.

15 Did you show that this specific plant is critical
16 to renewable integration?

17 MR. LAYTON: I believe the FSA analysis does not
18 say that.

19 MR. ROSTOV: Okay. In your responses, in several
20 places actually, you say that -- the staff says that this
21 project will be consistent with AB 32 and other state
22 policies or goals for GHG emission reductions from the
23 electricity sector.

24 I was wondering how it's consistent with AB 32,
25 since the AB 32 regulations don't go into place until

1 2012.

2 MR. RATLIFF: Could you clarify that, Mr. Rostov?
3 AB 32, which AB 32 regulations are you talking about?

4 MR. ROSTOV: Well, the regulations that --

5 MR. RATLIFF: I mean, AB 32 is in effect now.

6 MR. ROSTOV: It is in effect now.

7 MR. RATLIFF: Yes, and some regulations have been
8 adopted. And there's a scoping order. So I don't know
9 what you're referring to.

10 MR. ROSTOV: Well, I was referring to --
11 actually, I was referring to the cap and trade system as
12 part of the regulations that are going to be in place in
13 2012, but that's a good -- actually, a good objection.

14 Let me rephrase the question.

15 Please explain why you think it's consistent with
16 AB 32.

17 And this is to the staff.

18 MR. RATLIFF: You said "to the staff." Does that
19 mean Mr. McClary isn't supposed to answer it?

20 I'm not quite -- when you say it's to the staff,
21 we consider Mr. McClary to be one of the staff witnesses,
22 and I'm just asking, is there anything improper for
23 Mr. McClary to answer this question?

24 MR. ROSTOV: That's fine. I mean --

25 HEARING OFFICER KRAMER: He's going to get to

1 answer it whether he goes first or not among the staff, I
2 guess is the only distinction. And I don't see that as a
3 distinction of distinction, if you know what I mean.

4 MR. McCLARY: Let me -- I'll just say that I
5 think as we know developing policy and siting power plants
6 as rules and regulations are evolving is just a reality
7 that this Commission or any other regulatory agency faces.
8 At this point AB 32 is in place, the goals are clear; the
9 ARB has conducted extensive public proceedings on this.
10 We do have a scoping order, we do have a general outline
11 of where state policy is going on this. And if the
12 suggestion was that we would all sit on our hands waiting
13 for the regulations, I would think that that would be
14 inconsistent with the intent of AB 32, which is to proceed
15 expeditiously with greenhouse gas emission reduction
16 strategies.

17 MR. ROSTOV: Actually, I think page 99 is still
18 up on the board.

19 The second paragraph. Mr. McClary, you say, "In
20 the long run as ARB translates its broad stroking plan
21 into specific regulations, the market and regulatory
22 environment may clarify the question of where, how much,
23 and for what purpose new gas-fired generation should be
24 built in the state. But in the short term, when
25 AB 32-related regulations have yet to be implemented, the

1 Energy Commission must consider this question and the
2 appropriate answer to it."

3 So once again, is this consistent with AB 32?

4 MR. McCLARY: I would say, yes, it is.

5 MR. ROSTOV: Despite that what you just wrote --
6 what you wrote?

7 MR. McCLARY: What I wrote is that there are
8 regulations still to be implemented, but the intent in the
9 general outline of greenhouse gas emissions reduction
10 policy is quite clear, and in fact, the intent here is
11 going to exactly the point I had just made, that in the
12 short term, the Energy Commission has to make decisions
13 while those regulations are still being -- some of them
14 are still being finalized and implemented.

15 I think that that's -- you know, perhaps it's
16 presumptuous, but to me that looks as if it's a
17 requirement put before this Commission to act in that kind
18 of environment, and that they are doing so. And that's
19 actually quite -- the staff's analysis is quite consistent
20 with the intent of what you've quoted and with the rest of
21 the context in which this section of the report is put,
22 which is that the analysis needs to be done, it needs to
23 be done appropriately, and it needs to be done even in the
24 short term while we're waiting for further regulations to
25 be enacted and adopted.

1 MR. ROSTOV: And when you say "appropriately," do
2 you include quantitative analysis, which is -- several
3 places in your report you seem to suggest for a specific
4 plant you would need the quantitative analysis.

5 MR. McCLARY: I think that the use of the term
6 "quantitative" that we've had here has been a bit
7 misleading or perhaps not helpful in clarifying the nature
8 of the analysis here.

9 I would, for example, say that in this case where
10 the analysis certainly shows that it's negative, that it's
11 a benefit, that that's as quantitative as is required,
12 and, in fact, that's a good result, that you could try to
13 be more specific about how positive a benefit this
14 provides, but there doesn't appear to be a need to because
15 it is -- it is a positive benefit and it is reducing
16 greenhouse gas emissions. That's as quantitative as
17 appropriate or required in order to reach a finding in
18 this case.

19 MR. ROSTOV: Well, I mean, you could do an
20 analysis that says, well, you know we have this one plant
21 that's going to put out, let's say, 800,000 tons of GHGs,
22 and then we have all these other renewable resources that
23 could maybe replace it and not have as much GHG analysis.
24 So that would still be quantitative. That would be a
25 quantitative analysis as well too; is that correct?

1 Sorry, I lost my train of thought. I'm sorry,
2 could you just repeat your last statement? We don't have
3 a court reporter, and the court reporter would do that in
4 general.

5 MR. LAYTON: Well, and I won't be able to quote
6 it verbatim, but the intent here of my answer was to say
7 that what we were attempting to do in the report and what
8 we say here is that in the short term as the Energy
9 Commission makes -- is faced with decisions on specific
10 power plants, it should do the level of analysis
11 appropriate to reach a decision consistent with the
12 greenhouse gas emission reduction benefits associated with
13 gas-fired plants of certain kinds.

14 In this case, the staff has done that, they have
15 looked at it, they have found that it's negative
16 emissions, it is a decrease in emissions. That seems to
17 me to be an appropriate level of quantification to allow a
18 decision to be made.

19 MR. ROSTOV: I mean, you also think there could
20 be an analysis as an alternative potentially that assessed
21 the system in terms of renewable resources, rooftop solar
22 PV, and other distributed generation technologies.

23 MR. McCLARY: Well, I think that the problem that
24 always faces the Commission in this kind of thing is they
25 have to look at the alternative in the project that's

1 presented to them. They don't have a decision to make to
2 say do we build this or do we build a 2000 megawatt wind
3 project in Wyoming or do we build 500 megawatts in the
4 desert? They have this project to consider and they have
5 this analysis, which I think is an appropriate one to take
6 into consideration in making that decision.

7 MR. ROSTOV: Okay. There's one more slide I'd
8 like to put up. It's the OPT slide -- OTC, sorry.

9 MR. LAYTON: Is there a page number?

10 MR. ROSTOV: There's a page number. It's A7,
11 and --

12 MR. McCLARY: It's in which document?

13 MR. ROSTOV: Sorry, let me -- it was a document
14 cited by Mr. Hunt, actually. It's Exhibit 635 and it's
15 page A7. And it's essentially a draft report talking
16 about -- and maybe Mr. Vidaver was on this committee, but
17 it's essentially a draft report talking about replacing
18 OTC facilities.

19 MR. RATLIFF: I'm sorry, could you tell us what
20 the name of the report is and which agency did it?

21 MR. ROSTOV: Yeah. It's the implementation of
22 once-through cooling mitigation through energy
23 infrastructure planning and procurement, and it's a draft
24 joint agency staff paper with CEC, CAL ISO, and PUC.

25 MR. RATLIFF: And what's the exhibit number? I'm

1 sorry.

2 MR. ROSTOV: 635.

3 MR. RATLIFF: Thank you.

4 MR. ROSTOV: Page 8 -- I mean A, as in "apple,"
5 7.

6 So it's essentially talking about, you know,
7 replacing once-through cooling systems and the strategy
8 for doing it.

9 Could you, Mr. McClary, read the highlighted
10 section?

11 MR. McCLARY: The answer is no.

12 MR. ROSTOV: I'll bring you my copy.

13 MR. McCLARY: No, actually, I think I can make it
14 out from here.

15 MR. ROSTOV: I could bring you my copy.

16 HEARING OFFICER KRAMER: Kimberly, is there any
17 chance you could reverse the projector, because at this
18 point --

19 MR. McCLARY: So just to be clear, you're asking
20 me to read only the highlighted section --

21 MR. ROSTOV: Right.

22 MR. McCLARY: -- and not, for example, the full
23 sentence that -- well includes that section.

24 MR. ROSTOV: Right.

25 MR. McCLARY: It's quite a lengthy sentence.

1 MR. ROSTOV: It would fail to address, yes.
2 Because part of it is talking about -- but there's a more
3 general point.

4 MR. McCLARY: That's part of the context that I
5 was noting here, is that it appears to be referring to
6 South Coast Air Quality Management District, which leads
7 me to think that this may be actually be addressing
8 specifically a situation in the South Coast Air Quality
9 Management District. I'm not sure. You know, I am not
10 claiming to have reviewed and digested the entire report.

11 With that qualification, I can go ahead and read
12 the highlighted section.

13 MR. ROSTOV: Okay.

14 MR. RATLIFF: Well, may I just offer that
15 Mr. McClary's right, this paragraph, at least this portion
16 of the paragraph is addressing the peculiarities of the
17 South Coast Air Quality Management District and the lack
18 of offset credits in that basin because of the priority
19 reserve litigation.

20 MR. ROSTOV: I don't think that's true.

21 MR. RATLIFF: With that in mind, I don't mind if
22 you ask a question, I'm --

23 MR. ROSTOV: Well, one, we don't think that's
24 true. We think it touches on the South Coast, but it
25 makes a more general point, and the more general point is

1 the highlighted point.

2 MR. RATLIFF: Well, could we just read the whole
3 sentence then so at least we get the whole sentence,
4 because then the context will be, I think, more clear.

5 MR. ROSTOV: Let me set it up. This is
6 essentially a report talking about, you know, replacing
7 once-through cooling facilities.

8 MR. McCLARY: All right. Well, I'm going to go
9 ahead and read the full sentence so that I can follow the
10 thread.

11 "However, this approach would likely have
12 considerable problems in SCAQMD in finding needed air
13 credits, and it would fail to address the policy
14 preferences established by the energy agencies through the
15 energy action plan process or the need to reduce reliance
16 upon fossil power plants to achieve AB 32 GHG emission
17 reduction goals. Assessing the feasibility of major
18 changes to the system through increased reliance upon
19 renewable resources upon rooftop solar PV and other
20 distributed generation technologies, enhanced energy
21 efficient program impacts reducing load, et cetera, is
22 necessarily more complex and time consuming than simply
23 endorsing a repowering strategy with little thought to the
24 very long-term consequences."

25 And that's the section you've asked me to read.

1 MR. ROSTOV: Right. So do you agree that it's
2 simpler to just replace a once-through cooling system with
3 another as opposed to doing this type of analysis?

4 MR. McCLARY: I actually can't render an opinion
5 on this report in this one fragment out of a full report
6 and what it's talking about. I would not do that.

7 MR. ROSTOV: Mr. Vidaver.

8 MR. VIDAVER: I think if you look at the title
9 page, I'm not listed among the authors of this report.

10 I will hazard that there -- it is a response to
11 individuals who believe that the replacement of OTC
12 facilities is best and most easily accomplished simply by
13 repowering all of them. And I would agree that blithely
14 repowering, megawatt for megawatt, every OTC facility in
15 South Coast is probably not consistent with the state's
16 energy policy goals.

17 MR. McCLARY: And may I add something here as the
18 reader of this section, because I'm now sort of getting a
19 chance to digest it a bit, and frankly, I think the
20 conclusion is that assessing the feasibility through this
21 complex process and all the different factors is
22 necessarily more complex and time consuming than simply
23 endorsing a repowering strategy, that's probably correct.
24 I don't think it, this report, in fact, draws a conclusion
25 as to whether it's preferable, just that it's more complex

1 and time consuming.

2 MR. ROSTOV: Right. Thank you. And that's what
3 I was looking for.

4 Since it's more complex -- and I understand in
5 this situation this isn't a repower, per se, but since
6 we're trying to achieve the goals of the energy action
7 plan and AB 32, based on this sentence, it didn't make
8 sense that the Energy Commission in this licensing
9 proceeding should do this type of analysis, even though
10 it's more complicated.

11 MR. RATLIFF: I'm sorry, could you clarify which
12 type of analysis when you say "this type of analysis"?

13 MR. ROSTOV: The highlighted assessing the
14 feasibility of major changes to the system through -- I
15 could read -- do you want me to read the whole --

16 HEARING OFFICER KRAMER: You mean the paragraph
17 that he just read?

18 MR. ROSTOV: Yeah.

19 MR. RATLIFF: I thought -- I mean, I'm sorry, but
20 do you mean -- you don't mean -- I guess you're concluding
21 that our analysis did not do that, but -- I'm sorry.

22 HEARING OFFICER KRAMER: The question seems to
23 refer to a methodology, and I'm not seeing one mentioned
24 or implied in the paragraph that was just read, in the
25 excerpt. So --

1 MR. ROSTOV: I'll rephrase.

2 How about this: This paragraph says for
3 something to be consistent with the energy action plan
4 process and the goals of AB 32, which the FSA claimed they
5 are, you would need -- it would be good to assess the
6 feasibility of the major changes to the system, including,
7 you know, everything that's listed there.

8 Has the staff done this assessment in this case?

9 HEARING OFFICER KRAMER: Mr. Ratliff, you
10 shouldn't go first to answer the question.

11 MR. RATLIFF: Well, I'm resisting. I'm just
12 trying to figure out who should.

13 Mr. Vidaver, could you answer the question?

14 MR. VIDAVER: I would agree that staff has not
15 conducted the detailed scenario analysis implied by this
16 paragraph, yes.

17 MR. ROSTOV: All right.

18 MR. RATLIFF: Detailed scenario --

19 MR. VIDAVER: Here you're talking about retiring
20 or replacing something like, if you include LADWP,
21 something like 9,000 megawatts at eight different
22 locations in a local reliability area, which is fed by six
23 or seven major transmission interconnections and contains
24 a substantial diverse number of renewable resources.

25 Has that type of analysis been done for this

1 case? No.

2 MR. ROSTOV: Do you think that type of analysis
3 should be developed for a case like this in the
4 alternatives or in the greenhouse gas sections?

5 MR. VIDAVER: I'm sorry, I don't think I'm
6 qualified to answer that.

7 MR. RATLIFF: You're asking -- the question was
8 do you think that kind of analysis should be done in this
9 kind of case? Was that the question?

10 MR. ROSTOV: Yes. Is it -- I would rather change
11 the word "should" to "necessary."

12 MR. RATLIFF: Well --

13 MR. ROSTOV: And I'm still asking one of the
14 staff members, not you, Mr. Ratliff.

15 MR. RATLIFF: I'm not sure which staff person
16 should answer; but, Mr. Vidaver, should that kind of
17 analysis be done for this siting case?

18 MR. VIDAVER: Well, I -- I -- I don't even know
19 how to spell CEQA, so I have no idea what the legal
20 requirements are. But the -- it's -- we're about to
21 retire or remove from the utility portfolios,
22 conservatively, 14,000 megawatts of capacity. To my mind,
23 the fast-ramping dispatchable resources that provide a lot
24 of inertia to the system and, therefore, may take grid
25 stability, the need to add some threshold number of

1 megawatts is obvious to me. I just -- based on my
2 understanding of the system. And to -- to assume that
3 the -- the San Diego local reliability area is a less than
4 desirable place to do that begs credulity, for want of a
5 better word. I'm sorry, just covering my own opinion.

6 There are a couple of other observations I feel
7 compelled to make.

8 I'm not sure that -- there is no one power plant
9 that is yet to be built that can be -- claim to be
10 critical. The lights are on. The lights stay on. We
11 have a reliable system. So as long as you're going to
12 keep the existing system at Encina operating, there's no
13 need for a power plant within one mile of it.

14 The ability to incorporate renewables in large
15 quantities into the system can be -- is a function that
16 can be performed by power plants located virtually
17 anywhere in California. The ability to provide
18 dispatchable or dependable capacity in the San Diego local
19 reliability area, and thereby retiring the existing units
20 at Encina can be accomplished, as far as I know, by any
21 replacement capacity located anywhere in the San Diego
22 area.

23 So to say that the Carlsbad energy project is
24 critical is setting -- at the very least it's setting a
25 standard that's not possible to meet.

1 COMMISSIONER BOYD: He need to ask somebody on
2 staff to read me the title of this report again.

3 MR. RATLIFF: May I?

4 COMMISSIONER BOYD: Please.

5 MR. RATLIFF: I think this is Exhibit 635, if I'm
6 correct. 635. The name of the report is "Interagency
7 Implementation of OTC Mitigation through Energy
8 Infrastructure Planning and Procurement," dated 7/2009.
9 And it doesn't actually identify the agency that was
10 responsible for the report.

11 COMMISSIONER BOYD: Is there any indication that
12 it's a draft report, or you read it to me as is?

13 HEARING OFFICER KRAMER: It says "draft."

14 COMMISSIONER BOYD: I was particularly looking
15 for that word. It failed me.

16 MR. RATLIFF: Where does it say -- we're looking
17 on two different copies then.

18 HEARING OFFICER KRAMER: The vertical text.

19 DR. ROE: Does that document have an exhibit
20 number?

21 HEARING OFFICER KRAMER: 635.

22 COMMISSIONER BOYD: On the copy we have up here,
23 it says "draft."

24 MR. RATLIFF: Okay.

25 HEARING OFFICER KRAMER: And somebody must

1 have -- this one must be pulled off of the web.

2 There's this Commission author, Mr. Jaske,
3 somebody from the ISO, and somebody from the CPUC.

4 Mr. Rostov, you're down to ten minutes.

5 MR. ROSTOV: I was about ready to stop. I just
6 have like two or three questions on something totally
7 different.

8 But I guess to Mr. Vidaver's point, you know,
9 what I've been kind of startled with from the staff's
10 perspective is the CPUC says we really can't be building
11 these new fossil fuel power plants, and we still are, and
12 we are licensing this plant. So I just don't -- I don't
13 understand the disconnect.

14 In addition --

15 MR. RATLIFF: Is that question for Mr. Vidaver?

16 MR. ROSTOV: Yes.

17 MR. VIDAVER: I think -- I think you're
18 interpreting the codes that you extracted from the CPUC in
19 a rather unique way. The CPUC in saying that a majority
20 of the energy that a system is going to have to add over
21 the next few years on a net basis is renewable. That
22 doesn't mean that there is not a need for gas-fired or
23 dispatchable capacity, which is something that is
24 substantially different; it doesn't mean that there will
25 not be a need for energy to meet local reliability needs

1 in small amounts or selected amounts in selected local
2 reliability areas.

3 It -- at the time this -- or not this document,
4 but the document you quoted from the CPUC, I believe it
5 was the October 2008 quarterly report --

6 MR. ROSTOV: Correct.

7 MR. VIDAVER: -- which is now 16 months old. At
8 that time the CPUC was not aware of the fact that the
9 constraint on transforming to a low carbon system was
10 going to be needed to replace the inertia lost with the
11 retirement of the state's aging steam turbines. So you're
12 taking a dated bit of text out of context and then not
13 taking into account the fact that the needs of the system
14 in order to transition to a low-carbon future have been
15 more carefully examined and that there is a role for new
16 gas-fired units in the system.

17 COMMISSIONER BOYD: As much as I really enjoy
18 listening to Mr. Vidaver for all the eight years I've been
19 at the Commission, because it's sometimes like attending a
20 seminar, I learn a lot, I like you Mr. Rostov, but we're
21 going in circles here. I mean, this isn't probably
22 appropriate for me to be jumping in like this, but then if
23 this is a panel of judges, they tend to do things like
24 that.

25 I'm very familiar with this report, this document

1 you're referencing. You're broaching -- it was a highly
2 controversial, policy controversial report; it was read in
3 Sacramento two different ways. One, the way you're trying
4 to get it interpreted here tonight; the other way was,
5 quite frankly, a slam by the PUC on the fact that
6 33 percent was ever achievable. And the comment was, if
7 you're going to get there, every single power plant you're
8 ever going to be build has to be such and such plan. That
9 was debated hotly amongst the energy agencies, it was
10 debated in front of the legislature. In my opinion, the
11 PUC slunk away from that with their tail between their
12 legs. And as Mr. Vidaver says, 16 months have passed, and
13 a lot has changed.

14 So I wouldn't recommend relying really heavily on
15 that statement persistently, because if we did get the
16 authors of this draft report in here, and it is just a
17 draft, it's dealing with a huge problem that we policy
18 people of all the energy agencies are wrestling with at
19 this very moment and have been for a long, long time, you
20 get all kinds of different opinions.

21 So that's just my seminar on policy in
22 Sacramento, perhaps.

23 MR. ROSTOV: Thank you, Mr. Boyd. I don't want
24 to follow that up.

25 So I just want to change the subject to just do

1 two more questions on something a little off topic, and
2 then I'll be done. And I do appreciate the patience of
3 everybody. I know everybody's been sitting through three
4 days of hearings, but we, you know, want to spend on just
5 a few issues, and we also were patient, but I do
6 appreciate the patience.

7 And this goes back to Mr. Walters, when you were
8 talking about LNG. Essentially you were saying the use of
9 LNG is speculative.

10 One thing you said, all the projects are stalled,
11 but are you familiar with the one, I believe it's in
12 Jordan Cove, that's one in Oregon that was just approved
13 recently.

14 MR. WALTERS: No, I'm not aware of that. And my
15 most recent contact with other CEC personnel did not bring
16 that to light.

17 MR. ROSTOV: Okay. Well, I believe your more
18 general point is that the -- well, is your more general
19 point that the natural gas markets are changing, and right
20 now that natural gas, the natural gas market would not
21 allow for the importation of LNG?

22 MR. WALTERS: Well, I actually had more than one
23 point that drove home the entire argument which was the
24 point that there is considerably more natural gas
25 domestically available and a growing amount that would

1 economically probably preclude the use of very much LNG.
2 And it's speculative to figure out how much of that LNG
3 would ever reach up through the pipeline all the way up to
4 the Carlsbad facility from where it ties in.

5 And finally, the point is if LNG is coming in and
6 this facility is being used in lieu of other facilities
7 with higher GHG emissions, then not only do you get the
8 benefit of this facility being more efficient, you get the
9 benefit and the multiplication essentially of any
10 additional lifecycle GHG from LNG.

11 MR. ROSTOV: In terms of the market issue, the
12 natural gas markets have changed, and they could change in
13 the future. So if the natural gas prices change, we could
14 get the deliveries -- could we get the deliveries would be
15 the question.

16 MR. WALTERS: Well, I think that goes straight to
17 my answer that it's speculative.

18 MR. ROSTOV: When you do a CEQA analysis, at
19 least in the air situation -- I mean, I think
20 "speculative" is a legal conclusion. But when you do a
21 CEQA analysis in the air context or any other context, you
22 look at the worst-case scenario. So if it is reasonable,
23 probable that LNG can come to the CECP --

24 MR. RATLIFF: Pardon me, Mr. Rostov. Where does
25 CEQA require a worst-case scenario, and what is that?

1 MR. ROSTOV: It's my turn to ask questions.

2 MR. RATLIFF: Oh, I know, but you just are posing
3 this to my witness as a legal conclusion that he's about
4 to answer a question to, and I want to say where is that a
5 CEQA requirement and what does it mean.

6 MR. ROSTOV: I don't think I have to answer that.
7 I mean, are you objecting to my question?

8 MR. RATLIFF: Well, if I have to, yes, because
9 that's an incorrect preface to whatever question you're
10 about to make him answer.

11 MR. ROSTOV: So yesterday, for example, when
12 Mr. Rubenstein was talking -- I think it was
13 Mr. Rubenstein -- somebody was talking about their air
14 emissions analysis, and they were talking about when we do
15 the air emissions analysis we look at the worst-case
16 scenario. And that air case analysis is part of the CEQA
17 analysis.

18 HEARING OFFICER KRAMER: I think you could ask
19 your question about whether they performed a worst-case
20 analysis without resolving whether or not it's required.

21 MR. ROSTOV: Thank you, Mr. Kramer. That will
22 save a lot of time.

23 MR. RATLIFF: If you want me to quote the
24 U.S. Supreme Court, there is no worst case, because you
25 can always think of an additional variable that will make

1 it worse still.

2 MR. ROSTOV: So given the fact that there's a
3 pipeline that comes to Carlsbad, given the fact that you
4 can calculate, you know, the relative amount of gas in the
5 worst-case situation -- or in the optimal situation, if
6 you were Sempra, and that there's a methodology for
7 calculating the lifecycle emissions, did -- did staff do
8 that analysis?

9 MR. WALTERS: First, you're assuming that staff
10 has actually stipulated to the fact that there's a
11 methodology to do that analysis, and we have not.

12 MR. ROSTOV: That's my other question I guess.
13 You just reminded me.

14 In your response to -- it was just a staff
15 response, so I guess it was staff rebuttal, you said
16 there's a disagreement about whether or not GHG emissions
17 from LNG occur, but you didn't cite anything. So was that
18 just -- what was that? Was that just your opinion?

19 MR. WALTERS: No, it was a review of available
20 documentation. I mean, if you want, there is a 2008
21 report that was sponsored by Sempra by a couple of
22 companies that basically found that in 2006 there is no
23 net increase and by 2020 it's very minor.

24 MR. ROSTOV: Well, you didn't put that report in
25 the record, so I object to you talking about it.

1 And second of all --

2 MR. WALTERS: You asked me the question. I was
3 trying to answer it.

4 MR. ROSTOV: Okay. Well, I don't object to you
5 talking about it, but I'm just saying that report's not in
6 the record; and if my witness was still here he would say
7 that it was sponsored by Sempra and he would give you the
8 analysis.

9 MR. WALTERS: And I could say that the others
10 were sponsored by other agencies that were trying to get
11 to another conclusion.

12 MR. ROSTOV: Okay.

13 HEARING OFFICER KRAMER: Your 150 minutes are
14 quickly drawing to a close.

15 MR. ROSTOV: I'd like to end on a good note, so
16 let me think for a second.

17 COMMISSIONER BOYD: You can give him a --

18 HEARING OFFICER KRAMER: You want to assign your
19 time? I think we're creating a new sort of market here.

20 MR. ROSTOV: I guess --

21 HEARING OFFICER KRAMER: Credits;
22 cross-examination credits.

23 MR. ROSTOV: I'm just going to make reference to
24 this --

25 COMMISSIONER EGGERT: Can I suggest we follow the

1 loading order and invest in efficiency first though?

2 MR. ROSTOV: That probably would have not applied
3 to me, would it?

4 HEARING OFFICER KRAMER: Were you finished or --

5 MR. ROSTOV: Can I just note -- and maybe I'll
6 just ask Mr. Walters.

7 Are you familiar that the 2009 IEPR discusses the
8 Costa Azul plant and the potential use of LNG from it on
9 page 131, and the 2007 IEPR also discusses that LNG could
10 potential come from Costa Azul?

11 MR. WALTERS: I'll believe that that's the case.

12 MR. ROSTOV: Okay.

13 HEARING OFFICER KRAMER: I think he was asking if
14 you had read those reports.

15 MR. WALTERS: Not those specific parts.

16 MR. ROSTOV: Okay. I'm just going to -- thank
17 you once again for your indulgence. I appreciate it.

18 HEARING OFFICER KRAMER: Okay. Thank you.

19 Power of Vision.

20 DR. ROE: Thank you, Mr. Kramer.

21 My friend, Mr. Walters, I think you heard
22 Commissioner Boyd ask the question earlier in the day of
23 how the efficiency of the Siemens turbines when operating
24 in their quick-start-up mode, that is what, the HRSG and
25 the steam generator, how that efficiency compares with the

1 familiar stand alone gas turbines; and I think the
2 Commission mentioned LN1100, if I'm not mistaken, or some
3 such number.

4 HEARING OFFICER KRAMER: Was that me in fact?

5 DR. ROE: That question was asked --

6 COMMISSIONER BOYD: I asked -- the question -- I
7 did not ask the question that you're framing now. I did
8 ask a question, a very broad general question about three
9 categories. In fact, it might have even been yesterday, I
10 don't even remember anymore, of simple cycle, combined
11 cycle, and then this hybrid approach and their relative
12 efficiencies. But someone else, could have been
13 Mr. Kramer, got more specific.

14 DR. ROE: No, no, I accept your version. My
15 memory's not as good as yours, evidently.

16 COMMISSIONER BOYD: We did discuss our relative
17 ages, didn't we?

18 DR. ROE: No doubt.

19 And I think we heard Mr. McIntier say that the
20 Siemens turbines were much more efficient than the
21 simple-cycle turbines; is that correct? Do you recall
22 that?

23 COMMISSIONER BOYD: I'm not being cross-examined.

24 DR. ROE: I know. But I didn't want you to
25 correct me again, so I looked at you.

1 MR. WALTERS: Yes, I recall that.

2 DR. ROE: Have you been provided by the Applicant
3 or Siemens with any numbers as to the efficiency of those
4 units, of those hybrid units or whatever they're called,
5 combined-cycle units, when they're operating in that
6 quick-start-up mode?

7 MR. WALTERS: I think that there's an issue here
8 of categorizing how the plant operates. The quick start
9 up is ten minutes, and at that point, you know, it's
10 operating normally; but HRSG has never disconnected from
11 the system. It's not an OTSG system, it's not a
12 once-through-steam-generating system, it does not run in
13 simple cycle and then able to go into combined cycle. So
14 I think there's basically a technology disconnect in your
15 question.

16 DR. ROE: Well, let me rephrase the question.

17 During those ten minutes or fifteen or
18 twenty minutes when it's quickly starting, have you been
19 given any indication of the efficiency during that period
20 so that I or Commissioner Boyd could make the comparison
21 with the simple -- with other simple-cycle turbines?

22 MR. WALTERS: No.

23 DR. ROE: I asked that question because
24 Mr. McIntier's testimony was rather vague and not specific
25 on that issue.

1 Maybe I could direct that question to
2 Mr. Rubenstein who earlier mentioned that this gas turbine
3 has been operating as a simple-cycle turbine in many other
4 applications. So the information should be available on
5 what the efficiency is during that period and how it might
6 compare to other existing simple-cycle turbines.

7 Mr. Rubenstein?

8 MR. RUBENSTEIN: At the risk of being repetitive,
9 let me say it again. I did not actually say that.

10 What I did say is that this turbine has been
11 operating in many other applications throughout the
12 country. There are only a very few in which it's
13 operating as a simple-cycle unit. But there are many
14 combined-cycle versions of this turbine.

15 To answer your specific question, I did not find
16 in my materials any information about the efficiency of
17 this unit at this site when operating in simple cycle;
18 however, I found some general literature from Siemens
19 indicating the simple cycle efficiency of this unit I
20 think is in the range of 34 to 36, which would be
21 comparable to or a little better than most simple-cycle
22 units, but --

23 DR. ROE: Thank you.

24 MR. WALTERS: -- I'm not --

25 DR. ROE: That's my answer. Because I came to

1 the same conclusion, that the characteristics of the
2 Siemens unit when operating in single cycle is not really
3 different than the characteristics of other single-cycle
4 turbines, and their efficiencies really are -- should be
5 comparable, unless there's something unique about the
6 Siemens turbines that I don't know.

7 MR. WALTERS: If I could finish my answer,
8 please.

9 I just wanted to say, but don't hold me to those
10 numbers. Those are approximate in terms of the
11 simple-cycle efficiencies.

12 DR. ROE: All right.

13 Mr. Vidaver. Hello. And I'd appreciate if you
14 could talk into the microphone because I didn't understand
15 or comprehend much of what you said earlier.

16 MR. VIDAVER: Nobody did, with the exception of
17 Commissioner Boyd, perhaps.

18 DR. ROE: In talking about reliability in local
19 load centers, you only talked about how power plants
20 provide that reliability. You did not mention that such
21 reliability could also come from additional transmission
22 lines; is that correct?

23 MR. VIDAVER: I believe I stated that reducing
24 local capacity requirements or meeting local requirements
25 in San Diego could be accomplished either by building

1 dependable capacity or by expanding the ability to import
2 energy into the San Diego area.

3 DR. ROE: Okay. I must have missed that in your
4 testimony. Good, I'm glad you said that because -- and
5 I'm not sure on this, and I hope to provide the exact
6 reference at a future time, but I vaguely recall, and I
7 think it was in the 2007 CEC IEPR, a statement to the
8 effect that the reliability in the San Diego load area
9 would be better served by direct north-south transmission
10 capability by the building of additional power plants.

11 MR. VIDAVER: I can't comment on whether or not
12 that statement was in there.

13 DR. ROE: Without the exact reference, I wouldn't
14 expect you to.

15 MR. VIDAVER: I'm obviously not responsible for
16 that statement, and I won't take any issue with it.

17 DR. ROE: Good. As I pointed out in earlier
18 testimony, one of the important arbiters of what
19 reliability is and what is needed is the local power
20 utility, San Diego Gas & Electric, and my understanding is
21 they are not considering entering into a purchase
22 agreement with any merchant energy supplier in the north
23 San Diego County region.

24 Would that be an indicator that such new energy
25 supply is not needed in the north San Diego County?

1 MR. VIDAVER: I -- I'm not qualified to answer
2 that. If San Diego has made that --

3 DR. ROE: So anybody else on the panel who feels
4 qualified to answer that?

5 MR. VIDAVER: If San Diego Gas & Electric has
6 said that it does not intend on entering into a power
7 purchase agreement with a generator in the northern part
8 of the county because it doesn't feel it's necessary, I
9 would assume -- I would conclude from that that San Diego
10 doesn't feel it's necessary.

11 DR. ROE: Thank you.

12 MR. McCLARY: I would just offer -- the only
13 comment that I could offer on that, I haven't seen such a
14 statement from SDG&E, and I would frankly be surprised if
15 they would make such a statement in advance of an RFO
16 or --

17 DR. ROE: Well, they haven't made --

18 MR. McCLARY: -- that specific a level.

19 DR. ROE: They haven't made a public statement,
20 but it's common knowledge on the street that they are
21 considering only a need from a power provider in the south
22 coastal region, probably in the Chula Vista area.

23 Now, I know there's been a request made to the
24 Commission that they investigate, they have the -- I
25 cannot ask them that question nor can NRG ask them that

1 question nor can you, but I believe the Commission has the
2 ability to ask for a confidential response from SDG&E as
3 to why they did not select anybody from the north county
4 to provide that power. And I -- I sincerely hope that
5 they will take the opportunity to do so.

6 HEARING OFFICER KRAMER: Well, we're certainly
7 not going to accept rumors as evidence.

8 DR. ROE: Excuse me?

9 HEARING OFFICER KRAMER: We're not going to
10 accept rumor, or the on the street -- word on the street
11 as evidence. We did, at the request of the city, I spoke
12 to an attorney who represents SDG&E in regulatory matters.
13 He wrote back to me -- I'm not -- because I haven't read
14 it in a week or two, I'm not going to try to summarize
15 what he said, but I -- I then circulated that among all
16 the parties via e-mail last week, I believe. And
17 Mr. McKinsey happens to have more than one copy of it.
18 And this may be a good time to discuss whether or not the
19 parties want to --

20 MR. MCKINSEY: I do. I was going to propose it
21 as an exhibit at some point, and this is the probably the
22 perfect time to propose it as an exhibit.

23 HEARING OFFICER KRAMER: Okay.

24 MR. MCKINSEY: Though I'm not clear if we have a
25 motion or a question from Dr. Roe. I mean he was asking,

1 I think, or suggesting that you make a demand or that
2 there is a requirement. I think we'd object to their
3 being a requirement or a need for SDG&E to testify
4 regarding anything if that's going on.

5 But I would also move that we put in as an
6 exhibit the response from Taylor Miller, which -- and I
7 have a copy of this e-mail -- from Taylor Miller at SDG&E
8 to Paul Kramer. It's dated January 26th at about
9 12:43 p.m. The re line is "City Request for RFO Bidder
10 Information." And this was -- I -- we all received this,
11 the hearing officer sent it out on the proof of service
12 list. It had two attachments to it, which I didn't make
13 tons of copies of because I didn't think it was worth
14 killing all those trees, but we all received this via
15 e-mail anyway.

16 And I have five copies of the Taylor Miller --
17 four copies of the Taylor Miller e-mail. And I suggest at
18 that we put this in as Exhibit 196 for the Applicant.

19 HEARING OFFICER KRAMER: That would be the
20 number.

21 Is there any objection to receiving that? You
22 need to look at it first?

23 The attachments were a PUC decision, and then
24 appendices to the decision. I think they add up to about
25 150 pages.

1 MR. MCKINSEY: One attachment is a -- states,
2 "Mail July 5th, 2006, Decision 0606066. June 29th, 2006.
3 Order instituting rulemaking to implement Senate Bill 1488
4 relating to confidentiality of information."

5 And the other document is an appendix,
6 Appendix 1, IOU matrix for CPUC matter R05-06-040.

7 HEARING OFFICER KRAMER: So is it your intention
8 that the admitted document would include the attachments?

9 MR. MCKINSEY: Yes, I don't have a problem with
10 that. Again, I didn't make ten copies of all this, but
11 this was e-mailed to everybody, and we could probably do
12 that if we wanted to.

13 HEARING OFFICER KRAMER: So is there any
14 objection to accepting that exhibit into the record?

15 MR. THOMPSON: No.

16 HEARING OFFICER KRAMER: Seeing none, then it
17 will be received.

18 (Thereupon, Exhibit 196 was marked for
19 identification and received into evidence.)

20 HEARING OFFICER KRAMER: If you want to look at
21 that, the attachments, and then hand them to me before we
22 leave tonight, I'll --

23 DR. ROE: I don't have to pursue it further. I
24 raised the issue, and however the Commission decides to
25 handle it.

1 HEARING OFFICER KRAMER: Okay. Thank you. That
2 concludes your questioning?

3 DR. ROE: No, I'd like to go on to my next
4 question --

5 HEARING OFFICER KRAMER: Okay.

6 DR. ROE: For Mr. Vidaver again.

7 In your earlier testimony you mentioned a need
8 for quick-start-up capabilities to meet the sudden loss of
9 renewable or other power sources. Did you mention that?

10 MR. VIDAVER: No, I believe that was probably
11 Mr. McIntosh who said that.

12 DR. ROE: Well, all right.

13 Mr. Vidaver, are you familiar with the California
14 ISO 2011, 2013 local capacity analysis --

15 MR. VIDAVER: Yes

16 DR. ROE: -- report that came out in December,
17 2008?

18 MR. VIDAVER: Yes, I am.

19 DR. ROE: Good. I asked that question of
20 Mr. McIntier, and he said no, so I'm glad you can answer.

21 MR. VIDAVER: He's a planner, yes. Or not a
22 planner, he's operations.

23 DR. ROE: The reason I raise that question is it
24 seems that CAL ISO has a very specific way of categorizing
25 when quick start up is needed. And they talk about LCR

1 need based on a category B and a category C.

2 Are you familiar with those categories?

3 MR. VIDAVER: I'm familiar with categories B and
4 C insofar as they go, but I'm not qualified to discuss
5 them in any --

6 DR. ROE: That's fine. It's a very short
7 definition which I can read to you; it will help refresh
8 your memory. It says, "Category B describes the system
9 performance that is expected immediately following the
10 loss of a single transmission element, such as a
11 transmission circuit, a generator, or a transformer."

12 Plain and simple what the reference is, for
13 example, San Onofre shut down or if one of the major tie
14 lines was shut down.

15 And in that same report, which I don't think was
16 referenced at all in the FSA, am I correct in that?

17 MR. VIDAVER: I actually think it was. I may be
18 confusing it with a different --

19 DR. ROE: I looked for it in the FSA; I didn't
20 find it. Did I miss it someplace?

21 MR. LAYTON: I don't think it's in there.

22 DR. ROE: All right. In that -- and admittedly,
23 that report deals with the short-term prospects, not the
24 long-term prospects. But in that report, they indicate
25 that under a category B situation, San Diego is not

1 deficient in capabilities to handle such a -- such an
2 outage.

3 MR. VIDAVER: I'm not sure that's correct.

4 DR. ROE: Well, that's what it says right here.
5 I'm looking at it. And it says, San Diego area, 2013,
6 local capacity needs LCRD based on category B efficiency
7 zero.

8 MR. VIDAVER: I beg your pardon. You are
9 correct. I keep thinking of local capacity requirements
10 in San Diego absent the Encina -- existing Encina
11 facility.

12 DR. ROE: As long as the existing Encina is still
13 operating, there is a surplus of some 500 megawatts.

14 MR. VIDAVER: Yes, you're correct.

15 DR. ROE: Now, if I recall correctly, and you can
16 correct me on this if I'm not correct, this report was
17 based on certain assumptions. And one of those
18 assumptions were the availability of Sunrise Powerlink to
19 bring in approximately 3,000, I believe, megawatts of
20 solar power on that link.

21 MR. VIDAVER: I don't think Sunrise is deemed to
22 be available to bring in solar power, it's just deemed to
23 be available to bring in an incremental amount of any kind
24 of power.

25 DR. ROE: Well, I think it's specifically stated

1 that it included the capability of bringing in solar
2 power.

3 MR. VIDAVER: I -- I -- I would strongly doubt
4 that the local capacity technical analysis devoted the
5 transmission capacity of the Sunrise Powerlink to a
6 specific technology.

7 DR. ROE: So you think -- you would contend that
8 their analysis did not take into consideration potential
9 loss of solar power.

10 MR. VIDAVER: No, I -- I'm just stating that the
11 ISO did not in that report dedicate the transmission
12 capacity associated with the Sunrise Powerlink to solar
13 power. I would imagine that they would describe the
14 Powerlink in terms of its ability to bring in certain -- a
15 thousand megawatts, for example, of power regardless of
16 its source.

17 You did ask a question of Mr. McIntosh this
18 afternoon that he was unable to answer, and that was
19 whether or not the study to which you're referring took
20 into account renewable energy.

21 DR. ROE: Right.

22 MR. VIDAVER: And I'm happy to give you an answer
23 to that question if that's what you're looking for.

24 DR. ROE: Yes.

25 MR. VIDAVER: The local capacity requirements

1 estimated by the ISO are based in part on the demand
2 forecast published by the California Energy Commission.
3 That demand forecast takes into account rooftop
4 photovoltaics procured under the Coast Solar Initiative.

5 So any customer site rooftop DG that is
6 forecasted to be forthcoming from the California Solar
7 Initiative would be included in the demand forecast and,
8 therefore, considered by the ISO in this document.

9 The utility side renewables that were considered
10 are, as you said, it's a short-term document. The utility
11 side resources are limited to the handful of utility scale
12 renewable resources in the San Diego area. They're
13 existing qualifying facilities, landfill gas facilities,
14 et cetera, and there are a couple of facilities that are
15 in the ISO interconnection queue that I believe San Diego
16 Gas & Electric has entered into renewable portfolio
17 standard contracts with that some of which are online,
18 others of which are not.

19 For example, the Bull Moose Biomass Facility,
20 27 megawatts with which San Diego Gas & Electric has
21 contracted, is assumed to be online in this study; it
22 isn't, and arguably won't be by 2014. So the document
23 does consider all customer site rooftop photovoltaics, and
24 it does consider existing and reasonably foreseeable
25 utility scale renewables.

1 DR. ROE: Yes, my recollection was that it
2 included some existing wind and solar in Mexico and which
3 the Powerlink will be able to access, and that also
4 included the 3,000 megawatts that they've contracted for
5 in the desert, which, as you say it has not been built
6 yet, but these don't forget our forecast, and that is what
7 they forecast would foreseeably be available, and could
8 indeed even, I think contemplated in this, the complete
9 retirement of the South Bay power plant.

10 MR. VIDAVER: Yes, it was assumed to be gone.

11 DR. ROE: So it seems that even considering that
12 the -- a category B crisis could arise if the Sunrise
13 Powerlink was shut down and those renewable and other
14 sources that it was supplying were no longer available,
15 that under that circumstance, a category B circumstance,
16 the San Diego area would still be zero deficient.

17 MR. VIDAVER: First thing I'm going to do is
18 define the San Diego area.

19 I'm speaking of the smaller area that does not
20 include Imperial Valley. So there -- once the Sunrise
21 Powerlink comes online, there are two distinct local
22 capacity requirements for San Diego. There's one for a
23 smaller area that doesn't include Imperial Valley, and
24 there are -- doesn't include the solar plants to which
25 you're referring.

1 Then there is a second large area which includes
2 Imperial Valley, which has a large local capacity
3 requirement and a large set of existing and forecasted
4 resources in that area. I'm not intimately familiar with
5 the assumptions made about the large area because I've
6 been focusing on the smaller area which establishes
7 requirements that create the need for the existing Encina
8 power plant.

9 So if you're referring to the broader San Diego
10 plus Imperial Valley area, I will have to take you at your
11 word for what that considers, because I'm only intimately
12 familiar with the more local capacity requirement
13 associated with the smaller area.

14 DR. ROE: Thank you. I think you're correct that
15 the CAL ISO report does not tear out different segments of
16 their region, it just lists it as San Diego.

17 MR. VIDAVER: I believe it actually considers two
18 regions; that there is a smaller San Diego area for which
19 there is one local capacity requirement, and then a large
20 area including Imperial Valley, which has a second
21 requirement.

22 HEARING OFFICER KRAMER: Dr. Roe, you've exceeded
23 your original five minutes, and you got Mr. Simpson's ten
24 minutes, and you're beyond both of those. So you need to
25 wrap it up.

1 DR. ROE: Well, if you'll indulge me with the
2 question that I was not able to post during the power
3 plant deficiency, I would appreciate that.

4 HEARING OFFICER KRAMER: That's of Mr. Sharman?
5 Go ahead.

6 DR. ROE: Oh, thank you.

7 And, I think, Mr. Walters, you might be happy to
8 respond to this.

9 Were you here yesterday when I asked the question
10 of staff expert Mr. Khoshmashrab --

11 MR. WALTERS: No, I wasn't.

12 DR. ROE: Huh?

13 MR. WALTERS: No, I was not.

14 DR. ROE: You were not. Well, let me tell you
15 the question I asked him, because I'd like to ask you the
16 same question.

17 I asked him whether when he was considering the
18 relative merits of different power units that could be
19 used at the CECP, did he consult with you about the
20 impacts that the differences in efficiency of the various
21 units considered, what that impact might have on
22 greenhouse gas emissions.

23 MR. WALTERS: Well, the answer would be no,
24 because the original author of the section was
25 Mr. Steve Baker, if I remember correctly, who is no longer

1 with the Commission.

2 DR. ROE: So you had no consultation with him
3 about the possible effects of efficiency on greenhouse
4 gases?

5 MR. WALTERS: Efficiency issues on greenhouse gas
6 are already outlined in our report in terms of greenhouse
7 gas performance and the variability between the different
8 units including, you know, the proposed unit.

9 DR. ROE: Well, let me tell you why I asked that
10 question.

11 Mr. Rubenstein was very correct in indicating in
12 his testimony earlier in the day that there are two kinds
13 of efficiency to consider. That is the difference
14 between, let's say, the Siemens unit and the GE unit, and
15 the difference in that is anywhere between seven and
16 eight percent.

17 And you indicated that another metric would be
18 the increase or decrease in deficiency, which is about
19 double that, or 7 to 16 percent. If you do some very,
20 very simple arithmetic -- and I want to do this not in the
21 context of this power plant because you've already pointed
22 out that we're interested in the GHG emissions from the
23 point of view of their global impact -- if you do some
24 simple calculations and say you're going to put in a unit
25 that is 14 percent less efficient than a more-efficient

1 unit, and you look at the total greenhouse gases of the
2 less-efficient unit as indicated in the FSA, the
3 greenhouse gases are listed at about 845,000 metric tons
4 per year. And if you multiply that by the -- I'll take
5 the lower number, the 14 percent difference in efficiency,
6 that translates to a very significant 118,000 metric tons
7 per year that will be -- will have a global impact just
8 from the fact that a lower-efficiency unit was selected.
9 And that same sort of analysis would apply to the NOx
10 emissions, which are currently listed as being capped
11 at approximately 72 metric tons per year, and if you
12 multiply that 14 percent by 72, you're putting an
13 additional 10 metric tons per year of NOx into the
14 atmosphere. I'll not touch upon the question because it
15 never seems to have come up elsewhere, that it would also
16 mean that you would have to use -- I'd make a guess --
17 80,000 metric tons of natural gas more a year by using the
18 less-efficient power plant.

19 Doesn't that concern you that the Applicant has
20 posed, as a matter of fact, the FSA has shrugged its
21 shoulders at the difference between the efficiency of
22 currently available known technology, which is 14 percent
23 more efficient than the proposed Siemens unit?

24 MR. WALTERS: Well, my analysis is based on the
25 Applicant's proposal. I did not perform an alternative

1 analysis for technology or location, so, you know, my
2 analysis just identified whether or not it was, you know,
3 a net benefit from this particular project.

4 DR. ROE: Well, don't you think somebody in the
5 staff should have been concerned about this impact on the
6 environment that comes from using less-efficient units
7 than others that are currently available?

8 HEARING OFFICER KRAMER: I think you have to
9 conduct that argument with the staff by way of your
10 briefs. You have to conduct that argument with the staff
11 by way of your briefs. They've told you they didn't do
12 it, so --

13 MR. RATLIFF: Well, wait, we did do it.

14 DR. ROE: Thank you.

15 Oh, you did.

16 MR. RATLIFF: Well, Mr. Khoshmashrab told us
17 yesterday that he did look at the efficiency, and he
18 talked about the advantages of turbine that was more
19 flexible. I thought that was gone over in the
20 efficiency --

21 DR. ROE: Oh, that was my interpretation of
22 his -- when I inquired about that, he said that he did not
23 look at the overall greenhouse gas emissions as a result
24 of the changes.

25 MR. RATLIFF: Well, he -- you're right --

1 HEARING OFFICER KRAMER: Well, let's go to the
2 transcript for the instant replay there.

3 DR. ROE: I appreciate it.

4 HEARING OFFICER KRAMER: I understood Mr. --
5 Dr. Roe to be talking about the alternatives analysis.

6 DR. ROE: Thank you. We can do it in our brief.

7 HEARING OFFICER KRAMER: Okay. Thank you.

8 DR. ROE: I want to go to sleep too, I'm an old
9 man.

10 HEARING OFFICER KRAMER: Does that end your
11 question?

12 MR. LAYTON: Mr. Kramer, the CAL ISO study is
13 actually referred to in the FSA on greenhouse gases, and
14 the discussion that uses it is on pages 111 and 112 of the
15 greenhouse gas section.

16 HEARING OFFICER KRAMER: Does it also happen to
17 be one of the exhibits, do you know?

18 MR. LAYTON: It's one of the references; I do not
19 know if it's one of the exhibits. I apologize.

20 MR. ROSTOV: I believe it is. I think we
21 requested it to be.

22 HEARING OFFICER KRAMER: Okay. Let me see who
23 that leaves. Terramar.

24 CROSS-EXAMINATION

25 MS. SIEKMANN: To the Applicant, does the

1 continuation of increasing greenhouse gases pose a
2 significant threat to climate stability?

3 MR. RUBENSTEIN: As I indicated in my testimony,
4 I believe that CECP will result in a net increase in
5 greenhouse gases.

6 MS. SIEKMANN: Oh, I'm just talking about the
7 continuation of increasing GHGs in general.

8 MR. McKINSEY: I think that's beyond the scope of
9 his testimony.

10 MS. SIEKMANN: Okay. Has the Applicant
11 guaranteed the reduction of emissions through the
12 permitting of that plant?

13 MR. McKINSEY: Your greenhouse gas emissions is
14 what you mean?

15 MS. SIEKMANN: Yes. I'm sorry, yes, greenhouse
16 gas emissions.

17 MR. McKINSEY: No.

18 MS. SIEKMANN: Would the Applicant allow the
19 Commission to know whether or not there is a contract with
20 SDG&E?

21 MR. McKINSEY: Again, I think that's beyond the
22 scope of the testimony.

23 Are you asking me that question?

24 MS. SIEKMANN: Yes, since you're talking to me.

25 MR. McKINSEY: (Inaudible.)

1 MS. SIEKMANN: I know that, but you're talking to
2 me, so I'm just asking --

3 MR. MCKINSEY: NRG has indicated very clearly
4 that they cannot discuss the status of the contract
5 negotiations, even any status they have at any RFO
6 proceeding for two reasons; one, it's company policy, and
7 two, because they have confidentiality obligations in
8 those proceedings.

9 MS. SIEKMANN: Not even just with the
10 Commissioners?

11 MR. MCKINSEY: No.

12 MS. SIEKMANN: Thank you.

13 THE REPORTER: I'm sorry, the mic is not on at
14 all. All I hear is air. I can't understand what he's
15 saying.

16 MS. SIEKMANN: Do you want to repeat yourself?

17 THE REPORTER: They can, I can't.

18 HEARING OFFICER KRAMER: We're off the record.

19 (Discussion off the record.)

20 MR. MCKINSEY: NRG cannot and will not comment on
21 the status of any RFO participation or contract
22 negotiation both as a matter of policy and because of
23 confidential obligations they have in those processes.

24 MS. SIEKMANN: And did you hear my response?

25 THE REPORTER: Yes, ma'am.

1 MS. SIEKMANN: Okay. Thank you.

2 This is to -- I just want to make sure I get your
3 name right. Mr. McClary.

4 You spoke of once-through cooling earlier in your
5 testimony. Are you aware that this plant will have a
6 desalination plant that once 4 and 5 are decommissioned
7 could cause impacts of entrainment and impingement that
8 are the problems with once-through cooling?

9 (Inaudible.)

10 THE REPORTER: I'm sorry, we have to stop. All
11 the microphones on this side, none of them are working.

12 HEARING OFFICER KRAMER: The microphones are on.

13 THE REPORTER: What I'm telling you is that the
14 feed that you're giving me is not coming through my
15 machine, all I hear is air.

16 (Discussion off the record.)

17 HEARING OFFICER KRAMER: Okay. Go ahead.

18 MS. SIEKMANN: Did you want the once-through
19 cooling answer on the record, or does that -- it doesn't
20 matter to me.

21 HEARING OFFICER KRAMER: Well, it doesn't matter
22 to you, then we're fine.

23 MS. SIEKMANN: Since it's not his area, it
24 doesn't really matter.

25 Okay. This is a question for CEC staff.

1 I was just curious, what would happen first,
2 shutting down the non-renewable coal-fired contracts or
3 shutting down the once-through cooling plants?

4 MR. VIDAVER: The coal contracts the utilities
5 have expire -- some of them expire, I believe, as soon as
6 2013, others in 2016, 2019. The longest of them run
7 through the late 2020s.

8 MS. SIEKMANN: Okay. So the once-through cooling
9 plant?

10 MR. VIDAVER: The compliance deadline that was
11 established by the water board for the once-through
12 cooling plants range from effectively the end of 2009.
13 The plant -- the replacement infrastructure for some of
14 these plants is already in place, and the plants have shut
15 down, Potrero two units, and South Bay, et cetera.

16 The gas-fired once-through cooling plants run out
17 through, I believe, 2020. The plants in the Los Angeles
18 basin, several of them are the end of 2020. And the
19 state's nuclear facilities compliance deadlines coincide
20 with their relicensing deadlines, 2023 and 2024, I
21 believe.

22 MS. SIEKMANN: Thank you. Okay.

23 And one other question -- well, actually, I have
24 two.

25 I just didn't quite understand the math of this.

1 If an out-of-state plant -- if you guys stop renewing your
2 coal-fired out-of-state contracts and they go somewhere
3 else and get a contract, and then you build more fossil
4 fuel plants, I don't get how your GHGs go down.

5 MR. VIDAVER: Well, the new fossil plants that
6 you build will replace the coal plants in your portfolio.
7 Let's say you're San Diego Gas & Electric --

8 MS. SIEKMANN: I can -- I'm sorry, go ahead.

9 MR. VIDAVER: So in that sense, the GHG emissions
10 attributed to your portfolio go down. But you're right,
11 the system emissions don't go down simply because you as
12 San Diego have substituted a new gas-fired plant for a
13 coal plant. The new gas-fired plant you build, however,
14 will result in reduced generation from another gas plant.

15 MS. SIEKMANN: I understand that. But aren't
16 GHGs a world issue?

17 MR. VIDAVER: Yes, they are.

18 MS. SIEKMANN: So actually, they didn't really
19 reduce emissions --

20 MR. VIDAVER: Well, it does --

21 MS. SIEKMANN: -- for the State of California.

22 MR. VIDAVER: No, system wide. Because even
23 though the coal plants continue to operate, the gas plants
24 that you build will displace other gas plants, not coal
25 plants, but gas plants.

1 Now, when we've spoken about the -- what new gas
2 plants will displace, in the short run they will
3 displace -- they will displace generation from other gas
4 plants; in the long run they will displace coal in utility
5 portfolios. But assuming that we have a cap and trade
6 system in place or a carbon tax, something that actually
7 makes coal more expensive, if it makes coal expensive
8 enough, a new gas-fired plant will actually physically
9 displace coal plants.

10 MS. SIEKMANN: But on the other side, I can say
11 if they get the battery situation resolved, then it will
12 go absolutely the opposite way.

13 MR. VIDAVER: I'm sorry, I don't understand.

14 MS. SIEKMANN: Well, yeah, the storage, if they
15 get the storage resolved in that same period of time then,
16 actually those gas-fired plants are making the -- you
17 know, that you're bringing in now that are supposedly more
18 efficient are certainly not going to be more efficient
19 than a storage system of renewables. So it's all kind of
20 whatever happens.

21 I just wanted to point that out, that those coal
22 plant contracts could be passed on to other states, and
23 maybe for the State of California those GHGs might go
24 down, but I'm looking at it in a world perspective.

25 MR. VIDAVER: I -- if the State of California is

1 the only entity that makes coal more expensive or
2 prohibits it, you're correct, that coal will go elsewhere,
3 yes.

4 MS. SIEKMANN: Thank you.

5 I would like to offer to staff, if you would
6 consider a declaration of certification, no LNG at the
7 CECP.

8 MR. RATLIFF: Thank you.

9 MS. SIEKMANN: Thank you. And I'm finished.

10 MR. VIDAVER: Thank you.

11 HEARING OFFICER KRAMER: Thank you.

12 Go ahead.

13 Commissioner Eggert has a question.

14 COMMISSIONER EGGERT: Actually, that just
15 prompted a thought. The question is would your analysis
16 change with the existence of a cap and trade system that
17 was included in electricity generation?

18 MR. VIDAVER: Yes. With any policy that made
19 coal more expensive, a carbon tax or a cap and trade
20 system that penalized carboniferous resources, the
21 displacement engendered by new gas-fired plants would not
22 be of less-efficient gas-fired plants, but would also be
23 of coal, which on a per-megawatt-hour basis is roughly
24 twice as carboniferous.

25 COMMISSIONER EGGERT: I guess, is it correct to

1 say that with the constraint of a cap imposed through a
2 cap and trade program, that that would offer an assurance
3 that the emissions would not go up, that they would be
4 limited by that absolute limit on total emissions within
5 the system?

6 MR. VIDAVER: Yes, that would most certainly be
7 the case.

8 COMMISSIONER EGGERT: As a further constraint I
9 guess is maybe a better way of saying it.

10 MR. VIDAVER: Yes, certainly.

11 COMMISSIONER EGGERT: All right. Thank you.

12 HEARING OFFICER KRAMER: Okay. Any redirect?

13 I see Mr. McKinsey and Mr. Ratliff as well?

14 MR. MCKINSEY: Yeah, I have two questions.

15 HEARING OFFICER KRAMER: Go ahead.

16 REDIRECT EXAMINATION

17 MR. MCKINSEY: Mr. Rubenstein, though it probably
18 seems like a long time ago, you heard Mr. Cox's discussion
19 of greenhouse gas emissions associated with LNG imports.
20 Do you agree with his statements?

21 MR. RUBENSTEIN: No, I do not. In particular, I
22 disagree with his characterization of the greenhouse gas
23 emissions increases he attributed to LNG, even if the
24 question of the effect of LNG on CECP was relevant.

25 I mentioned earlier that I had experience in

1 performing lifecycle greenhouse gas analyses. One of them
2 was, in fact, for the import of LNG into California. And
3 one of the most striking aspects of that analysis was the
4 conclusion that over 80 percent, in fact, 88 percent in
5 our analysis of the greenhouse gas emissions associated
6 with LNG are associated with combustion of the fuel here
7 in California. Only 12 percent of the emissions are
8 associated with the extraction, liquefaction, transport,
9 regasification, and transport in California.

10 It's important when talking about lifecycle
11 analysis to keep in mind that the answer you get is
12 critically dependent on exactly how you draw the circle,
13 what you include and what you don't.

14 To be very clear, my analysis did not include,
15 for example, the greenhouse gas emissions associated with
16 fabricating the equipment that performs the gas extraction
17 or fabricating the ships that would transport LNG strictly
18 associated with the combustion of fuel for natural gas
19 extraction, liquefaction, transport, and bringing it to
20 here.

21 Also, my analysis, in contrast to the analysis
22 mentioned by Mr. Cox, did not stop at the LNG terminal, I
23 went all the way to the burner tip here.

24 In terms of comparing the numbers, I identify
25 only 1.3 percent of the total carbon attributable to LNG

1 to be due to the unique aspects of LNG, meaning
2 liquefaction, transport across the ocean, and
3 regasification here. 1.3 percent out of the hundred
4 percent.

5 Looking at that another way, that's 1.3
6 percentage points out of the 12 percentage points that are
7 attributable to transportation, extraction and
8 transmission, or roughly 11 percent. And that number is
9 directly comparable to the 25 percent number that Mr. Cox
10 referred to.

11 When I prepared this analysis, which was about
12 18 months ago, my analysis included the review of
13 Mr. Cox's paper, which was out at that time. I also then
14 went to the source materials that his paper referred to,
15 which included the Carnegie Mellon study and the Heede
16 study. I compared the emission factors used in all of
17 those, and as well, I compared emission factors that at
18 the time were in draft reports by the California Air
19 Resources Board relating to the low carbon fuel standard
20 as well as some protocols regarding greenhouse gas
21 emission factors from the California -- the then existent
22 California Climate Action Registry. Most of the emission
23 factors I selected were, in fact, from the two California
24 data sources, but I did review those other reports as
25 well. So I'm reasonably confident of the numbers.

1 The bottom line in all of that is the inclusion
2 of the additional transport emissions for LNG. If you
3 were to do that, would result in no more than, in my
4 numbers, two percent change in the total carbon emissions
5 associated with the combustion of fuel, and that would
6 only be applied to the fraction of the fuel that was, in
7 fact, LNG coming into the plant.

8 So, in all, I think it is a very small impact.
9 And as I indicated in my testimony earlier, I believe that
10 it's not reasonably foreseeable in terms of exactly what
11 the fraction's going to be.

12 MR. MCKINSEY: Thank you. And my other question.

13 How relevant is the simple-cycle efficiency of
14 the project's gas turbines in this proceeding?

15 MR. RUBENSTEIN: It's really only relevant for
16 roughly the 35-to-45 minute period from the time the unit
17 starts up until the steam turbine fully kicks in. And
18 that 35-to-45 minute period refers to a warm start, which
19 if you're talking about this plant cycling daily, is most
20 likely operating mode.

21 As I believe Mr. Walters or Mr. Layton indicated,
22 this unit does not have a once-through steam generator.
23 The way that the steam side of the plant and the
24 combustion turbine are decoupled is by the size of the
25 condenser. The condenser is able to condense all of the

1 steam from the plant enabling the gas turbine to come up
2 to speed very quickly, the heat recovery steam generator
3 will then gradually warm up, start producing steam, that
4 in turn will start warming up the steam turbine. And that
5 whole process to get to full combined-cycle efficiency for
6 a warm start should be on the order of about 45 minutes.

7 MR. MCKINSEY: Thank you.

8 HEARING OFFICER KRAMER: Mr. Ratliff, did you
9 have redirect?

10 MR. RATLIFF: Yes. And I have to say, I write
11 down questions that at the time seem very important, but
12 this time of night, I'm not sure any of them are
13 important, but I'll ask at least two.

14 REDIRECT EXAMINATION

15 MR. RATLIFF: And the first one, Mr. Vidaver, I'd
16 like you to comment on the forecast of solar's potential
17 in San Diego that are in Mr. Hunt's analysis. I'd like
18 you to give your perspective on those, please.

19 MR. VIDAVER: Mr. Hunt in his testimony claims
20 that there are in excess of 1400 megawatts of technical
21 potential for solar photovoltaics in the San Diego area.
22 And this number may actually be an understatement. I've
23 seen estimates by Anders and Bialek in 2006, they put
24 technical potential at well over 4,000 megawatts. But the
25 difficulty I have with Mr. Hunt's analysis is that he

1 assumes that this 1400 megawatts of technical potential
2 translates into 700 megawatts of what he refers to as
3 "market potential."

4 There is no market bottle for solar PV potential.
5 This is one of the observations from the renewable
6 energy -- renewable distributed energy collaborative
7 working group that the CPUC has set up.

8 Mr. Hunt asserts that a realization of 50 percent
9 participation in various programs, whether it's installing
10 solar PV on rooftops, large or small, whether it's
11 locating 20 megawatt facilities at utility-owned
12 substations in rural areas, et cetera, as a plausible
13 number and refers to this as market potential; when, in
14 fact, assuming 50 percent participation in these programs
15 is -- it's a higher percentage than I've ever seen anybody
16 assume.

17 In the work that consultants did for the CPUC
18 renewable energy study of late last year, the consultant
19 hired to do that even only assumed a 33-percent
20 penetration rate, and then referred to this as a maximum.

21 The Anders and Bialek looked at five and
22 ten-percent participation rates for rooftop solar.

23 Mr. Hunt lists four rather significant categories
24 of solar PV which he believes are going to contribute to
25 the market potential in San Diego. And I'd just like to

1 go over them very quickly and offer comments on them.

2 He assumes 200 megawatts of rooftop PV under the
3 California Solar Initiative and another 52 megawatts under
4 the San Diego Gas & Electric Solar Project, which they
5 have pending for the CPUC, and says that this 252
6 megawatts is roughly half the capacity of the CPUC.

7 What he neglects to say at this point is, well, a
8 couple of things. One is that the 200 megawatts of
9 rooftop PV under the California Solar Initiative is
10 accounted for in the ISO's capacity, in the California
11 ISO's estimates of local capacity requirements through
12 the -- its inclusion in the Energy Commission's demand
13 forecast.

14 He -- elsewhere in his testimony he states that
15 these nameplate values really only yield 60 percent of
16 on-peak capacity. So 200 megawatts of rooftop PV would
17 yield 120 megawatts toward a local capacity requirement.

18 The Energy Commission value is actually
19 50 percent. This is also the percentage that's used by
20 Anders and Bialek.

21 The 52 megawatt solar project that San Diego has
22 submitted to the PUC, he claims is about to be approved by
23 the PUC. It's a rather interesting project. The
24 San Diego Gas & Electric filed a request for a competitive
25 solicitation for turnkey projects on utility-owned

1 property in -- let's see, I believe this was July of 2008.
2 It was 77 megawatts DC, 52 megawatts AC. 12 protests were
3 immediately filed. The most significant issues were that
4 the utility-owned generation was not necessary, it should
5 be privately owned, and that the solicitation by San Diego
6 would not yield competitive outcomes because it was
7 utility-owned generation, and that the price which
8 San Diego Gas & Electric was quoting for these facilities
9 was far too high. They were allocating, I believe,
10 \$250 million for 77 megawatts DC.

11 A settlement agreement was reached and submitted
12 to the PUC in -- sometime thereafter. I don't remember
13 the exact date. I believe it was in -- I want to say
14 March 2009, but I might be wrong. The agreement put a
15 price cap on the solicitation, no more than 7,000
16 megawatts of -- excuse me, \$7,000 per kilowatt. And this
17 settlement agreement was rejected by the parties to the
18 proceeding who were not parties to the settlement. So we
19 now have a much smaller project, which is about
20 35 megawatts, AC, much smaller set of project, which is
21 about 35 megawatts AC, and no guarantee that the CPUC will
22 approve the project, which I believe they're scheduled to
23 rule on it within the next 60 days or so.

24 Mr. Hunt also talked about 604 megawatts of large
25 roof potential as indicated by a study done by Black &

1 Veatch and E3, Black & Veatch being the consultant to the
2 Renewable Energy Transmission Initiative. And E3 and
3 Black & Veatch jointly submitted that study into the
4 CPUC's procurement proceeding.

5 Again, Mr. Hunt claims a market potential of
6 exactly 50 percent. So according to Mr. Hunt, it's quite
7 possible for half of the large roofs in -- large roof area
8 in San Diego to have rooftop PV on it, a percentage which
9 is quite high.

10 He also cites the study done for Ready and the
11 procurement proceeding, which indicates that there are 31
12 sites located in the San Diego area near a rural
13 substation that are suitable for the development of
14 20-megawatt solar PV facilities ground-mounted tracking,
15 and again, posits that half of these sites can -- market
16 potential is represented by half of these sites. Again, a
17 very large number.

18 What he -- what I think parties who are
19 considering that 700 megawatts of rooftop PV or solar PV
20 in San Diego should take into account when looking into
21 this study is that the consultant who performed the study
22 said, and I quote, "This is a very rough analysis, it is
23 an educated guess, not an engineering analysis." The
24 cases all assume indefinite continuation of current
25 federal and state tax incentives. The study did not

1 investigate the ability of the grid to absorb energy at
2 the PV output profile and that voltage and grid stability
3 issues associated with a lack of inertia were not subject
4 to question in the study.

5 So while we have a substantial technical
6 potential, the notion that 700 megawatts of solar PV can
7 be put in place in the greater San Diego area in the near
8 future is optimistic, all the more so given the seeming
9 unwillingness of anybody to pay for it.

10 Beyond the California Solar Initiative, there
11 does not seem to be any mechanism for this solar capacity
12 to be put in place. The CPUC is not ordering the
13 San Diego Gas & Electric to develop sites.

14 Perhaps all this is just a natural outcome of our
15 existence on a competitive hybriding process where we
16 develop merchant renewable projects. There are no tariffs
17 in place at present to make sure that this capacity is
18 brought into place.

19 It would be nice to think that it could -- is a
20 realistic alternative to gas-fired capacity to meet local
21 capacity requirements, but to say that it is an
22 alternative to a combined cycle in the San Diego area
23 would be further questioned; it's, as Jim McIntosh has
24 pointed out, that the solar PV does not provide ancillary
25 services, it's not dispatchable, and as I've stated

1 earlier, solar PV doesn't provide any inertia, which most
2 parties now believe is going to be a serious constraint on
3 the ability to the retire once-through cooling facilities
4 in the state.

5 So, sorry, those are my comments on Mr. Hunt's
6 rather optimistic assumptions.

7 MR. RATLIFF: Thank you. Could I just add -- ask
8 you what I think is a shorter-answer question. I
9 appreciate very much actually that you did offer a rather
10 elaborate answer there, but my more precise question is
11 what did the Energy Commission assume in its forecast for
12 the San Diego region for solar PV and -- for solar
13 distribution?

14 MR. VIDAVER: The Energy Commission's demand
15 forecast assumes 200 megawatts, a little over 200
16 megawatts nameplate installed by 2020 corresponding to a
17 little over a hundred megawatts of dependable by 2020.

18 MR. RATLIFF: Thank you.

19 DR. ROE: May I recross the witness?

20 MR. RATLIFF: I'm not done yet.

21 And, Mr. McClary, I'm not sure, maybe it's
22 Mr. Vidaver, I'm not sure to ask my own witnesses who to
23 answer this question, but I'll -- I will assume that it's
24 either Mr. McClary or Mr. Vidaver.

25 And that is, there was a lot of discussion

1 tonight about whether it would be interesting or useful to
2 do a much more elaborate analysis to determine exactly how
3 much greenhouse gas is displaced by a particular project
4 such as CECP. And my question to you, whichever of you
5 wants to answer it, is what would that analysis involve,
6 and how many resources would it take for a particular
7 project?

8 MR. McCLARY: Well, I'll take a crack at the
9 first part of that anyway.

10 I think there is no one set answer. You do more
11 analysis to get a better understanding of the impact of
12 potential development renewable and gas-fired resources as
13 you go along. The studies that have been referred to that
14 are underway are kind of a first step on that. But I'm
15 sure that following that there will be additional
16 questions and additional detail that the Commission could
17 use in forming its policy and in forming the demand
18 forecast that it passes on.

19 So in that sense, sort of the more the better, I
20 guess as far as getting increased detail on where a policy
21 can take you.

22 For this individual project, as I've said, you
23 know, everything points to it being a negative number in
24 the decrease in greenhouse gases, that's what's needed in
25 this specific case. If you were to try to do a much

1 more -- something, let's say, on the order of the CAL ISO
2 33-percent RPS study in each individual case, I will leave
3 that to the staff to describe the -- how much effort that
4 would take, but I do know that the ISO has dedicated
5 significant staff over many months, and so far the
6 analysis is -- I won't say that it's intractable, but it's
7 difficult to define scope and bring to a close.

8 MR. SHARMAN: May I, Mr. Kramer, may I add one
9 comment quickly?

10 HEARING OFFICER KRAMER: Yes. I like the "Q"
11 word.

12 MR. SHARMAN: This is a portion of the emission
13 fleet, and they're adding another portion, and then they
14 just do not make any guarantee about taking one out. That
15 is the basic mitigation principle enshrined in this
16 review. And when they do that, then they have met the
17 standard. But they have not met that standard. This is
18 arm waving. I hate to say this, but it is arm waving, and
19 you all know that it's arm waving, because if this plant
20 costs less than all the renewables, which it does, there's
21 not going to be a renewable that's going to displace that.
22 It's going to stay there. And the inefficient plants are
23 going to stay there if they're least cost as well too.
24 Those plants that are less efficient will be dispatched
25 because they may be less expensive. And that's my point.

1 They're all staying.

2 MR. RATLIFF: Well, could -- I wanted Mr. Vidaver
3 to actually comment on my last question, but then I would
4 ask him to respond to the comment as well.

5 MR. VIDAVER: I'll respond to this comment.

6 You're imagining each of those bottles as a power
7 plant. Imagine them as a megawatt hour of energy.

8 MR. SHARMAN: Sure. And imagine more demand.

9 MR. VIDAVER: The construction and operation of
10 the project won't increase demand. You have a -- it won't
11 reduce the price of electricity, so people won't want more
12 of it, it won't render energy-efficiency programs less
13 efficacious, so it won't increase demand through that
14 avenue. So those are -- you have four megawatt hours of
15 energy whether I build the project or not. The difference
16 is that if you build and operate the project, the megawatt
17 hours of energy will emit less greenhouse gases.

18 HEARING OFFICER KRAMER: I think we've debated
19 that point pretty fairly already this evening.

20 So, Mr. Ratliff, do you want to --

21 COMMISSIONER BOYD: I was going to ask
22 Mr. Vidaver, what about the RPS? I mean, doesn't that
23 mean anything here?

24 MR. VIDAVER: Yes. The RPS ensures that
25 utilities will solicit renewable projects on contracts,

1 enable the financing of the projects, their construction,
2 and provide a revenue stream which guarantees their
3 construction and operation.

4 MR. RATLIFF: Even if they're more expensive?

5 MR. VIDAVER: Even if -- well, they -- a wind
6 plant has -- it doesn't have to sign a check to get mother
7 nature to provide fuel. And the same thing is true for a
8 solar plant. Carlsbad Energy Project is going to have to
9 buy gas. So once you build a wind plant, as will be the
10 response to the renewable portfolio standard, it costs you
11 nothing to run it. It bids into a market at zero, it --
12 and is taken ahead of any gas-fired plant that is
13 competing in the market. It signs a contract with the
14 utility that says you will take all my generation, and the
15 utility says, yes, I will, or I'll pay you if I have to
16 curtail you under over-generation conditions.

17 This project won't result in any less renewable
18 generation. And it's the RPS which ensures that a certain
19 amount of renewable generation will be forthcoming.

20 I'm sorry, I'm waving, I apologize.

21 MR. RATLIFF: I have no more questions.

22 DR. ROE: Mr. Kramer, may I redirect to
23 Mr. Vidaver?

24 HEARING OFFICER KRAMER: For how long?

25 DR. ROE: A half a minute.

1 HEARING OFFICER KRAMER: Okay.

2 MR. VIDAVER: Does that include my answer?

3 DR. ROE: No.

4 HEARING OFFICER KRAMER: That would be unfair.

5 REDIRECT EXAMINATION

6 DR. ROE: You mentioned earlier that SDG&E had an
7 RFO, I think, in the year 2008 or 2007, which was resolved
8 in 2008 for renewable energy. You were talking about an
9 SDG&E earlier RFO for renewable energy.

10 MR. VIDAVER: It's getting late, you'll have to
11 go -- attribute more statements to me before I --

12 DR. ROE: Well, the reason I ask is you quoted an
13 earlier RFO, and I wanted to ask you are you aware that
14 SDG&E has issued a new RFO for renewable energy in
15 December of 2009 and have you taken into consideration the
16 potential renewable energies that may come online as a
17 result of that RFO --

18 MR. VIDAVER: Yes, I am aware of the --

19 DR. ROE: -- 2009.

20 MR. VIDAVER: -- I'm aware of the fact that
21 San Diego issued an RFO. I'm not familiar with the
22 details of it.

23 DR. ROE: Thank you. That was the brief answer.

24 HEARING OFFICER KRAMER: Okay. I think that
25 concludes --

1 MR. ROSTOV: Mr. Kramer, can I ask Mr. Rubenstein
2 like two questions just to follow up on his -- they're
3 very short questions, and they should have short answers.

4 HEARING OFFICER KRAMER: Okay.

5 RE CROSS-EXAMINATION

6 MR. ROSTOV: Who did you prepare that LNG report
7 for?

8 MR. VIDAVER: I can't discuss that.

9 MR. ROSTOV: Okay.

10 HEARING OFFICER KRAMER: All right. That
11 concludes greenhouse gases.

12 COMMISSIONER BOYD: Wait. Wait.

13 HEARING OFFICER KRAMER: Or, no?

14 COMMISSIONER BOYD: I forgot to ask.

15 HEARING OFFICER KRAMER: Oh, I'm sorry.

16 COMMISSIONER BOYD: Quick questions.

17 While Mr. Rubenstein has done so much work on
18 LNG, I would like to ask if I'm correct in one of my
19 impressions.

20 Are there any what you might call spill-over
21 benefits associated with the constituencies of natural gas
22 that is liquefied and turned into LNG that you could
23 identify? That is, it's my understanding that through the
24 LNG process, liquification in particular, that some
25 constituents that are problematic go by the board, and,

1 you know, might be a small benefit of LNG versus a, quote,
2 natural gas on the receiving end. Am I correct in that
3 impression, to your knowledge?

4 MR. RUBENSTEIN: Commissioner Boyd, that is
5 vaguely ringing a bell. But I looked at that about
6 18 months ago, and I'm not remembering anything in
7 particular.

8 I know that some liquefaction processes will boil
9 off lighter hydrocarbons so you get something more
10 approaching liquid methane, as I think you mentioned
11 earlier; but I'm, offhand, not aware of other noxious
12 components that might be eliminated. But I see
13 Mr. Walters is raising his hand and might have an answer
14 to your question.

15 COMMISSIONER BOYD: Good enough.

16 MR. WALTERS: To my knowledge, liquefaction
17 process takes essentially all the sulfur out of the fuel
18 gas. In fact, they have to odorize because there isn't
19 any natural odor left in the natural gas.

20 COMMISSIONER BOYD: Okay. And one other
21 question, and there may be no one here who can address
22 this any better than my memory, but it's prompted in my
23 mind by the questions about continued use of coal in other
24 places if we, you know, refuse coal and clean up our
25 fleet, I'm reminded that many, many states in western and

1 eastern provinces of Canada and even some eastern states
2 have joined onto the so-called Climate Western Initiative,
3 trying to follow California's footsteps with regards to
4 its climate change program, which I would presume also
5 includes the idea of decarbonizing their fleets and
6 probably beginning to replicate some of the backing away
7 from coal generation that California has endorsed. I just
8 wondered if anybody had any comments on that.

9 That's a way to maybe mitigate some concerns that
10 were expressed about it's just going to go somewhere else.
11 That may be true in the beginning, but over time, as
12 there's pressure on coal ultimately pushing, you know, to
13 quote, clean coal, whatever that means, maybe an oxymoron,
14 but whatever that means. Any comments by anybody?

15 COMMISSIONER EGGERT: Actually, if you don't
16 mind --

17 COMMISSIONER BOYD: I almost said I know one
18 person sitting up here who could respond, but I didn't
19 want to set you up, Commissioner.

20 COMMISSIONER EGGERT: No worries.

21 So I think you know that the currently the WCI
22 includes seven western states and four Canadian provinces,
23 it's not all of the WECC, and I think certainly that's a
24 goal, the program is to have the full WECC inclusive in
25 the program.

1 Each state that's signed up to that consortium,
2 that partnership, has to make a commitment of an absolute
3 limit up to 2020; and I think collectively if you add them
4 all up, it's about a 15 percent absolute reduction in
5 emissions across all partners, and that's to be instituted
6 through a regional cap and trade program.

7 The benefits of that regional program is that you
8 will substantially reduce both leakage and shuffling,
9 meaning that companies don't have the option to as easily
10 escape from the program by just moving to adjacent
11 jurisdiction. And then furthermore, the greater coverage
12 you have, the less the ability to just reshuffle the
13 power, in other words, just send it to a jurisdiction that
14 doesn't have the program in place.

15 And we do have one of the recommendations, at
16 least for the program design, is to use what's called a
17 first jurisdictional delivery model, which also accounts
18 for imported electricity at the point of first delivery,
19 which accounts for upstream emissions. So it's a further
20 design that will limit the amount of leakage from the
21 system.

22 So I think once that's in place, once that's
23 fully operational, I think it also sort of helps address
24 kind of, as we were discussing before, some of these
25 issues of having an assurance that the absolute total

1 emissions are decreasing over time from all the covered
2 sectors within the system.

3 COMMISSIONER BOYD: Thank you. Since we were
4 engaged in a mini seminar here today, I thought I'd add to
5 it.

6 I'm done, Mr. Kramer. You can breathe a sigh of
7 relief.

8 HEARING OFFICER KRAMER: Okay. Thank you.

9 One evidentiary issue.

10 Staff, you mentioned a new version of the air
11 quality section. All I think we have in the record right
12 now is the original FSA, and then we have -- correct me if
13 I'm wrong, don't we have as Exhibit 220 staff errata
14 comments? But I looked that up, and that's -- that's
15 simply a list of changes, but it's not a reprinted
16 section. So I'm just wondering, we've probably been
17 referring to both documents during the course of the
18 discussion, and if it's --

19 MR. MCKINSEY: There was an addendum, I think
20 you're referring to the addendum on worker safety and air
21 quality that staff filed, right? It's in the exhibit
22 list, too, I think.

23 HEARING OFFICER KRAMER: Okay. Well, then maybe
24 I'm just not seeing it. Which one is that? I just want
25 to make sure that we have the documents that we can then

1 correlate with the transcript if we're trying to figure
2 out what somebody was looking at.

3 MR. RATLIFF: All I know is that Mr. Rostov and I
4 had the same edition that we were referring to. It's
5 docketed December 14th, revised sections for the Carlsbad
6 FSA dated November 2009 air quality and worker 4.1 safety
7 and fire protection 4.14.

8 HEARING OFFICER KRAMER: Okay.

9 MR. RATLIFF: And then it says revised December
10 2009.

11 HEARING OFFICER KRAMER: Then the question is is
12 it in the exhibit list.

13 Let me just ask, does anybody object to my adding
14 that as an exhibit, and then we'll have it introduced
15 tomorrow?

16 MR. THOMPSON: As tempted as I am, I will not.

17 HEARING OFFICER KRAMER: Okay. Well, I'll go
18 look that up as -- actually, while I'm listening to you
19 I'm also working on the exhibit list a little bit. So
20 I'll take that as homework, try to straighten that out by
21 tomorrow when we will likely have a new list to look at
22 with all the changes we've talked about.

23 So then let's get started on alternatives, see
24 how far we can get.

25 Mr. McKinsey, when do we lose the room, or do we

1 have people hovering to take our empty -- or half empty
2 soda cans away from us?

3 MR. MCKINSEY: We're not booted out yet, that's
4 all I know.

5 HEARING OFFICER KRAMER: Okay. The panels are
6 more or less the same. So if those panelists could come
7 to the fore, or sit where they are if they're already up
8 at the table.

9 MS. SIEKMANN: And I have a witness, Mr. Noble.

10 HEARING OFFICER KRAMER: Mr. Noble, you'll need
11 to sit at the table. There's not room next to
12 Ms. Siekmann.

13 MR. ROSTOV: Mr. Kramer, is this the generational
14 alternative, or is this the land use?

15 MR. RATLIFF: Well, Commissioners, isn't this
16 just for land use? We've just done -- we aren't going to
17 redo alternatives now, are we? We've thrashed that horse
18 far beyond death.

19 MR. ROSTOV: We had some questions about the
20 alternatives sections.

21 HEARING OFFICER KRAMER: Some people crossed over
22 in their testimony, but --

23 MR. RATLIFF: Well, I thought that was
24 intentional, that we address the technological
25 alternatives with the witnesses that were already in that

1 category.

2 HEARING OFFICER KRAMER: Well, we didn't make
3 that clear to everyone, so if somebody has a few more
4 questions about or testimony about technological
5 alternatives, we need to give them that opportunity. I
6 mean, as early as Mr. Rubenstein -- he started to talk
7 about and crossed over the issue, but out of fairness to
8 the parties, I don't think I can tell them that they
9 can't -- especially since I asked many of them to wait,
10 and some of them did, I can't shut them down.

11 MR. ROSTOV: Right. I mean, we have a few, we
12 could do it now or in the morning, either way.

13 MR. RATLIFF: Well, let's do them now. Let's
14 not -- let's not put it off. Let's get this done.

15 HEARING OFFICER KRAMER: Okay. Well, let me get
16 the panel seated.

17 MR. RATLIFF: I mean, I thought we were done, so
18 I'm just real chagrined that we're doing it twice, but --

19 HEARING OFFICER KRAMER: Well, we're going to
20 finish up with questions that some people may have,
21 because of the way I described things, have waited.

22 MR. RATLIFF: Well, are we going to at least
23 finish off the generation alternative section before we go
24 into the land use, or are we going to scramble it all
25 together?

1 HEARING OFFICER KRAMER: No, we will finish off
2 the technological alternatives.

3 MR. RATLIFF: Okay. Great.

4 MR. THOMPSON: Mr. Garuba has more redirect, and
5 summary of his testimony; it goes into a couple of areas
6 briefly, not heavily generational, but there's a little
7 bit of both.

8 MR. RATLIFF: You're talking about locational
9 alternatives.

10 HEARING OFFICER KRAMER: We're all around the
11 table, so it won't take long to switch gears.

12 Okay. Our panelists are, for the Applicant,
13 Robert Mason and David Stein. You're both here.

14 MR. MASON: David Stein is not.

15 HEARING OFFICER KRAMER: Oh, okay.

16 MR. MCKINSEY: We do not have David Stein here.
17 We're not using him.

18 HEARING OFFICER KRAMER: Okay. For staff, Mike
19 Monosmith, Dave Vidaver, Neghar Vahidi, Mr. McIntosh of
20 course has left us, but we took the opportunity this
21 afternoon to address any of these questions to him before
22 he left. Mr. McClary is still here. Mr. Debauche, okay,
23 he's here. Mr. Garuba is here for the city. Mr. Noble,
24 you're here for Terramar? Ms. Siekmann?

25 MS. SIEKMANN: Yes.

1 HEARING OFFICER KRAMER: And that's the sum total
2 of the witnesses. So, again, we're going to finish up
3 because there was some discussion already in the
4 greenhouse gas area of technology alternatives, issues
5 such as does the area need another gas-fired power plant,
6 and any questions you may have, or a related question is
7 why can't renewables take care of this, this need.

8 Are there any other sub-issues that the parties
9 believe should be in the technological portion of the
10 alternatives discussion? Is there anything to discuss as
11 a technology alternative besides those two that I
12 mentioned?

13 Actually, I thought of a third. That would be
14 Dr. Roe's concern about efficiency.

15 But do you feel that you've covered that
16 completely already?

17 DR. ROE: Yes. But I am concerned about
18 the no -- the statements about the no-project alternative
19 in the FSA.

20 HEARING OFFICER KRAMER: Okay. We'll do that
21 with the alternative sites. So that will be the second
22 part.

23 MR. THOMPSON: And Mr. Garuba, only to the extent
24 of his experience with other bidders, but it's not to the
25 issues you just read.

1 HEARING OFFICER KRAMER: So that would be in
2 the -- is that a third category?

3 MR. THOMPSON: It's more or less alternate sites.

4 HEARING OFFICER KRAMER: Okay. Good.

5 MR. RATLIFF: And then I don't understand how
6 you're putting no-project alternative and location
7 alternatives together when no-project alternative would
8 seem to be the same as the generation alternatives to me,
9 because that's saying you don't need the project you're
10 doing it with some other alternative generation.

11 HEARING OFFICER KRAMER: Okay. Well, we can do
12 it that way as well.

13 So, Dr. Roe, you'll be talking about the
14 no-project alternative with the technological alternatives
15 that we're about to start.

16 Okay. The Applicant.

17 MR. MCKINSEY: We have no direct testimony in
18 that category.

19 HEARING OFFICER KRAMER: Thank you.

20 Staff?

21 But first, I'm sorry, I'm forgetting to have the
22 witnesses identify themselves, and we may have to swear in
23 one or two of you.

24 MR. RATLIFF: Not for this section actually. For
25 generational alternatives we've got the same panel, and we

1 might as well just finish that discussion first.

2 HEARING OFFICER KRAMER: Okay. And, Mr. Noble,
3 are you just on the site alternatives?

4 MR. NOBLE: Pardon me?

5 HEARING OFFICER KRAMER: Are you just speaking
6 about the alternatives sites, or are you speaking about
7 alternative technologies?

8 MR. NOBLE: Well, I spent 27 years in the Marine
9 Corps; part of the problem is I'm hearing impaired, and so
10 sometimes I can't get my Ds, Es, ZEs, so I get some weird
11 questions.

12 HEARING OFFICER KRAMER: Okay. Ms. Siekmann says
13 that you're on the second part, and you need to speak very
14 closely to the microphone.

15 MR. NOBLE: Okay. Thank you.

16 HEARING OFFICER KRAMER: Nonetheless, we'll swear
17 in the whole panel at this point. That will be a lot
18 easier.

19 Mr. Debauche, he's on which, Mr. Ratliff?

20 MR. RATLIFF: He's on alternatives, but for
21 generational and no-project alternatives.

22 HEARING OFFICER KRAMER: Okay. The sites. Okay.

23 All right. Which of you panelists have not been
24 sworn in?

25 Okay. If you would stand please and raise your

1 right hand.

2 ALL FURTHER PROSPECTIVE WITNESSES
3 were called as witnesses herein, and after first
4 having been duly sworn, were examined and testified
5 as follows:

6 HEARING OFFICER KRAMER: Okay. Thank you.

7 We'll let the parties introduce their witnesses
8 as they go forward with their direct examination.

9 Mr. Ratliff?

10 MR. RATLIFF: Same witnesses that we just had.

11 HEARING OFFICER KRAMER: Okay.

12 MR. RATLIFF: And the same testimony that we just
13 had. We shot off all our fireworks already, and I hope
14 people will not ask the same questions again.

15 HEARING OFFICER KRAMER: An asked and answered
16 objection would be perfectly appropriate in that
17 circumstance.

18 Mr. Thompson for the city?

19 MR. THOMPSON: Although we addressed -- we have
20 one question on redirect on the no-project alternatives, I
21 didn't view it as a generational, and I didn't break it
22 out in the five or six questions that I have for them at
23 the beginning. I could put him through all that now, I
24 could put him through it in a little bit. It doesn't
25 matter.

1 HEARING OFFICER KRAMER: Well, you said you had
2 one question about the no project?

3 MR. THOMPSON: I think so.

4 HEARING OFFICER KRAMER: And please introduce the
5 witness, and then ask him that question, if you would.

6 DIRECT EXAMINATION

7 MR. THOMPSON: Would you please state your name
8 and place of employment for the record.

9 MR. GARUBA: Rock star close?

10 HEARING OFFICER KRAMER: Yes, indeed.

11 MR. GARUBA: My name is Joe Garuba. I'm with the
12 City of Carlsbad. I'm employed by the City of Carlsbad.
13 I'm the municipal projects management for the city.

14 MR. THOMPSON: Would you go to -- never mind,
15 this is not scripted, number 14.

16 Do you have any comment on the no-project
17 alternative?

18 MR. GARUBA: I do have a comment on the
19 no-project alternative as proposed in the FSA. The city
20 firmly believes that this project is in non-conformance
21 with the redevelopment and Coastal Act and local land use
22 requirements as well as the significant visual, aesthetic,
23 and safety impacts it will create. If the Commission
24 decides to override these issues, we believe it's
25 important that they carefully consider a reasonable range

1 of alternative sites and technologies.

2 In this case, in the few that I've observed
3 through reading through many of your proceedings, it seems
4 like the no-project alternative is actually a potentially
5 viable option. SDG&E has an RFO process that's in place
6 that's ongoing, and they're doing what they need to do to
7 secure their power needs for the region. Let that process
8 work.

9 MR. THOMPSON: I think that's the only point we
10 have on generation and no project.

11 HEARING OFFICER KRAMER: And number 14 is
12 different than the numbered --

13 MR. THOMPSON: It's an internal 14. This is a --

14 HEARING OFFICER KRAMER: Does not correspond to
15 his written testimony.

16 MR. THOMPSON: It does not.

17 Okay. Thank you.

18 Terramar, your witnesses who have something to
19 say on this topic, this subtopic.

20 MS. SIEKMANN: Not on this no-project
21 alternative.

22 HEARING OFFICER KRAMER: Or the technological?

23 MS. SIEKMANN: Not tech- -- it's site.

24 HEARING OFFICER KRAMER: Okay. Then, thank you.

25 Dr. Roe, the other day you were -- you spoke

1 about the possibility of trading some of your time for --
2 your cross-examination time to testify on the topic of
3 efficiency. Earlier you said you had said everything you
4 needed to; is that correct?

5 DR. ROE: Yes.

6 HEARING OFFICER KRAMER: Okay. Were you going to
7 offer any direct testimony about the no-project
8 alternative or just ask questions?

9 DR. ROE: Well, I'd like to ask questions. Just
10 cross.

11 HEARING OFFICER KRAMER: Okay. Well, we'll get
12 back to you in a minute then.

13 We're now at the cross-examination stage.

14 The Applicant?

15 MR. MCKINSEY: Well, I don't know if you asked,
16 Communities for Biological Diversity or not if they had
17 any direct testimony.

18 MR. ROSTOV: It's Center for Biological
19 Diversity.

20 MR. MCKINSEY: Sorry.

21 MR. ROSTOV: It's okay. I used to work at
22 Communities for a Better Environment.

23 HEARING OFFICER KRAMER: There's none on the
24 chart for them.

25 MR. ROSTOV: No, we do have time for

1 cross-examination --

2 HEARING OFFICER KRAMER: Right, but not a
3 witness.

4 MR. ROSTOV: What? No, not for witnesses, sorry.

5 HEARING OFFICER KRAMER: So I think it's back to
6 you.

7 MR. MCKINSEY: And we have no cross-examination
8 on this topic.

9 HEARING OFFICER KRAMER: Mr. Ratliff?

10 MR. RATLIFF: No, no cross-examination.

11 HEARING OFFICER KRAMER: Mr. Thompson.

12 MR. THOMPSON: We have none.

13 HEARING OFFICER KRAMER: Okay. Mr. Rostov?

14 MR. ROSTOV: I have a few. And it's shorter than
15 the time I'm allotted.

16 CROSS-EXAMINATION

17 MR. ROSTOV: This goes to staff. SB 170 requires
18 that SDG&E be at 20 percent renewable generation
19 procurement by 2010. And the governor recently mandated
20 33 percent by 2020. As of 2008 SDG&E's renewable
21 procurement status was just 6.1 percent. We have that in
22 Exhibit 625.

23 Did staff take these requirements into
24 consideration before dismissing the renewable technologies
25 in its alternative analysis?

1 Do you want me to rephrase it?

2 MR. VIDAVER: I'm not sure I'm the person to
3 stipulate to our having dismissed the alternative
4 renewables technology analysis. I'm not familiar enough
5 with the FSA to know.

6 HEARING OFFICER KRAMER: Get the mic --

7 MR. VIDAVER: I'm not --

8 HEARING OFFICER KRAMER: Rock star.

9 MR. VIDAVER: I'm not familiar enough with the
10 FSA to know whether we, quote, dismissed alternatives
11 renewables technology analysis or not, so if I answer that
12 question -- if by answering that question I imply that I
13 agree with that statement, I'm reticent to do so.

14 MR. ROSTOV: Let me ask you another way.

15 MR. RATLIFF: Well, could I just point you to
16 the -- unfortunately, this is in the greenhouse gas
17 testimony that we just went through, and that's why I
18 described this as a cross-over kind of issue. We actually
19 have a table that describes greenhouse gas emissions under
20 a 33-percent RPS and a table depicting that.

21 MR. ROSTOV: No, it's actually an alternatives
22 question. And maybe let me explain why it's an
23 alternatives question.

24 HEARING OFFICER KRAMER: Well, rather than you
25 doing that, there are other witnesses, and do any of them

1 have an explanation or an answer to his question? Did you
2 consider, I guess it's the current performance level of
3 the RPS in the portfolio of SDG&E when you were making
4 your --

5 MR. ROSTOV: Alternatives analysis.

6 MS. VAHIDI: Okay. I don't know that I'm
7 understanding the question.

8 MR. RATLIFF: You're asking our land use
9 alternatives people the question about RPS? I mean, I
10 don't --

11 HEARING OFFICER KRAMER: Well, they're all listed
12 as authors. I'm just trying to see if anyone --

13 MR. RATLIFF: Well, I can tell you here it's the
14 same panel that we're going on with generational
15 alternatives, not different people. At least the
16 remaining -- the surviving members of the panel are the
17 only ones you've got here now. But we do have, as I say,
18 a discussion, in fact a chart at 20-percent RPS and
19 33-percent RPS at page 4.1-115 of our air quality
20 testimony appendix.

21 MR. VIDAVER: Can I give it a shot?

22 I would hazard to say that the current level of
23 San Diego's RPS wasn't an element in the alternative
24 technologies assessment.

25 MR. McCLARY: And actually, just to expand a

1 little bit too, is the question was the current level
2 considered, or was the -- is the question were the RPS
3 requirements for increased renewable resources considered?

4 MR. ROSTOV: The question is were the
5 requirements to increase the level to 20 percent. So when
6 you did the alternatives analysis, did you take into
7 account that San Diego Gas & Electric needs to improve by,
8 say, 14 percent by 2010 and even more by 2020?

9 MR. McCLARY: And my answer would be in looking
10 at the FSA on this, in fact, the finding there is that the
11 flexible generation provided by this gas-fired project
12 allows the renewable resource to be brought in that's
13 required under state policy.

14 So if the question is would an alternative with a
15 renewable resource perform that function and the finding
16 was no, it would not, because the renewable resource is
17 what's being facilitated, it wasn't -- it was found unable
18 to sort of self-facilitate, if you will, by providing
19 those same characteristics.

20 MR. ROSTOV: Let me try it one more way.

21 The alternatives section, you know, goes through
22 certain types of technologies, like solar thermal
23 projects, rejected due to space requirement, it goes
24 through solar PV, it goes through rooftop solar PV. And
25 you get the impression by reading the alternatives

1 analysis that there's really just not that much renewable
2 energy. And in contrast there's a state requirement that
3 says we need to achieve 20 percent by 2010.

4 So it seems to me -- and this is a question --
5 did the alternatives analysis do a -- study enough
6 alternatives to at least comply, to provide an
7 alternatives analysis that would at least comply with the
8 state regulations?

9 MR. VIDAVER: San Diego Gas & -- obviously
10 San Diego Gas & Electric is not building the Carlsbad
11 Energy Project. There's no obligation on the developer of
12 the project to meet a renewable portfolio standard.

13 MR. ROSTOV: That's true. But within the system
14 you're going to need that much renewable technology, and
15 when we go through the alternatives section, and correct
16 me if I'm wrong, it doesn't seem like -- why did staff's
17 rejection of each of the technologies individually -- it
18 doesn't seem like there's really enough renewable energy
19 to meet that standard. Is that the staff's position?

20 MR. VIDAVER: As I think staff has testified, the
21 construction and operation of the Carlsbad project
22 wouldn't result in less renewable generation being
23 developed, and as Mr. McClary just stated, the project
24 would actually enable more renewable generation to be
25 developed.

1 MR. ROSTOV: Since the time's late, I'm just
2 going to move on to a couple other questions.

3 There was a report called San Diego Smart Energy
4 2020, which is Exhibit 632, which was written by
5 Mr. Powers, which essentially is an analysis of how
6 San Diego could move to a renewable future.

7 Did the staff consider that in their alternatives
8 analysis?

9 MR. VIDAVER: I --

10 MR. RATLIFF: Could you repeat the question?

11 MR. ROSTOV: I just want -- so Bill Powers -- and
12 it's Exhibit 632, and I could go through the details of
13 the report, but it's in the record so I'm not going to --
14 wrote a report talking about potential capacity for
15 renewables and alternative technologies in San Diego. And
16 I'm wondering as part of your alternatives analysis, did
17 you look at that report and incorporate that into the
18 alternatives section?

19 MR. VIDAVER: I -- I stated earlier that the --
20 whatever the -- sorry.

21 MR. ROSTOV: I mean --

22 MR. VIDAVER: I did not read this report in
23 contributing to the alternatives analysis.

24 MR. ROSTOV: Okay. Thank you. That's all I'm
25 looking for. I'm just trying to -- sorry, maybe I'll

1 explain what I'm trying to do so we can speed things
2 along.

3 I'm just trying to figure out the extent of the
4 alternatives analysis.

5 So there's a report by Mr. Powers. You say you
6 didn't consider it. But you did consider a report by
7 Mr. Anders where he says there is a lot of technical
8 potential for solar. Mr. Anders also wrote another report
9 that we introduced as Exhibit 632 where he even estimates
10 more potential for photovoltaics in parking lots and
11 parking structures. Sorry, I'm reading the wrong thing.

12 In a similar report, which we admitted as
13 Exhibit 631, not 632, Mr. Anders also identified a lot of
14 potential from wind and up to another 3340 megawatts of
15 potential from geothermal generation in the region. Did
16 you consider that report when you were doing alternatives
17 analysis?

18 MR. VIDAVER: No, I did not.

19 MR. ROSTOV: We also introduced an exhibit, 630,
20 which is a California Energy Commission report which talks
21 about the potential from combined heat and power. And it
22 says that there is essentially about 1,000 megawatts in
23 the SD service territory of combined heat and power and
24 assessment it would grow to another 1200 to 2029. Did you
25 consider the combined heat and power as an alternative?

1 MR. VIDAVER: In the analysis, no.

2 MR. ROSTOV: I think those were all for
3 Mr. Vidaver.

4 Okay. On page 7 and 8 of staff's rebuttal
5 testimony, staff explains that the ISO 2011 to 2013 local
6 capacity technical report projects a need for 2489
7 megawatts of capacity in San Diego to meet the CAL ISO
8 established local capacity requirements in 2013.

9 MR. RATLIFF: I'm sorry, what page was that
10 again?

11 MR. ROSTOV: Sorry, 7 and 8 of your rebuttal.

12 MR. RATLIFF: 7 and 8.

13 MR. ROSTOV: We think it's 7, actually.

14 Okay. It found existing capacity totals to be
15 2982 megawatts yielding a surplus of 493 megawatts. This
16 total assumed the retirement of the South Bay facility and
17 completion of the Orange Grove Bill Moose and Lake Hodges
18 projects as well as the completion of the Sunrise
19 Powerlink. If the retirement of the existing Encina
20 facility, 960 megawatts were included, it would create a
21 local reduction of 467 megawatts in 2013.

22 So the question is, is staff suggesting that that
23 it's finding that the CECP is necessary for local
24 reliability that's prefaced on the shut down of not just
25 Units 1, 2, and 3, but it's really prefaced on the entire

1 Encina power station, even though we've been told
2 repeatedly that the shut down of Units 4 and 5 are not
3 planned in the foreseeable future?

4 MR. RATLIFF: Even though what?

5 MR. ROSTOV: Even though we've been told
6 repeatedly that the shut down of 4 and 5 are not planned
7 in the foreseeable future.

8 MR. RATLIFF: You're told by whom?

9 MR. ROSTOV: I think that's the evidence that's
10 come out at this hearing.

11 I'll even --

12 MR. RATLIFF: Can you -- you said this was page 7
13 of staff's rebuttal testimony?

14 MR. ROSTOV: Yes.

15 MR. RATLIFF: Could you -- I just -- I want to
16 know where you're at. There's issue 5, 6, 7, issue 8,
17 issue 9 on that page?

18 MR. ROSTOV: Oh, it's in response to Power of
19 Vision, actually. It's the staff's prehearing conference
20 statement.

21 MR. RATLIFF: It's what?

22 MR. ROSTOV: It's page 7.

23 HEARING OFFICER KRAMER: I don't think staff's
24 ever filed a prehearing conference statement that long.

25 MR. RATLIFF: No. I think you're referring

1 correctly to our rebuttal testimony --

2 MR. ROSTOV: Right.

3 MR. RATLIFF: -- page 7, but I mean I have to
4 confess I'm a bit lost about how your question relates to
5 that testimony. Actually it does relate to it, but I'm
6 still confused by the question.

7 MR. ROSTOV: So the question is saying your
8 answer to Power of Vision, it was a question of Power of
9 Vision, you included --

10 MR. RATLIFF: Could you just ask him to explain
11 it maybe, his statement, or what he meant by this
12 numerical amount or --

13 MR. ROSTOV: Sure.

14 MR. VIDAVER: The numerical estimate I provided
15 was designed to shed light on what would be needed to
16 retire the entire Encina facility regardless of who has
17 said what about when it's going to be retired, the
18 retirement of the entire facility is a stated policy goal
19 as expressed in the 2005 and 2007 IEPRs, and is considered
20 to be the most economic if not the only feasible response
21 to the state water board's policy on once-through cooling.

22 MR. ROSTOV: Okay. That's great. Thank you for
23 that answer.

24 So if you take out Units 4 and 5, those closures,
25 is it then fair to conclude that Units 1, 2, and 3, which

1 total 337 megawatts, could be shut down and the CECP not
2 built, we'd still have capacity, a surplus capacity of
3 156 megawatts?

4 MR. VIDAVER: I'm going to assume that your math
5 is correct. I'm only providing testimony as to what is
6 necessary to meet the local capacity requirement as
7 established by the ISO. You need the ISO to testify as to
8 whether or not meeting that local capacity requirement is
9 in and of itself sufficient to retire Encina when -- at
10 that point.

11 MR. ROSTOV: But you are saying that there could
12 be left surplus capacity?

13 MR. VIDAVER: We're talking --

14 MR. ROSTOV: If the math is correct.

15 MR. VIDAVER: We're talking -- if the math is
16 correct, we're talking about capacity in the San Diego
17 basin relative to the ISO's local capacity requirements,
18 yes.

19 MR. ROSTOV: And then I have just a few questions
20 for Mr. Garuba.

21 MR. GARUBA: Yes, sir.

22 MR. ROSTOV: So what type of policies and
23 programs has the City of Carlsbad explored or put in place
24 to reduce energy use or encourage renewable energy?

25 MR. GARUBA: The City of Carlsbad has actually

1 been pretty aggressive in the renewable energy and energy
2 efficiency front, I'd say, for the past seven years, give
3 or take. I've been directly involved with it for about at
4 that long.

5 We've gone through and extensively retrofitted
6 our facilities with energy-efficiency measures, changed
7 all the light bulbs. We are in the process, thank you to
8 the California Energy Commission for a loan, a
9 low-interest loan, of changing all of our streetlights.
10 So that project will be starting in the next couple of
11 months.

12 The city council has adopted a policy that has
13 mandated all new civic infrastructure to be the equivalent
14 to a LEED Silver Rating. We've -- this past year
15 council's approved and authorized the development of
16 hydroelectric power in our facilities.

17 We realize we can actually capture energy through
18 pressure differentials in the water system, and so we're
19 putting vertical turbines in and picking up a fair amount
20 of energy that way. The Poseidon Power Plant, or Poseidon
21 desal plant has that built into the pipeline system, so we
22 actually think we'll be able to get a fair amount of
23 energy recaptured through that process.

24 And then we've conducted an exhaustive solar
25 analysis on city-owned property. We analyzed large sites

1 that would generate, what I would consider to be for our
2 jurisdiction, a considerable amount of solar in the
3 neighborhood, at least on one side of 10 to 20 megawatts
4 that we are currently analyzing and evaluating. It's
5 constructible, it's actually a beautiful site, it's just
6 the economics.

7 And then lastly, we're moving forward with city
8 council within the next several weeks for the adoption of
9 an AB 811 program. We see this as obviously the cost to
10 buy into renewables and energy-efficiency measures,
11 especially in these hard economic times it's been
12 difficult. So we see an opportunity of putting that on
13 the property tax as a way to remove that barrier and to
14 spur the incentive into that market.

15 And then, again, the last thing is we have sort
16 of a general policy. We're trying to reach carbon
17 neutrality. It hasn't officially been adopted by the city
18 council, but we have over this past 18 to 24 months been
19 able to chisel off about 33 percent of our carbon
20 footprint, and that's with the projects I've mentioned,
21 not including the solar generation.

22 MR. ROSTOV: Have you investigated your solar
23 potential from industrial roofs?

24 MR. GARUBA: We've hypothesized about it. I
25 mean, we have the second largest industrial corridor in

1 the county of San Diego. It's a very large corridor if
2 you run through the center of town, it's actually designed
3 that way. Most of the facilities out there have flat
4 roofs. There's several million square feet of industrial
5 rooftop that we think would be ripe for solar panels if
6 and when we can move forward with the AB 811 program.

7 Also, I would encourage anybody who's in a
8 policy-making capacity to please pass a reasonable fit so
9 that we can see some of this move forward.

10 MR. ROSTOV: And you discussed that you were
11 generating some energy through in-system hydro. Do you
12 think there's other opportunities that exist countywide
13 for this same type of program and do you know how much?

14 MR. GARUBA: I can't -- I can't put a number to
15 it, but I can give you some numbers that we've identified
16 within our system.

17 Just on one pressure drop, a series of when
18 pipeline pressure drops with a connection with the
19 San Diego County Water Authority, we're going to be able
20 to have approximately a 650-kW system that's constant. It
21 will run, because it comes off the aqueduct, so it's a
22 constant command. And we can also, depending on how we
23 operate our system, we can fluctuate it, we can ramp it up
24 or down if we need to.

25 We have 90 pressure reducing stations within the

1 city. Every municipal water system has these, generally
2 speaking. Because you're pulling water off the aqueduct,
3 especially in San Diego County, you're pulling water off
4 the aqueduct, they charge the water to approximately
5 240 psi to move it around the region.

6 There's lots of energy in that water when it
7 comes out of the system, and that pressure needs to be
8 reduced because it's too high for local pipes, smaller
9 sizes. We currently do that through mechanical
10 mechanisms, through the valves, but you could put in
11 vertical turbines. I know other jurisdictions are looking
12 at it, we're not the leader in this area, we stole the
13 idea, as what good government should do. And so -- but I
14 believe there's opportunities.

15 MR. ROSTOV: Thank you for your answers.

16 In my haste to speed through things, I realize I
17 did this in the opposite order, so perhaps, Mr. Vidaver,
18 one more question?

19 HEARING OFFICER KRAMER: Go ahead.

20 MR. ROSTOV: Did you consider any of the policies
21 that you just heard about from the City of Carlsbad when
22 you were doing your alternatives analysis?

23 MR. RATLIFF: You're talking about the city's
24 policies.

25 MR. ROSTOV: Yeah, the city's policies and their

1 infrastructure project.

2 MR. VIDAVER: I was unaware of the City of
3 Carlsbad's efforts in this regard, so the answer is no.

4 MR. ROSTOV: Okay. Thank you. And thank you for
5 your time.

6 HEARING OFFICER KRAMER: Thank you.

7 Power of Vision?

8 DR. ROE: Thank you. I was just about to request
9 if I could go next because I'm about ready to fall asleep
10 here.

11 HEARING OFFICER KRAMER: Well, don't put yourself
12 to sleep.

13 CROSS-EXAMINATION

14 DR. ROE: My questions relate to the no-project
15 alternative in the FSA. And if you look on page 619 at
16 the very end of that section, to the conclusions -- let me
17 read them to you. It says, the no-project alternative
18 would not -- I guess there's a missing word -- meet the
19 following two critical project objectives of the CECP.
20 And it goes on to say that these are -- meets the
21 expanding -- I underline the word "expanding" -- need for
22 new, highly-efficient -- and I underline that again --
23 reliable electrical-generating resources that are
24 dispatchable by the CAL ISO and are located in the load
25 pocket of the San Diego region.

1 Now, the first thing that strikes me about this
2 conclusion is that there's no timeline associated with
3 this conclusion. It doesn't mean that it meets the need
4 today, tomorrow, two years, three years, or five years
5 from now. So the only assumption I can make is since
6 we're considering the project right now, it would meet the
7 need now.

8 And I'm under the impression from earlier
9 testimony that there is not an expanding need currently,
10 but a diminished need for any kind of generating sources
11 in this load pocket.

12 And secondly, you've all heard my questions about
13 the relative high efficiency of the proposed Siemens unit,
14 and so I really question whether this is an accurate
15 statement or conclusion that you can make, particularly
16 this view of the testimony that we heard, and particularly
17 also in view that you did not specifically look at --

18 MR. RATLIFF: Dr. Roe, are you testifying now, or
19 are you going to ask a question?

20 DR. ROE: Come again?

21 MR. RATLIFF: Are you testifying now, or would
22 you like to ask a question?

23 DR. ROE: Well, I guess the question is, had you
24 taken these considerations that were brought up during the
25 testimony into account when you prepared this document?

1 MR. VIDAVER: It seems what you're saying is
2 that -- well, two things. One, that there's a diminishing
3 need for -- or there is a diminishing need of some sort of
4 dispatchable fast-ramping capacity --

5 DR. ROE: In the immediate present that we're
6 discussing. It may come, the need may be there four or
7 five years downstream, but right now, the indications are
8 that there are no needs.

9 MR. VIDAVER: Well --

10 DR. ROE: Indications from the CAL ISO report and
11 the 2009 CEC IEPR report, which you did not reference at
12 all in the FSA.

13 MR. RATLIFF: Please, Mr. Roe, let the witness
14 try to answer the question.

15 MR. VIDAVER: There are -- there have been and
16 are planned in the very near future retirements of
17 dispatchable steam turbines throughout the State of
18 California, which I realize doesn't address your concern
19 that it be a specifically local need. The retirement, as
20 it were, of two of the units at South Bay left in
21 December -- pardon me. The retirement of two of the units
22 at South Bay in December reduces the amount of
23 dispatchable dependable capacity in the San Diego area.

24 The 2011, 2013 local capacity requirement study by the
25 ISO that you referred to this evening, presumes the

1 retirement of two more -- the remaining two units at South
2 Bay by 2014. The state water board's policy regarding
3 once-through cooling as well as the Energy Commission's
4 policy regarding the retirement of aging power plants
5 is -- aims at retiring Encina no later than 2017, if not
6 sooner.

7 So given how long it takes to permit and
8 construct a power plant, I think most people would argue
9 that we're cutting too close to the edge rather than
10 anticipating a need which is well off in the distant
11 future.

12 I hope that addresses your question.

13 DR. ROE: It addresses the question, but is not
14 in conformance with my own opinion in the matter.

15 Your second statement says that this project as
16 compared to the no-project alternative improves
17 San Diego's electrical system reliability. And --

18 MR. VIDAVER: Certainly the no-project
19 alternative entails the continued operation of the
20 existing units at Encina. It's the observation I have.

21 DR. ROE: The existing current use of the -- are
22 you talking about the 1, 2, and 3, or the --

23 MR. VIDAVER: Yes, sir, 4 and 5 as well.

24 DR. ROE: They are used so minimally now and
25 probably will be less so in the future.

1 MR. VIDAVER: We're getting pretty close to -- I
2 think we're down to something like 7-percent capacity
3 factor in 2009, but the fact that they're only producing
4 7 percent of their potential output is -- says nothing
5 about the fact that they need to continue to be available
6 to the ISO.

7 DR. ROE: Thank you.

8 MR. VIDAVER: Thank you.

9 HEARING OFFICER KRAMER: That's it?

10 DR. ROE: No further questions.

11 HEARING OFFICER KRAMER: Thank you.

12 I skipped over the city.

13 Mr. Thompson, do you have any cross-examination?

14 MR. THOMPSON: Not on this topic.

15 HEARING OFFICER KRAMER: Okay.

16 Ms. Siekmann?

17 MS. SIEKMANN: I just have a couple things.

18 HEARING OFFICER KRAMER: Go ahead.

19 CROSS-EXAMINATION

20 MS. SIEKMANN: I just want to make a
21 clarification to staff that even though Chula Vista was
22 shut down, Otay Mesa did just come online.

23 MR. VIDAVER: Yes, it did.

24 MS. SIEKMANN: Thank you.

25 HEARING OFFICER KRAMER: Okay. Any redirect on

1 the technology alternative topic?

2 MR. RATLIFF: Yes, I would like to ask one
3 question, although prudence tells me that I shouldn't.

4 COMMISSIONER BOYD: You should listen to
5 prudence.

6 REDIRECT EXAMINATION

7 MR. RATLIFF: I'd like to ask Mr. Vidaver to
8 address what the renewable potential in the San Diego area
9 is in his opinion.

10 MR. VIDAVER: I previously discussed ad nauseam
11 what I think the potential for PV is in San Diego. And
12 Mr. Rostov raised several reports which indicate that
13 there is a substantial potential for utility scale
14 renewable development in the San Diego area. And I'll try
15 and keep this under about, oh, maybe two minutes.

16 In approving the long-term procurement plans of
17 the investor-run utilities in December of 2007, the Public
18 Utilities Commission found that there was going to be
19 something on the order of hundreds if not thousands of
20 megawatts of central station renewable developed in the
21 PG&E and southern California Edison service areas.

22 Its assumption for San Diego Gas & Electric was
23 conservatively that no renewable capacity would be
24 developed in the San Diego local reliability area. This
25 is not to say that there isn't the potential for a

1 substantial amount of development of central station
2 renewables at Imperial Valley, but Imperial Valley lies
3 outside the San Diego local reliability area and wouldn't
4 provide the local capacity needed to meet local capacity
5 requirements.

6 Utility scale renewable development to date
7 inside the San Diego local reliability area pales in
8 comparison to the potential that Mr. Rostov cites. The
9 renewable power plant agreement -- excuse me, power
10 purchase agreement list that is on the CPUC's website
11 shows that there are currently ten contracts that
12 San Diego Gas & Electric has for central station
13 renewables inside the San Diego local reliability area.

14 Three of them have been canceled, so we're down
15 to seven facilities. One is currently experiencing
16 various types of permitting problems, the exact nature of
17 which I'm not familiar with, that's the Bull Moose
18 facility, which is 25 to 27 megawatts, depending on which
19 document you're looking at, and it is actually assumed by
20 the California ISO to be part of the system in its
21 estimates of local capacity requirements for San Diego.

22 The remaining six contracts, Sycamore Gas
23 recovery systems, 2.5 megawatts. Rancho Penasquitos,
24 small hydro. San Diego County Water Authority, 4.5
25 megawatts. And I believe the net qualifying capacity,

1 which the ISO uses to determine the capacity value of that
2 resource, is actually just under 3 megawatts.

3 The Kumeyaay Wind Facility, 50 megawatts
4 nameplate. It has a net qualifying capacity, according to
5 the ISO, of just under 7 megawatts for local capacity
6 requirement purposes. Covanta Otay 3, a new biogas
7 facility, 3.75 megawatts. And then two existing biogas
8 facilities which predate the RPS, Otay 1, Sycamore
9 Energy 1 totaling 3 megawatts.

10 So we have seen for local reliability purposes
11 something on the order of maybe 10, 12 megawatts from
12 central station renewable development in the San Diego
13 local reliability area.

14 Looking outward, yes, we might see more
15 development in the future. The Renewable Energy
16 Transmission Initiative has identified two competitive
17 renewable energy zones or CREZs as they're more commonly
18 known. They're the San Diego North Central Zone and the
19 San Diego South Zone. However, neither of these CREZs is
20 assumed to provide renewable energy in the 33-percent RPS
21 reference case that was developed by E3 and Black & Veatch
22 for submittal in the CPUC long-term procurement plan and
23 referenced by both you and Mr. Hunt on numerous occasions
24 this evening.

25 So while it would be pleasant if -- it would be

1 very nice if large amounts of central station renewables
2 were developed in the San Diego local reliability area, I
3 think if Mr. McIntosh were here, he would probably agree
4 with me if I were to say it would be kind of imprudent to
5 plan on those as alternatives to the proposed project.

6 And it perhaps goes without saying, but, of
7 course, I will, that the -- many of these projects, wind
8 and rooftop solar are really kind of imperfect
9 alternatives for combined cycle. They don't provide,
10 other than capacity in the case of solar peaking capacity,
11 and a not insignificant amount of energy, they don't
12 really provide the services that Mr. McClary has outlined
13 the project as providing with respect to dispatchability
14 and the ability to ramp up and down quickly, et cetera,
15 et cetera.

16 So, sorry, two and a half minutes. That's my
17 response.

18 HEARING OFFICER KRAMER: Anything more,
19 Mr. Ratliff?

20 MR. RATLIFF: No.

21 HEARING OFFICER KRAMER: Okay.

22 MS. SIEKMANN: Mr. Kramer, may I make one more
23 comment after what he just said --

24 HEARING OFFICER KRAMER: Okay.

25 MS. SIEKMANN: -- in way of a question?

1 HEARING OFFICER KRAMER: Go ahead.

2 MS. SIEKMANN: Based on what you just said, don't
3 you feel that, once again, SDG&E's contract decisions are
4 a very large missing item in this hearing?

5 MR. VIDAVER: The contracts that San Diego Gas &
6 Electric have entered into or have proposed that they
7 enter into in advice letter form to the CPUC are public
8 information. If San Diego Gas & Electric is currently
9 negotiating with other central station renewable
10 developers for additional projects, I'm unfamiliar with
11 that because I'm not a member of the procurement review
12 group that allows San Diego to share that information with
13 non-market participants, and even if I were, like the
14 gentleman down there, I would be bound by confidentiality
15 constraints not to discuss it.

16 MS. SIEKMANN: Thank you.

17 HEARING OFFICER KRAMER: Okay. Thank you.

18 That closes the topic, the subtopic of
19 technological alternatives, and we will move on to the
20 other subtopic of locational alternatives. And to be
21 clear, the technological alternatives category also
22 included the no-project alternative.

23 So let's go through the list again, beginning
24 with the Applicant.

25 Do you have direct testimony on the locational

1 alternatives?

2 MR. McKINSEY: I do.

3 Mr. Mason has already spoken a few times, so I
4 won't ask him to introduce himself.

5 DIRECT EXAMINATION

6 MR. McKINSEY: Can you describe the universe of
7 alternative sites that have been proposed in this
8 proceeding?

9 MR. MASON: Yes. They include the Encina Waste
10 Water Authority Site, the Merckle site, KATO, Oaks North,
11 and the Carlsbad Safety Center and Fleet Center -- Fleet
12 Service Center.

13 MR. McKINSEY: So that's five sites generally.

14 MR. MASON: Generally, yes.

15 MR. McKINSEY: Have you reviewed the staff's
16 testimony regarding alternatives?

17 MR. MASON: Yes.

18 MR. McKINSEY: Do you concur with the staff's
19 analysis in the FSA that the Merckle, Oaks North, and KATO
20 sites do not avoid or substantially lessen environmental
21 impacts?

22 MR. MASON: Yes, I do.

23 MR. McKINSEY: Do you agree with staff's
24 conclusion in the FSA that the Encina Waste Water
25 Authority site does not meet alternative screening

1 criteria because it lacks sufficient acreage?

2 MR. MASON: Yes, I do.

3 MR. McKINSEY: And do you agree with the staff's
4 conclusion regarding the Safety Center site, and if so,
5 can you explain?

6 MR. MASON: Yes, I do. This site does not meet
7 the alternative screening criteria based on the potential
8 for it to result in significant unmitigatable impacts,
9 potential significant land use compatibility issue and the
10 lack of nearby transmission lines.

11 MR. McKINSEY: Have you reviewed the city's
12 testimony regarding alternatives?

13 MR. MASON: Yes, I have.

14 MR. McKINSEY: What alternative sites does the
15 city claim are available for this project?

16 MR. MASON: They note the Fleet Service site and
17 also an area of the Oaks North location called the Phase 3
18 Center.

19 MR. McKINSEY: So is the Fleet Services site the
20 same as the Safety Center site that was dismissed by the
21 staff?

22 MR. MASON: As I understand it, it's adjacent to
23 the Safety Center site, and the reasons the staff rejected
24 the Safety Center site also apply to the Fleet Service
25 site as well.

1 MR. MCKINSEY: Are there other reasons for
2 rejecting the Fleet Services site?

3 MR. MASON: Yes, sir.

4 MR. MCKINSEY: And what are those?

5 MR. MASON: It is incompatible with the McClellan
6 Palomar Airport Land Use Compatibility Plan that was
7 adopted in January, I think January the 25th of 2010.

8 MR. MCKINSEY: Does the Fleet Services site have
9 any high-voltage transmission lines?

10 MR. MASON: No. Significant construction would
11 be required to develop transmission lines, connections for
12 the Fleet Service Center.

13 MR. MCKINSEY: Is the Fleet Services site an
14 environmentally-superior alternative to the proposed
15 project site?

16 MR. MASON: No, the Fleet Service site does not
17 avoid or substantially lessen environmental impacts when
18 compared to the proposed CECP site for various reasons,
19 including the sites existing land use designation would
20 require an amendment to the city's general plan and zoning
21 code. The current general plan "G" designation,
22 government use, and "OS," open space, zoning designation
23 does not list power plants as a permitted use or a
24 conditional permitted use.

25 MR. MCKINSEY: Okay. I'd like to also now ask

1 you about the city's other proposed site that you
2 mentioned, the Oaks North --

3 MR. MASON: Before we go on, I did have a couple
4 of other points that I forgot to mention about the
5 Fleet Service site.

6 Also, that the Fleet Service site is
7 approximately eight acres and is insufficient size for
8 CECP. And construction of any facility on the site would
9 also require the removal of existing public buildings and
10 structures.

11 MR. MCKINSEY: Thank you.

12 I'd like to ask you a couple questions about the
13 city's proposed Oaks North Phase 3 site.

14 First, is the Oaks North Phase 3 site proposed by
15 the city the same as the Oaks North site analyzed by the
16 staff in the FSA?

17 MR. MASON: Generally, however, the FSA analyzed
18 the entire 414 acre Oaks North site, whereas the city
19 proposed only a portion of the Oaks North site as an
20 alternative, which they refer to as the Oaks North
21 Phase 3.

22 MR. MCKINSEY: Is a project like the Carlsbad
23 Energy Center compatible with the Oaks North Phase 3
24 location?

25 MR. MASON: No. As with the Fleet Service site,

1 the Oaks North site is within -- is inconsistent with the
2 Airport Land Use Compatibility Plan as it's zoned -- it's
3 located within zone 6, and within that zone 6 from the
4 compatibility plan, no new sites or land acquisitions for
5 a power plant the size of CECP can occur in that zone,
6 which is where, again, the city is proposing to locate an
7 alternative site, either entirely within zone 6 or at
8 least partially within zone 6.

9 MR. MCKINSEY: And does the Oaks North site have
10 high-voltage transmission lines?

11 MR. MASON: No. It would also require
12 significant construction to bring in transmission lines to
13 that site.

14 MR. MCKINSEY: And so is the Oaks North Phase 3
15 site an environmentally-superior alternative to the
16 proposed project site?

17 MR. MASON: No, it is not. Again, it does not
18 avoid nor substantially lessen environmental impacts when
19 compared to the proposed CECP site for various reasons,
20 including that the existing land use designation for that
21 site would require an amendment to the city's general plan
22 and zoning code for a power plant to be located at that
23 site, and such amendments would need to first undergo a
24 full environmental impact analysis pursuant to CEQA.

25 Also, the current planned industrial general plan

1 designation and zone designation do not list power plants
2 as a permitted use or conditional permitted use on that
3 site. Further, the use of the Oaks North Phase 3 site are
4 limited to the scope of the existing EIR for the Oaks
5 North area, the subdivision map, and the associated
6 entitlement for that site. Also, the Oaks North EIR does
7 not evaluate or did not evaluate a power plant being
8 constructed at that site. And then lastly, the site is
9 privately owned, is not fully graded, and would require
10 significant construction activities for transmission line
11 connection.

12 MR. MCKINSEY: So, in summary, are any of the
13 alternative sites proposed by any of the parties feasible
14 and environmentally superior to the project site proposed
15 for this project?

16 MR. MASON: No. The CECP site as proposed by the
17 Applicant is environmentally superior to all alternative
18 sites identified by the parties; and, in fact, none of the
19 identified alternative sites have compatible zoning for a
20 power plant, except for the Encina Waste Water Authority
21 site, which is completely built out with existing
22 facilities.

23 MR. MCKINSEY: Thank you.

24 That concludes our direct testimony.

25 HEARING OFFICER KRAMER: Thank you.

1 Staff?

2 MR. RATLIFF: Staff witnesses on the remaining
3 portion of the alternatives analysis are Mike Monosmith,
4 Neghar Vahidi, and I believe it's Scott Debauche?

5 Pleased to meet you, Mr. Debauche. We've spoken,
6 but I've never seen you in the flesh.

7 I don't -- at this hour, I don't know if I want
8 to go through qualifications. Can we just assume that
9 those are sufficient for right now?

10 HEARING OFFICER KRAMER: Does any party have a
11 question about the qualifications of any of the witnesses?

12 You can avoid that then.

13 MR. RATLIFF: I think I'll ask Ms. Vahidi to be
14 the summary witness for the three witnesses, and if the
15 other two witnesses have something that they wish to
16 include, they can include it afterwards, but I'll address
17 these questions to Ms. Vahidi.

18 DIRECT EXAMINATION

19 MR. RATLIFF: Could you summarize the nature of
20 the alternatives analysis that you did for this case?

21 MS. VAHIDI: Sure. The purpose of our
22 alternatives analysis for the site alternatives was to
23 provide an analysis of a reasonable range of feasible
24 alternatives that could substantially reduce or avoid any
25 of the proposed project's potentially significant adverse

1 impacts, but while at the same time obtaining the basic
2 project objectives, and this is all pursuant to the
3 California Environmental Quality Act guidelines
4 requirements, which I will refer to as CEQA from now on.

5 MR. RATLIFF: And in your consideration of
6 alternatives, did you look at alternatives -- among the
7 alternatives that you looked at, were there alternatives
8 that the city proposed to you to look at as alternative
9 sites?

10 MS. VAHIDI: Yes. We looked at five site
11 alternatives. Four out of the five were recommended by
12 the city. To point out, two out of those four, the city
13 filed formal information into the record. And Mike
14 Monosmith can speak further to this issue.

15 The other two, we did receive some verbal input.
16 And, again, the fifth site was the site mentioned that was
17 mentioned by the Applicant in the AFC that was screened
18 out from further evaluation.

19 MR. RATLIFF: What considerations were most
20 important to you when you analyzed these alternatives?

21 MS. VAHIDI: Yes, there's a number of
22 considerations when you're doing CEQA site alternatives
23 analysis.

24 First, we evaluate each alternative to determine
25 whether it meets the basic project objectives. And then

1 we conduct a basic environmental analysis of the
2 alternative on a comparative basis to a proposed project.

3 It's important to point out that under CEQA we're
4 required to look at the project as described in the
5 application provided. So when we look at alternatives, we
6 do have to consider how they meet the project objectives
7 that the Applicant has.

8 The other considerations we give as we look at a
9 comparative environmental analysis of all of the critical
10 issue areas, meaning the ones that had impacts that were
11 mitigated, I will point out that based on our FSA analysis
12 in whole, and Mike can verify this, we did not have any
13 impacts that were unmitigated.

14 And that's pretty much the basic.

15 MR. RATLIFF: Did you conclude that any of the
16 project alternatives, locational alternatives that you
17 looked at were environmentally preferable?

18 MS. VAHIDI: No.

19 MR. RATLIFF: Could you explain?

20 MS. VAHIDI: Yes. The sites that were looked at,
21 as was mentioned earlier, again, everybody needs to sort
22 of understand the fact that when you're doing CEQA
23 alternatives analysis, we don't -- clearly we're not going
24 to look at each alternative site at the same level of
25 detail as the proposed project. But there are a number of

1 considerations when you're looking at site alternatives
2 that based on years of experience you can immediately tell
3 whether something is going to be feasible or not or
4 whether it will result in certain types of impacts.

5 A number of these sites did have -- were
6 undeveloped, so that's one of the considerations. One of
7 the most critical, I think, points is to look at the fact
8 that a lot of these sites would have greater linear
9 infrastructure impacts when compared to the proposed
10 project because they do have to all connect with a
11 high-voltage transmission line into the grid.

12 So the transmission line impacts, I think,
13 related to everything from right-of-way acquisition to,
14 you know, system considerations, so on and so forth, and
15 construction impacts would be far greater than the
16 proposed project.

17 MR. RATLIFF: Does aviation safety come into play
18 regarding the suitability of any of the sites?

19 MS. VAHIDI: Yes, absolutely. And on that issue,
20 I will have Scott speak to that because he is our
21 transportation and traffic expert.

22 MR. DEBAUCHE: In addition to the points that
23 Mr. Mason made in regards to both the Oaks North and the
24 Safety Center sites being incompatible with the airport's
25 land use plan, some of you might recall from the PSA

1 workshop Mr. David Butterfield from the FAA was there, and
2 they -- he conducted what is called a safety risk
3 assessment, and that has to do with the upward thermal air
4 plumes from the proposed stack.

5 And he looked at the proposed CECP site as well
6 as the Oaks North and the Safety Center site. And based
7 on his evaluation, he found that aircraft at the proposed
8 CECP site should maintain a altitude greater than 1200
9 feet. And he found that both alternative site locations,
10 that they should avoid flying below 1600 feet.

11 Now, based on the traffic patterns, the arrival
12 and departure patterns of the Palomar Airport, the FAA
13 found that typically aircraft are above 1200 feet at this
14 CECP site. However, at the Oaks North and the Safety
15 Center site, the typical recommended attitude would put
16 them at 1500 feet, which is underneath what he found to be
17 a safety risk, that aircraft should stay above 1600 feet.
18 So that would create a significant aviation impact at
19 those sites.

20 MR. RATLIFF: Does that conclude your answer?

21 MR. DEBAUCHE: Yes.

22 HEARING OFFICER KRAMER: So that's 1600 feet
23 above --

24 MR. DEBAUCHE: Sea level.

25 HEARING OFFICER KRAMER: Okay.

1 MR. DEBAUCHE: He had slides there, part of the
2 record that are the docketed, where he has the
3 calculations and the over-flight data.

4 MS. VAHIDI: And the reason for them having --
5 being at 1500 feet is because of the way they have to
6 approach the airport.

7 MR. DEBAUCHE: The recommended traffic pattern
8 for aircraft arriving and departing the runway at the
9 Safety Center site and at the Oaks North site put them at
10 1500 feet above sea level. Based on, if the project were
11 built there, impacts would occur under 1600 feet. So by
12 following the recommended traffic pattern, it would put
13 them at safety risk.

14 HEARING OFFICER KRAMER: Okay. And that's
15 because the ground elevation at that point is 400 feet?

16 MR. DEBAUCHE: It's considerably higher, yes.

17 HEARING OFFICER KRAMER: Okay. Those exhibits,
18 are they a part -- it's one thing to say they're docketed,
19 but are they also listed on the exhibit list?

20 MR. MCKINSEY: I believe they're on the exhibit
21 list.

22 MR. MONOSMITH: They're not.

23 Oh, they are?

24 HEARING OFFICER KRAMER: Just for the written
25 record, called the transcript, could we -- somebody come

1 up with that number?

2 MR. MCKINSEY: What's the date of the
3 presentation?

4 MR. MONOSMITH: I believe January 2009.

5 MS. VAHIDI: January 8th, 2009.

6 MR. GARUBA: It's 183. Exhibit 183.

7 HEARING OFFICER KRAMER: Thank you.

8 To orient myself here, I'm looking at the map.

9 The airport is the one that runs along Highway 12; is that
10 right? Just below sort of -- I guess this is southwest,
11 it's called Palomar Airport on the --

12 MS. VAHIDI: Yes.

13 HEARING OFFICER KRAMER: Looking at the exhibit
14 in the alternatives section.

15 MR. RATLIFF: Correct.

16 MS. VAHIDI: You are correct.

17 MR. RATLIFF: And finally, Ms. Vahidi, did visual
18 resources complicate the suitability of any of the sites
19 that you examined?

20 MS. VAHIDI: Yes, it did. And I will let Scott
21 also handle that because he's also somewhat of a visual
22 expert.

23 MR. MONOSMITH: Again, similar like aviation,
24 because the alternative sites are at a higher elevation,
25 being inland and more in a higher topographical area, site

1 reconnaissance that we did, we found that there's a number
2 of residential developments, hillside developments to the
3 north and to the east of the sites. And by developing the
4 project and the required stack would definitely impact
5 viewsheds from those residential developments that
6 currently have line of sight to those locations versus the
7 existing site which has an existing stack.

8 MS. VAHIDI: And to point out, again, the
9 required transmission lines, the above ground, and I'm
10 assuming 230-kb or 138-kb lines would be -- actually also
11 have a great visual impact because they would be running
12 through the city -- we don't know where yet, obviously --
13 but that would be a potential visual impact in addition to
14 the actual power plant site.

15 MR. RATLIFF: Thank you.

16 That concludes my direct testimony.

17 HEARING OFFICER KRAMER: Thank you.

18 The city with Mr. Garuba?

19 DIRECT EXAMINATION

20 MR. THOMPSON: You ready to go?

21 MR. GARUBA: Yes, sir.

22 MR. THOMPSON: We may have just increased it by
23 about an hour and a half by staff's presentation. We'll
24 try and keep it low.

25 Mr. Garuba, you've been previously sworn. Are

1 there any exhibits that you're testifying to?

2 MR. GARUBA: Yes, my name is Joe Garuba. I'm
3 with the City of Carlsbad.

4 I am sponsoring a city manager's letter of
5 support for -- to SDG&E for a bid by Pattern Energy into
6 an alternate site, that's Exhibit 425. I'm sponsoring
7 Exhibit 426, which is the FAA feasibility report that the
8 city requested from them. I'm sponsoring Exhibit 427,
9 which is a cumulative project description. And then
10 Exhibit 429, which is City of Carlsbad chronology for the
11 Encina power plant. Finally, it's already in the record,
12 but I think Exhibit 44 would deal with the land use issues
13 as well.

14 MR. THOMPSON: Could you please summarize your
15 testimony on alternatives?

16 MR. GARUBA: Yes.

17 Rock star close.

18 Based on our analysis, the city and redevelopment
19 agency have determined that the CECP does not conform to
20 the applicable LORS. As recognition of the potential need
21 to site a new power plant within our region, the city took
22 it upon itself to look at the alternative analysis and
23 offer solutions that would meet the future energy needs of
24 the region while preserving and enhancing our quality of
25 life and coastal resources. We are the ones that are

1 going to have to live with the new power plant if
2 approved.

3 While we believe the CECP project objectives are
4 narrowly drawn, we think the alternate sites will fill
5 those objectives and eliminate those LORS violations and
6 significant environmental impacts while providing benefits
7 to the community.

8 Based on the city's cooperation with the power
9 plant developer who bid into the 2009 San Diego Gas &
10 Electric RFO, power generation and alternate site could be
11 able to provide the majority of benefits sought by the
12 CECP.

13 That being said, from a land use planning
14 standpoint, we deal with planning large projects. It
15 seems like there is this disconnect in planning regional
16 power supply in the system. SDG&E and is the responsible
17 agency for this region in making sure the lights stay on.
18 They are going through the RFO process.

19 The RFO specifically stated they want to bring
20 new resources on to help retire aging power plants that
21 use OTC. We fully support that. And they know what the
22 needs of the region are, and they appear to be going in
23 the wrong direction.

24 HEARING OFFICER KRAMER: Can I ask before you go
25 off the subject then, how big was this Pattern power plant

1 proposal in megawatts?

2 MR. GARUBA: Yes, sir. The Pattern proposal was
3 300 initially, scalable upwards of 500 at the fleet site
4 and 500 plus at the Oaks North site. They proposed a
5 series of peaker units. I believe they're LM6000s, which
6 are compatible with the land use plan that was just
7 adopted by the San Diego County Airport Authority. It
8 says zone 6 peakers are allowed.

9 HEARING OFFICER KRAMER: Okay. So this is not in
10 the City of Carlsbad, then.

11 MR. GARUBA: It is in the City of Carlsbad.

12 HEARING OFFICER KRAMER: But you're referring to
13 somebody else's zoning?

14 MR. GARUBA: No. Well, I'm referring to the
15 airport land use plan.

16 HEARING OFFICER KRAMER: Okay. So it's the
17 city's airport land use plan.

18 MR. GARUBA: It's actually the county's airport
19 land use plan.

20 HEARING OFFICER KRAMER: Okay.

21 MR. GARUBA: This is one of those nesting dolls
22 that we talked about earlier.

23 HEARING OFFICER KRAMER: Yeah. So the city would
24 have zoning as well, and you were saying it would be
25 consistent with that?

1 MR. GARUBA: Talking about land use, I think,
2 land use for power plants is really interesting. You
3 know, the city hasn't changed its land use on a utility
4 designation since 1972 when it was created. And when
5 deregulation occurred, there became this big split because
6 we have nothing in our land use LORS that deals with
7 merchant power plants. They're not public or quasi-public
8 uses, at least my interpretation of the Chula Vista case,
9 we looked at that and we thought that was sort of an
10 interesting explanation.

11 And so we've asked city council to direct staff
12 to go off and figure out what appropriate land use
13 designations need to be for power plant, a merchant power
14 plant specifically.

15 Council authorized that land use analysis,
16 staff's moving forward on that. That's in Resolution 404.
17 That deals with the entire city. It was part of the
18 moratorium that dealt with the coastal side that was a
19 companion bill that went that night, but council's
20 recognized its land use split and has directed staff to go
21 fix it.

22 HEARING OFFICER KRAMER: Okay. But the zoning
23 for the Pattern property is what?

24 MR. GARUBA: The current zoning for the Pattern?
25 Well, let me be more specific.

1 The company that bid into the SDG&E and RFO
2 offered -- had two sites, there were options. One was
3 city owned, and that was the first option, that's the
4 fleet site; and then they bid the Oaks North site as a
5 backup because it has some features that we found to be
6 very attractive, such as the size of the property and the
7 ability to co-locate San Diego Gas & Electric's
8 maintenance out there. We're in negotiations with them.

9 So the property for the City of Carlsbad is
10 currently zoned, I think, "G" and open space. We were
11 going to -- we've negotiated -- or we had discussed a
12 long-term lease agreement with them.

13 For the Oaks North site they were going to
14 purchase it, and we would be going -- by the time they
15 reached the AFC process, we would have reevaluated land
16 use designation.

17 HEARING OFFICER KRAMER: But the current zoning
18 is what?

19 MR. GARUBA: The current zoning is planned
20 industrial.

21 HEARING OFFICER KRAMER: Okay. Thank you.

22 MR. GARUBA: Yes, sir.

23 MR. THOMPSON: Since the committee has not had a
24 chance to see the proposed alternate sites, really, let's
25 talk about two, the two main ones that you've been talking

1 about. Could you describe those sites and where the
2 proposed LM6000 power plants would be located, especially
3 on the Oaks North site?

4 MR. GARUBA: Yes, thank you.

5 The two -- the first is the Fleet Services site.
6 And I think there's a description in my testimony on those
7 sites on page 9. But the Fleet Services site is an
8 eight-acre parcel that's already graded and paved over.
9 It's adjacent to our public Safety Center on one side.
10 We're also going to have a shooting range on the other.
11 It's located approximately 400 feet away just on the other
12 side of the road from the trash transfer station in the
13 region, and it's in the middle of our industrial corridor.

14 The other notable thing is we've identified the
15 nearest residential development, and it's more than 2,000
16 feet away, that's a single home. And then the nearest
17 large residential development is over 3,000 feet away.

18 We've included all of the linear projects or the
19 linear facilities in our testimony.

20 The Oaks North site is -- the parcel that we
21 focused on was a -- it's known as Phase 3. It's a 55-acre
22 parcel. It's predominantly graded. It has varying
23 topography that goes from approximately 330 feet in
24 elevation to nearly 500 feet or a little bit greater.
25 It's backed by a large open space preserve, and it is too

1 in the middle of -- or sort of on the eastern edge of our
2 industrial corridor. There's a number of topography
3 changes which we believed would help screen the project as
4 well.

5 One of the benefits of the Oaks North site that
6 we liked was the large land mass and the ability to
7 co-locate some of those coastal facilities inland to then
8 allow for the meaningful redevelopment of the coastal
9 zone.

10 MR. THOMPSON: The staff talked about 230-kb
11 lines in the street. What was the city's requirement?

12 MR. GARUBA: Yes, the city required through our
13 agreement with Pattern that they underground those lines.
14 They agreed to that. We had identified the distance to
15 the proposed switch yard was approximately 12- to 14,000
16 feet. I believe that's in our testimony. The city has
17 right-of-way either through streets or through city-owned
18 property. There was one segment which would need to have
19 gone through an SDG&E right-of-way. We had engaged with
20 SDG&E in those discussions; they understood and had
21 acknowledged that was a feasible location.

22 MR. THOMPSON: Now, did you speak to the
23 right-of-ways?

24 MR. GARUBA: I think so. Well, you know -- we
25 deal with right-of-way all the time. Poseidon desal

1 plant's a good example. We're putting a 60-inch water
2 line through the center of town that's going to go for
3 eight miles. We understand the impacts of that. We see
4 those as temporary in nature, and we're used to dealing
5 with stuff going in our street and in our right-of-ways.

6 The one thing the city was adamant about, and I
7 appreciate Ms. Vahidi's comment about the potential impact
8 for power lines, we required those to be underground.
9 It's for the very reason we don't like the visual impact
10 of power lines that we want to move the existing power
11 station and move the switch yard to a more easterly
12 location so we can free up the strawberry fields from the
13 power lines that currently run to Encina power station.

14 MR. THOMPSON: Thank you. It appears that staff
15 and Applicant both evaluated the alternative of only
16 putting the CECP technology at these sites. Do you agree
17 that that was a correct assumption?

18 MR. GARUBA: No. I think if you're looking at
19 getting energy into the region, then you should look at
20 the feasible alternatives, including different types of
21 generation. The developer that we worked with through a
22 series of discussions bid different technology, clearly.
23 And that had a number of benefits.

24 The first is -- and I'll talk about it from the
25 city's perspective and then I can briefly talk about it

1 from what we see as meeting the project objectives. But
2 we like the peaker units, the LM6000s for a number of
3 reasons. One, the stacks are about half as high as what
4 the Siemens product is. We took our planners to a site
5 visit. You've heard the city say there's height
6 limitations. That's still the case. But if we were going
7 to have to live with something, we like that okay. And so
8 I think our planners were comfortable with the impact that
9 we presented from the LM6000s.

10 The second is they clearly have a smaller
11 footprint and mass than what the proposed CECP does. And
12 also, their ability to be located due to this smaller
13 massing in an industrial area where we could appropriately
14 screen it, we felt comfortable with.

15 Some of the reasons why I've heard -- just in
16 discussions with the developer, and I'm not an expert on
17 LM6000s and wouldn't pretend to be, but they like the fact
18 that they were approximately 50 megawatts apiece, they
19 were dispatchable in different loads. I think they could
20 be brought up at like 50-percent capacity, which allowed
21 for, you know, in the daisy chain sequence that they had,
22 you could bring one up even as low as a 25-megawatt
23 capacity. They had a quick-start capability which aided
24 with the renewables. And they also corresponded to the
25 SDG&E RFO. That's where we sought a lot of guidance from.

1 MR. THOMPSON: Have you had any -- I realize that
2 you previously have testified to some of the renewable
3 effort that the city is ongoing with SDG&E.

4 Have you had any other conversations, meetings
5 with SDG&E and the community benefits of the alternate
6 sites?

7 MR. GARUBA: We actually talk to SDG&E quite
8 frequently. Our paths tend to cross almost on a weekly
9 basis.

10 We have talked with them extensively, not only
11 about the energy-efficiency projects and the development
12 of renewables within the city. Somebody talked about the
13 200 megawatts that SDG&E is trying to go through the PUC.
14 They're actually looking at some of our land for that for
15 some of that solar. But we've also talked at length about
16 relocating their switch yard. They've agreed, and they
17 understand that that switch yard's not going to be there
18 for very much longer -- not the switch yard, the
19 maintenance yard.

20 They have a maintenance facility adjacent to the
21 existing Encina power station site which has sort of
22 outgrown its fitting with the surrounding character of the
23 community, so they've agreed to relocate that, and we're
24 working with them on that process.

25 They've agreed that they understand the city's

1 concern about the switch yard and their switch facility.
2 And we're in discussions with them about relocating that
3 switch facility to a location more easterly that would
4 allow potentially the reduction or the removal of the
5 power lines along the Cannon corridor, is what we call it,
6 it's those strawberry fields.

7 And then, finally, we had extensive discussions
8 with them on the alternate sites and what kind of
9 qualities they would look for in any kind of
10 infrastructure developed out there. And then also on the
11 alignments for the underground transmission lines into a
12 new switch.

13 MR. THOMPSON: Thank you. Are there benefits to
14 using existing infrastructure?

15 MR. GARUBA: Certainly. There's absolutely
16 benefits to using existing infrastructure. As somebody
17 who's not familiar with the power industry, the cost
18 associated with these are significant. That's one of the
19 reasons why we wanted to get a power company involved, a
20 power developer, because we realized we just didn't have
21 at that expertise.

22 But using existing infrastructure makes sense
23 only if it's -- if it fits the community's character and
24 the benefit going forward. And in an area like the
25 coast -- and you've seen the existing Encina site --

1 there's so much potential from redevelopment that the
2 continuation of that use, you just seem to be not fitting
3 with the community character, and it really diminishes the
4 city's ability to it grow into the future from a
5 qualitative standpoint.

6 I would like to say, and I think I've already
7 said this, the CECP isn't -- maybe I didn't say this --
8 the CECP still needs new infrastructure. I think they're
9 proposing a new switch yard. They're clearly going to
10 need a desalination plant to support their needs, and so
11 they are not without some level of infrastructure created.

12 And then lastly, we did look at using
13 power-related infrastructure when we looked at our
14 alternate sites. One of the reasons why we focused in on
15 the easterly portion of the community is because there's a
16 high-pressure gas line that serves -- that exists out that
17 way. And so we tried to leverage any project out there
18 and diminish the cost by looking at those -- that gas
19 line.

20 MR. THOMPSON: Thank you.

21 Staff just had a discussion on Exhibit 183, which
22 is the FAA study. Do you have any comments on that?

23 MR. GARUBA: I do. I have a number of comments
24 on the FAA's study.

25 The first is we take safety pretty seriously.

1 You're going to hear that tomorrow. I've actually
2 responded to a number of plane crashes in the city as the
3 city's PIO officer, so I understand the impacts when
4 planes fall out of the sky.

5 Once we identify a number of sites that we were
6 interested in pursuing, we sent those to the FAA for a
7 feasibility study. We wanted to get their take on it. We
8 recognize that they're pretty important, and so they need
9 to bless whatever we're looking at.

10 Based on their response, we actually scratched a
11 number of those sites off the list pretty quickly. They
12 said some work, some don't.

13 At the PSA workshop, Mr. Butterfield gave a very
14 informative presentation. It was really very helpful for
15 us in refining our approach to the alternatives. We --
16 gave all that information over to the developer, and the
17 developer went forward.

18 One of the things I would like to note is that
19 Mr. Butterfield made some project assumptions based on
20 information we provided. And at the time we weren't that
21 savvy about power plants. We gave them elevations on the
22 Oaks North site, I think in the 480- to 500-foot range.
23 There's actually the site that the developer looked at
24 putting the plants on were just over 350, and then they
25 were using different stacks so that they would stay under

1 the 1500-foot threshold by almost a hundred feet.

2 MR. THOMPSON: Is the Fleet Services parcel large
3 enough for a generating project?

4 MR. GARUBA: It was for our developer. The
5 developer proposal for the fleets, that was for an initial
6 300 megawatts, and it was scalable for an additional 200
7 megawatts. One of the problems, and I think you heard it
8 from the staff or in the FSA alternatives analysis, is
9 that they had size requirements for a power plant. So
10 they used 23 acres. Well, that takes out a lot of options
11 for a community. You know, where are you going to find
12 23 acres zoned utility that you can put something? And so
13 we felt that was arbitrary, and actually, in this case, it
14 was unneeded.

15 I've also noticed on the CEC website there's been
16 several power plants that have been constructed on sites
17 of around eight acres. Von Raesfeld was on three acres,
18 Malburg was at six. Sutter, which is a 540-megawatt
19 plant, was on ten acres.

20 MR. THOMPSON: In reviewing alternatives, what
21 role does SDG&E have?

22 MR. GARUBA: Well, SDG&E and is sort of the
23 bottom line in the region. They're responsible for the
24 generation, sufficiency, and really they control what gets
25 constructed and where for our region. They issued a

1 request for offer in June 2009, I believe it was; we went
2 with them just shy of that, so in June 2009, and for
3 fossil fuel. And then there was a renewable that was
4 right on that heel.

5 Based on the RFO categories, there were a number
6 of categories. We believe their needs would be met
7 through a variety of generation resources as they move
8 through this process.

9 I will say that when you look at their RFO, they
10 ask for in the neighborhood of approximately a thousand
11 megawatts of generation. In discussions with them, we've
12 been notified they received nearly four times that amount
13 from developers, so they did have their pick of generation
14 projects for this region.

15 MR. THOMPSON: Did you find anything in the RFO
16 that betrayed SDG&E's interest in the removal of
17 once-through cooling plants and/or RMR contract?

18 MR. GARUBA: It's specifically stated in the RFO
19 that their intent is to take -- to retire the aging
20 infrastructure generation plant that utilize once-through
21 cooling, and we support that whole heartedly.

22 MR. THOMPSON: On page 622 of the FSA, there's a
23 section on conclusions and recommendations. Would you
24 discuss each one of those, please, briefly.

25 MR. GARUBA: The CEC is very good at generating

1 paper, I will say that.

2 Yes, the first conclusion is of the visual impact
3 from the sites. And I want to say two things.

4 The first is that the visual impact, to
5 characterize the alternate sites compared to the coastal
6 zone, I'm not entirely sure that they actually went to
7 that site, but the traffic, I mean, just in the traffic
8 patterns alone there's a substantial difference. The
9 streets that front both of the alternate sites have daily
10 traffic flows of approximately 4,000 cars. I-5 holds
11 200,000 a day. So just the visual magnitude of the
12 passing traffic's substantial.

13 The other issue is that we looked at -- the
14 developer proposed fundamentally different equipment which
15 had a much lower profile, which we felt could be screened
16 by the existing Eucalyptus, which are of the same stature
17 I would say as the existing Eucalyptus at the proposed
18 CECP site.

19 The second, and this is on page 6-22 of the
20 alternatives on the conclusions, the CECP is better from
21 an environmental standpoint based on existing
22 infrastructure. The alternate sites would require
23 significant infrastructure upgrades including extensive
24 transmission line development with its associated
25 additional construction and operational impacts.

1 I think the city would fundamentally disagree.
2 That aging infrastructure, while useful and cost
3 effective, is not a reason to promote the kind of coastal
4 land use that the CECP would continue. Again, I would
5 turn my eyes towards the Chula Vista decision by the
6 Commission. We felt that there was language in there that
7 addressed this issue.

8 Next issue is the CECP -- or not issue,
9 conclusion of recommendation. I'm sorry. All evaluated
10 site alternatives pose potential land use impacts and
11 implementation conflicts due to the unknown availability
12 of required utility right-of-way.

13 It might be unknown to the Energy Commission, but
14 it's actually not unknown to us. We have multiple
15 designations for right-of-way to both of those sites.
16 They could either go through the street, through Faraday
17 Avenue and then go down up through Cannon, or it could go
18 through -- or Orion across an easement adjacent to Palomar
19 Airport and then through the city golf course. Again, we
20 would have required undergrounding of those lines.

21 And it's probably worth noting, we are tearing
22 Faraday up anyways to put in a big sewer line -- or a big
23 desal line. So we felt there might be some opportunities
24 to do those projects at the same time.

25 MR. THOMPSON: Is that it?

1 MR. GARUBA: There's actually two more. I'll be
2 quick.

3 Alternate sites are likely -- the required
4 transmission lines would require zoning changes. And the
5 two sites raise potential problems associated with site
6 control.

7 Well, one site isn't an issue with site control,
8 and that's the city fleet facility. Clearly, the city is
9 willing to put its own skin in the game, we're willing to
10 host a power plant. So the site control from that wasn't
11 an issue.

12 The Oaks North property was available for sale,
13 it's still available, as least in part for sale. I
14 haven't checked on this in the last several -- in the last
15 month, give or take, but that property was available, and
16 it is sufficient in size.

17 And then the other bullets, the evaluated
18 alternatives would result in the addition of another power
19 plant and lengthy utility interconnections. I think we've
20 dealt with that. I think I've already addressed that.

21 But again, if we're going to have another power
22 plant, the city would like to be able to help define where
23 we would want it to go. Again, we're the ones that are
24 going to have to live with it. It seems like once you get
25 one power plant, you can't get rid of it, you have to have

1 another one to get rid of the first one. I don't know if
2 that's such a -- what was a boon is now a problem for us,
3 I guess. And then, again, the right-of-way issues, we've
4 already addressed.

5 The alternative sites would result in the
6 conversion of sites not currently developed with
7 industrial uses with heavy industrial development
8 associated with a power plant. Staff determines that the
9 use of the existing EPS site does not cause any
10 significant impacts.

11 If you drive around the city, we actually don't
12 allow industrial uses like Encina power station. There
13 isn't any -- except for the waste water treatment plant
14 which is low in profile, there isn't anything else like
15 that here. We're not a smoke stack industry town.

16 We recognize that this -- having another power
17 plant would be a unique event in the city's history
18 besides, you know, over the past 50 years. We had one in
19 the early fifties, we need to have another one -- I think
20 we're willing to accommodate it, but again, we would like
21 to help choose where it goes.

22 And then lastly, the alternate sites pose
23 potential unmitigable aviation safety concerns. We're
24 requiring further study or have been to determine the post
25 significant aviation and safety impacts.

1 Again, respectively, we take the FAA fairly
2 seriously. We pass all the information to the developers.
3 They felt comfortable moving forward submitting not only
4 the bid, but investing their money and the work product
5 that they could manage that process.

6 MR. THOMPSON: Finally, with regard to land use
7 compatibility, zoning, CUP, et cetera, et cetera, did the
8 city council's support of offering up the inland site
9 leave you with a message that the zoning issues could be
10 worked through?

11 MR. GARUBA: Yes. The city, at least with the
12 fleet site, we went to negotiations with council in closed
13 session. We clearly would not have made that property
14 available to the developer for a long-term lease
15 discussion without city council recognizing the impacts
16 that it would have to the site and understanding the land
17 use changes that would need to occur to accommodate that
18 project so it wouldn't be a LORS violation.

19 MR. THOMPSON: Thank you.

20 Do you have any final comments?

21 MR. GARUBA: I have a lot of comments.

22 I've worked on this for two and a half years, and
23 as somebody who's never participated in an energy process
24 before, it's a little bit overwhelming, I have to say; and
25 we have been slow to catch up. There's a lot to your

1 business, and I really respect the time and energy you've
2 given us over this past week. And the staff has worked
3 diligently with us. I think we're their problem child. I
4 was pestering the project manager on a weekly basis, if
5 not a daily basis.

6 From a community standpoint, and that's really
7 what we're talking about, we recognize the need for power.
8 The city's willing to deal with that; we're willing to
9 live with a power plant, they've said so. Council has
10 supported the development of an alternate site
11 wholeheartedly, but they've done that recognizing that
12 they want to see the coastline restored to what could be.

13 We want to embrace the future, we want to move
14 the power lines off the coast, we want to embrace the
15 retirement of Encina, and if need be, we would support the
16 development of a power plant at a different location. We
17 approached the -- let me just leave it at that.

18 MR. THOMPSON: Thank you very much. Thank you
19 for your indulgence at this late hour.

20 HEARING OFFICER KRAMER: Thank you.

21 Terramar, your witnesses.

22 DIRECT EXAMINATION

23 MS. SIEKMANN: What's your name and address?

24 MR. NOBLE: Bailey Noble. I live at
25 5470 Las Robles Drive in Carlsbad.

1 MS. SIEKMANN: Are you retired from the Marine
2 Corps?

3 MR. NOBLE: Yes.

4 MS. SIEKMANN: Could you explain your service?

5 MR. NOBLE: I went in the Marine Corps
6 September 15, 1951, as a private. I came out in 1979 as a
7 lieutenant colonel. Stationed in many places throughout
8 the world, and a lot of places they didn't want me to come
9 there and they didn't want me to come back.

10 MS. SIEKMANN: How long have you lived in
11 Carlsbad?

12 MR. NOBLE: I moved here in 1971.

13 MS. SIEKMANN: And are you a resident of
14 Terramar?

15 MR. NOBLE: Absolutely.

16 MS. SIEKMANN: And how many years were you the
17 president of the Terramar Association of Homeowners?

18 MR. NOBLE: Fourteen.

19 MS. SIEKMANN: Did you serve on the Carlsbad
20 Planning Commission?

21 MR. NOBLE: Yes.

22 MS. SIEKMANN: And how long and when?

23 MR. NOBLE: It was eight years, 1981 to 1999
24 (sic).

25 MS. SIEKMANN: And what other services have you

1 done for our community?

2 MR. NOBLE: Well, I stopped counting how many
3 boards and commissions, committees in 2000 when I got to
4 56. But some of the others -- there have been more since
5 then; but the Boys and Girls club since 1999 -- '98, and
6 just recently awarded a lifetime membership for board of
7 directors. That just means they want a bigger donation.

8 Vice president of the North County Transit
9 Management Authority in 1995, and went for six years. The
10 board of directors Western New Mexico University, 1991 to
11 current. Past president. And I'm currently on the
12 Carlsbad Charity Foundation starting in 2007 till today.
13 And I served also in the Salinization Board, I'm on that,
14 and the Citizen Advisory Commission for Commuter Rail.

15 MS. SIEKMANN: And, Bailey, were you chosen as
16 Carlsbad 2001 Outstanding Citizen of the Year?

17 MR. NOBLE: Yes.

18 MS. SIEKMANN: Do you have a problem with the
19 construction of power plants?

20 MR. NOBLE: No. We need power.

21 MS. SIEKMANN: Do you see any problems with the
22 construction of the proposed CECP?

23 MR. NOBLE: Yes.

24 MS. SIEKMANN: And may I ask why?

25 MR. NOBLE: Coastal land is not an appropriate

1 location for power plant anymore. They don't need the
2 water to build them, and we don't need to build on the
3 coastline.

4 MS. SIEKMANN: Would the proposed CECP affect the
5 vision of Carlsbad you helped to create on the Planning
6 Commission?

7 MR. NOBLE: Yes. For me, the vision of Carlsbad
8 was a safe community for families and an inviting
9 atmosphere for visitors. And a power plant right next to
10 a widened Interstate 5 is not inviting and goes against
11 the vision I had back in those days for Carlsbad.

12 MS. SIEKMANN: Are there any other issues that
13 concern you regarding the proposed CECP?

14 MR. NOBLE: Well, I have concerns about the
15 additional air pollution, and I have concerns about --
16 because the fire department has safety concerns and we
17 don't need anymore visual blight with another plant.

18 MS. SIEKMANN: Is there anything else you'd like
19 to say on the subject?

20 MR. NOBLE: Yes.

21 I've been on many boards and commissions and
22 committees, and I've made some hard decisions. And I've
23 weighed this project very fairly, and I think making a
24 decision at this time, I won't approve the location, and
25 that is enhanced by the fact that when you do not know

1 whether SDG&E is going to get a contract to get the land
2 or get any power, then to me, that means that we don't
3 need anymore power. If we don't need anymore power, then
4 why is Carlsbad being selected to provide power for
5 someone away and we won't have to be sending a
6 transmission. And I resent having to pay a transmission
7 fee for electricity not even half a mile away from the
8 power plant.

9 MS. SIEKMANN: Thank you very much.

10 MR. NOBLE: Thank you.

11 MS. SIEKMANN: And then my testimony?

12 HEARING OFFICER KRAMER: Go ahead, please.

13 MS. SIEKMANN: CEC licensed both of the most
14 recent plants in San Diego County, the Otay Mesa plant and
15 the Palomar plant, both on green fields. The Encina site
16 is a valuable piece of land in more ways than economic.

17 With the aging of Encina and the plans of the
18 state to retire plants requiring once-through cooling,
19 this valuable piece of coastal property can once again
20 become valuable to the residents and visitors of the State
21 of California.

22 Once converted to a green field, it will create a
23 huge economic opportunity for the Applicant. In addition,
24 please note the thoughts of the Coastal Commission in
25 their 1990 NOI regarding the impacts of a second power

1 plant and its visual effects.

2 The existing Encina power plant with its 383-foot
3 high stack and massive generating facilities substantially
4 degrades the visual quality of the beach and shoreline.
5 The addition of the proposed combined-cycle project with
6 its two 100-foot high stacks will add significantly to the
7 existing impacts. As well, the across the beach discharge
8 visually degrades the beach and disrupts full public
9 access and use of the beach. The addition of the new
10 proposed Encina power plant would extend the size and life
11 of this discharge channel and on a cumulative basis
12 significantly impact beach use and the visual
13 environmental.

14 Say Encina is eventually shut down and the site
15 is renovated back to a green field. If the proposed CECP
16 or some other plant is built in an alternate location, we
17 would have the same number of power plants and we would
18 have a large parcel of coastal land restored to a green
19 field and coastal use, a huge public benefit to all. This
20 would be the best alternative.

21 Thank you.

22 HEARING OFFICER KRAMER: Thank you. Now, to
23 cross-examination beginning with the Applicant.

24 CROSS-EXAMINATION

25 MR. MCKINSEY: Thank you. I have a question for

1 staff's witness and Scott -- forgive me, I don't think I
2 can pronounce your last name. It's --

3 MR. DEBAUCHE: Debauche.

4 MR. MCKINSEY: Debauche, thank you.

5 Mr. Debauche, you testified regarding the thermal
6 effects and the potential thermal effects associated with
7 the proposed site as well as the alternative sites from a
8 aviation perspective?

9 MR. DEBAUCHE: Yes.

10 MR. MCKINSEY: And if I understand correctly,
11 your testimony was that the city's proposed alternative
12 sites both suffered from being into that zone where they
13 would produce a thermal plume where flights would
14 generally be coming through that zone as they approach the
15 Palomar Airport, correct?

16 MR. DEBAUCHE: Correct. That was the -- that was
17 the conclusion of the FAA.

18 MR. MCKINSEY: And I think you just heard the
19 city's testimony that they had engaged the FAA and had
20 obtained a study that approved both those sites as being
21 clear?

22 MR. DEBAUCHE: It actually, if I recall it, it
23 only evaluated the Safety Center site. And another very
24 important thing to remember is at that time the FAA only
25 evaluated the physical structure of the stack, it did not

1 evaluate the plume.

2 MR. MCKINSEY: Correct. In fact, I was going to
3 ask you that question.

4 I'm looking at the exhibit, and my understanding
5 of that is that is only a physical obstruction, has
6 nothing to do with thermal --

7 MR. DEBAUCHE: The only -- FAA form 7460, which
8 only deals with the physical structures, whereas
9 Mr. Butterfield's testimony dealt with the upward air
10 plume.

11 MR. MCKINSEY: Thank you.

12 And then, Mr. Garuba, a couple questions for you.

13 First, did you conduct any evaluation of the
14 differential efficiencies between LM6000s and the proposed
15 technology for the project?

16 MR. GARUBA: No.

17 MR. MCKINSEY: And I think you characterized the
18 Oaks North site as predominantly graded; is that correct?

19 MR. GARUBA: Yes.

20 MR. MCKINSEY: And that's -- you definitely feel
21 that that is your testimony regarding the Oaks North site?

22 MR. GARUBA: Yes. The developable acreage of
23 Oaks North, I'd say the vast majority of Oaks North has
24 been graded and padded out. We would be happy to provide
25 an aerial map.

1 MR. MCKINSEY: Well, and when you say "the vast
2 majority," are you referring to the city's proposed
3 55-acre portion of Phase 3, or are you referring to the
4 whole site?

5 MR. GARUBA: The whole site in that comment. I
6 would -- I don't have the -- I don't have the boundary
7 lines in front of me, but the -- there is a portion of the
8 Oaks North Phase 3 that is not graded.

9 MR. MCKINSEY: Great. Thank you.

10 I have no other questions.

11 HEARING OFFICER KRAMER: Thank you.

12 Staff.

13 CROSS-EXAMINATION

14 MR. RATLIFF: Good evening, Mr. Garuba.

15 MR. GARUBA: Good evening.

16 MR. RATLIFF: When you used the term earlier
17 "merchant power plant," were you using it with the same
18 definition that Mr. McDonald used earlier in his
19 testimony, that is, a power plant that does not have a PPA
20 or a -- that is, a contract, a purchase agreement?

21 MR. GARUBA: Yes. And if I can expand on that
22 just a bit.

23 This goes back to the discussion that I had with
24 the city's land use policies not adjusting to changes in
25 regulatory schemes for the energy system. So in

1 deregulation -- when deregulation occurred, there was the
2 development of merchant plants. The city had actually
3 never dealt with that before. And so when SDG&E sold
4 their property to -- it's been a series of companies, they
5 went into private ownership.

6 We, obviously, from the inception of this
7 project, started paying more attention to licensing cases
8 at the Energy Commission, as you can imagine, and there
9 was a significant discussion on the applicability of
10 merchant power plants as a quasi or public-quasi use in
11 the Chula Vista case. We looked at our regulations.

12 We actually believe that -- well, let me say that
13 it's created enough confusion for staff at that we have
14 gone back to city council to authorize direction to
15 clarify that. So we are in the process of reevaluating
16 how a merchant power plant would fit within city land use
17 regulations.

18 MR. RATLIFF: And again, just to make sure I
19 understand your answer, merchant power plant means a power
20 plant without a contract?

21 MR. GARUBA: The way we've defined merchant plant
22 is a merchant power plant that's privately owned without a
23 contract that is for the regional benefit, in this case
24 could be SDG&E.

25 There's some nuances. I would actually defer the

1 specific interpretation to our planning staff. We would
2 be happy to make them available tomorrow if you'd like.

3 MR. RATLIFF: Thank you.

4 I have to ask out of curiosity, but how tall are
5 the stacks on the alternative site location in the project
6 that -- I believe it was Mr. Bouquet, I believe, your
7 project developer --

8 MR. GARUBA: Oh, Mr. Parkay.

9 MR. RATLIFF: Parkay, that's right.

10 The LM6000, what's the dimension of those, the
11 vertical dimension of those stacks?

12 MR. GARUBA: The vertical dimension at the fleet
13 site, again, I don't -- I was only privy to seeing those
14 briefly, and then we don't have a copy of that, but I
15 believe that the height was 60 to 80 feet, and it depended
16 on location. I think it was 70 feet at Oaks North and
17 60 feet at the Safety Center, fleet site, if memory
18 serves.

19 We also did go out to the Riverside LM6000
20 project; city of Riverside has a set of those. They're
21 fairly well screened. I believe those are in the range of
22 60 feet as well.

23 MR. RATLIFF: I ask you this question because
24 I -- from what I've seen in the past two years I think
25 you're very much in touch with sort of the local -- the

1 local viewpoint of the people who run the city. And I
2 guess the question is a subjective one, but I have to ask
3 it.

4 What is the shelf life -- the city has taken, I
5 think, a view that seems to me very enlightened inasmuch
6 as it said if we don't -- if you don't license this power
7 plant, we'll support one at a different location. But
8 what would the shelf life of that support be in your
9 opinion in this city if the Energy Commission should turn
10 down this application?

11 MR. GARUBA: That's a very good question. And
12 let me -- I wish my city attorney was here tonight. He
13 could speak to some of the legal nuances a little bit
14 better.

15 That being said, there is a development agreement
16 that the city can enter into, which once you get past
17 the -- I believe it's a 30-day process, you can -- it then
18 becomes very difficult to challenge. So you can lock in
19 project conditions going forward.

20 So things that the city would offer in support of
21 the development of a project, we would put into that
22 agreement and then the council would potentially approve
23 it, and then it has weight going forward.

24 Because the existing CEC -- or the proposed CECP
25 also falls into a redevelopment area, there is the

1 potential to do what's called an OPA, an owner
2 participation agreement, through the redevelopment
3 process. That also allows -- it's similar to a
4 development agreement. It has some other benefits to it.
5 And so we've explored both of those. But the city was
6 fully committed to going down that path if and when the
7 development moved forward.

8 MR. RATLIFF: And do you think you'd be able to
9 sustain that in light of a lot of the opposition we heard
10 to the alternative locations last night and the night
11 before?

12 MR. GARUBA: Yes.

13 MR. RATLIFF: Did the city make any pledge to
14 Mr. Parkay's project that they would make recycled water
15 available?

16 MR. GARUBA: We negotiated an agreement for an
17 expansion of the recycled plant.

18 And since we're on that topic, I think it's
19 important to explain.

20 The city currently has 400 million gallons of its
21 own. We contract for some other recyclable water, but we
22 have four million gallons that we produce on a daily basis
23 from the waste water treatment plant. And so we've spent
24 the last ten years, give or take, on a \$50 million project
25 to develop that and to sell that water.

1 From the beginning of this project, reclaimed
2 water has kind of been an issue. I didn't get involved
3 until several months after the project got kicked off
4 officially, and by that time, staff had already concluded
5 that while there is reclaimed water available during the
6 winter and sort of the shoulder months, during the summer
7 months, especially by the time this project came online,
8 the CECP, it would not have -- we would not be able to
9 dedicate water to the plant. We were all committed, we
10 were sold out, and the Applicant never came and talked to
11 the city while we were expanding our plant to say, hey,
12 we're going to build a new power plant, you know, factor
13 us in. It wasn't in any of our plans.

14 We actually talked to the Applicant about
15 expansion. They didn't like what we had to say, they
16 didn't want to -- they wanted us to do something different
17 with our system than what we have designed, and we didn't
18 feel compelled to adjust. Pattern did, and so we were
19 able to come to mutually agreeable terms.

20 MR. RATLIFF: Is it conceivable that if this
21 project were licensed, you could come to
22 mutually-agreeable terms with NRG?

23 MR. GARUBA: It's uncertain.

24 MR. RATLIFF: Thank you.

25 MR. GARUBA: Yes, sir.

1 HEARING OFFICER KRAMER: Mr. Rostov.

2 MR. ROSTOV: I have nothing on this topic.

3 HEARING OFFICER KRAMER: Thank you.

4 Mr. Thompson for the city, cross-examination?

5 MR. THOMPSON: Yeah, couple questions. Thank
6 you.

7 CROSS-EXAMINATION

8 MR. THOMPSON: Mr. Mason, did you assess the
9 scenic or aesthetic impacts from constructing a plant at
10 one of the alternate sites, say, Oaks North?

11 MR. MASON: No, we did not.

12 MR. THOMPSON: Did you do any analysis of the
13 number of homes in the viewshed at either of those sites?

14 MR. MASON: No, we did not.

15 MR. THOMPSON: And should I assume you didn't
16 count traffic at those sites?

17 MR. MASON: That's correct.

18 MR. THOMPSON: Let me wrap this up.

19 Are there other permits required from the CECP
20 before construction can begin?

21 MR. MASON: Yes, there are several.

22 MR. THOMPSON: Would you name them, please?

23 MR. MASON: There would be the authority to
24 construct from the Air Pollution Control District. There
25 would be an MPDS permit from the Regional Water Quality

1 Control Board. Those are the two that come to mind
2 directly. There may be others.

3 MR. THOMPSON: I realize that there's often a lot
4 of -- and some of them very small.

5 Do you have a State Lands Commission agreement
6 that you have to do?

7 MR. MASON: I believe that there will end up --
8 and that may be a better question to counsel in terms of
9 state lands.

10 MR. MCKINSEY: Well, I mean, it's essentially a
11 land use question, but -- and I didn't hear your question,
12 but if I understand your question, you were asking what
13 other permits were required for the existing project
14 besides the application for certification?

15 MR. THOMPSON: Yes, right.

16 MR. MCKINSEY: And so you're asking is there a
17 permit required from the State Lands Commission?

18 MR. THOMPSON: Or a lease agreement or lease
19 change.

20 MR. MCKINSEY: A lease what?

21 MR. THOMPSON: A lease agreement or a lease
22 revision.

23 MR. MCKINSEY: And so the easy answer is the
24 existing site has a lease and the proposed use of the
25 cooling system to take water off of that for the -- should

1 the project use the purified ocean water, would require an
2 amendment to that lease, because a term was placed in that
3 lease for the Poseidon project the city adopted that said
4 no other desalinization.

5 So if you take the most conservative assumption,
6 is that this project would -- that small use that the
7 project would have would constitute a desalinization
8 project and thus would require another amendment to the
9 State Lands Commission lease, and that's if it chooses to
10 use the purified ocean water option for water supply.

11 MR. THOMPSON: Thank you.

12 Let me move on to staff.

13 Mike, let me -- should I direct it to you as the
14 boss I'm usually dealing with over there?

15 And I'm going to make some references to pages in
16 your alternatives testimony. At page 6.1 you state that
17 the no-project alternative would require the existing EPS
18 units to continue to operate. Has SDG&E indicated that
19 the CECP is needed to shut down the Encina units?

20 MR. MONOSMITH: I think -- I think that was -- I
21 thought the no-project alternative was addressed earlier,
22 that that -- the comments that Dave Vidaver had, I would
23 agree to.

24 MR. THOMPSON: You have a table on Page 611. And
25 it has -- I think it was some distances. Is this table

1 intended to compare environmental impacts, project costs,
2 or something else?

3 MS. VAHIDI: It's just as it says, it's
4 comparison of the approximate interconnection distances
5 for the linear facilities.

6 MR. THOMPSON: Okay. So there's no conclusions
7 to be drawn from it.

8 MS. VAHIDI: It's just a point of information as
9 part of the information provided to talk about the -- the
10 linear infrastructure impacts, you need to know what the
11 links are.

12 MR. THOMPSON: Okay.

13 MS. VAHIDI: And by the way, the links were
14 provided by this -- a lot of the links were provided by
15 the city.

16 MR. THOMPSON: I'd like to turn to the
17 magenta-colored pages starting at 612. You have a chart
18 that goes on for a couple pages. Let me just briefly
19 mention each one of them and see if I'm correct.

20 Air quality, under Oaks North -- and that's what
21 I'll be comparing, Oaks North to CECP -- the comment there
22 is for construction emissions; is that right?

23 MS. VAHIDI: Yes.

24 MR. THOMPSON: And for land use, again, Oaks
25 North, the nearest receptor is 2500 feet, for CECP it's

1 1700 feet; is that right? You can refer back to the table
2 that I referred to previously on 611 if you'd like.

3 MS. VAHIDI: Correct.

4 MR. THOMPSON: So the nearest receptor for
5 Oaks North is farther than it is for CECP.

6 MS. VAHIDI: Right. But the reason for the
7 conclusion of greater than the proposed site is not just
8 because of the statement made, and also it's regarding --
9 when we say -- when we make a statement greater than, it's
10 not just because of the -- the writing that's not in bold
11 is not the only reason given as the greater than. These
12 are just points of clarification that were put into the
13 table to just sort of illuminate sensitive receptor
14 locations, so on and so forth. So that's not the only
15 reason.

16 MR. THOMPSON: Turning to the next one,
17 biological resources?

18 MS. VAHIDI: Yes.

19 MR. THOMPSON: And I think that's a construction
20 impact as well, of right-of-way and city streets. Is that
21 what it says there?

22 MS. VAHIDI: For which site? For the Oaks North?

23 MR. THOMPSON: Oaks North versus CECP.

24 MS. VAHIDI: Yes.

25 MR. THOMPSON: And now noise. Oaks North again,

1 construction noise.

2 MS. VAHIDI: Say that again. I'm sorry.

3 MR. THOMPSON: Oaks North versus CECP, the
4 comment is based on construction.

5 MS. VAHIDI: Yeah. Again, these conclusions are
6 not all just based on -- the stuff in the table, the
7 conclusions in the table are not only focused on just
8 those stated items. There's a lot of other text. I can
9 go into it if you want about what the comparative impacts
10 are.

11 MR. THOMPSON: Just rolling through this.

12 And water's the next one?

13 MS. VAHIDI: Yes.

14 MR. THOMPSON: And the comment, again, is
15 construction?

16 MS. VAHIDI: For Oaks North it's similar to the
17 proposed site, level of impact.

18 MR. THOMPSON: Okay. Threw me off with the
19 color.

20 And then visual resources does not mention
21 construction on visual.

22 MS. VAHIDI: Not in the table, no.

23 MR. THOMPSON: Not in the table.

24 And then finally, construction line -- or
25 transmission line construction; that's construction

1 impacts.

2 MS. VAHIDI: For what's stated in the table, it's
3 the construction.

4 MR. THOMPSON: Right. And my only comment is if
5 you'll look at the seven points of your table where you
6 say the Oaks North is inferior environmentally, five of
7 those areas that you chose to write about are
8 construction, and the other two are visual and land use,
9 which are very dear elements to the city's interest. And
10 all I want to do is point that out.

11 MR. MCKINSEY: Are you asking a question of that
12 witness or are you testifying?

13 MR. THOMPSON: I'd be willing to testify.

14 MR. MCKINSEY: I don't know that I would agree to
15 that.

16 MR. THOMPSON: I didn't bring my resume.

17 That's all I have. Thank you.

18 HEARING OFFICER KRAMER: Thank you.

19 Power of Vision.

20 MS. BAKER: Dr. Roe asked our questions earlier.

21 But I think I -- well, never mind.

22 HEARING OFFICER KRAMER: Terramar?

23 CROSS-EXAMINATION

24 MS. SIEKMANN: Regarding -- and this is to staff.

25 Regarding new infrastructure at the proposed CECP site,

1 would the new desalination plant be considered part of the
2 new infrastructure needs at the proposed CECP site?

3 MS. VAHIDI: At the CECP, if they choose to use
4 purified ocean water at the CECP site, yes; but at all
5 other alternative sites, they would get the reclaimed
6 water.

7 MS. SIEKMANN: Is that included in your analysis?

8 MS. VAHIDI: Reclaimed water linear
9 infrastructure is included in the analysis for the
10 alternatives.

11 MS. SIEKMANN: No, my question is the
12 desalination plant, is that included in the --

13 MS. VAHIDI: The desalination plant analysis is
14 throughout the entire FSA.

15 MS. SIEKMANN: So it's included in your list of
16 new infrastructure costs at the proposed CECP --

17 MS. VAHIDI: We don't look at costs in a CEQA
18 environment alternatives analysis.

19 MS. SIEKMANN: Is the berm, the berm that will
20 need to be implemented, constructed with the I-5 widening,
21 is that included?

22 MS. VAHIDI: I don't understand the question.

23 MS. SIEKMANN: Do you, Mike?

24 MR. MONOSMITH: That's a cumulative, that's under
25 cumulative which would be addressed.

1 MS. SIEKMANN: But it's new infrastructure that
2 would have to be compared with the alternative site. Is
3 that considered? Is that a consideration?

4 MR. MONOSMITH: Not in this analysis. It's
5 considered and described and couched in the cumulative
6 condition and visual, which we talked about this
7 afternoon; but in terms of a project-specific
8 infrastructure for the CECP, no.

9 MS. SIEKMANN: Okay. Because --

10 HEARING OFFICER KRAMER: Well, I think you folks
11 are talking past each other.

12 As I understand this, Ms. Siekmann is asking --
13 she's presuming that there's some cost to creating the
14 berm for the CECP site and asking if that is included in
15 your analysis -- your comparison analysis with regard to
16 the other -- or to the alternative sites.

17 MR. RATLIFF: I thought we had an explanation
18 from the Applicant today that that would be probably
19 subject to negotiation between NRG and Cal Trans, if
20 Cal Trans decides to take the land and NRG has -- through
21 a condemnation proceeding, and that that would
22 determine -- the negotiations between those two entities
23 would determine whatever the cost would be for that
24 infrastructure.

25 HEARING OFFICER KRAMER: Well, that's the cost

1 that has to be modified.

2 MR. MCKINSEY: Kerry, are you asking about price
3 or were you asking about whether or not the actual
4 structure was included?

5 MS. SIEKMANN: My question involves alternatives.
6 And in the analysis that -- when I read it, I could see
7 all the things that needed -- they talked about needed to
8 be done at the alternative locations, like adding
9 transmission lines and -- but I did not see these items
10 noted for the CECP site, and I don't feel that you can
11 make a comparison without adding all the items to all the
12 areas. It's just exactly what Mr. Kramer was saying.

13 HEARING OFFICER KRAMER: Is there going to be any
14 addition to the berm at the CECP site, or is it just going
15 to be left as it is?

16 MR. MCKINSEY: Well, the point that the witness
17 was making is that the consideration of a berm is only
18 part of a potential cumulative impacts analysis. The
19 project as proposed takes advantage of the existing berm
20 landscaping and adding trees, and the evaluation of a
21 potential cumulative impact associated with I-5 widening
22 looked at how it could accommodate that, and in that
23 context is required a new berm, in many ways it's a
24 movement of an existing one, but it's different.

25 Nevertheless, and I think what the witness was

1 answering was that in the cumulative impacts analysis you
2 see a consideration of the effects of this, but for
3 purposes of the alternatives analysis you don't see that
4 because it's not part of the project, it's part of
5 cumulative.

6 HEARING OFFICER KRAMER: Right. And her question
7 was do you need to add work on the berm to the list of
8 improvements that's necessary to develop the CECP before
9 Cal Trans comes in and asks for something else. And it
10 appears that the answer is no because you're just going to
11 leave the berm, more or less, as it is now; is that
12 correct?

13 MS. SIEKMANN: Actually, I was actually referring
14 to the I-5 widening. Because that would be a huge cost in
15 that foreseeable future project that would be
16 associated --

17 HEARING OFFICER KRAMER: Well, I think in the
18 various statements here, that question's been answered.

19 MS. SIEKMANN: Thank you.

20 Then also, there's a suggested second berm to
21 protect the proposed CECP from a derailed train?

22 MS. VAHIDI: I don't know where you're reading
23 from. Can you point me to a page number?

24 MR. MONOSMITH: Are you talking about the western
25 berm?

1 MS. SIEKMANN: Okay. All right.

2 HEARING OFFICER KRAMER: What did you say,
3 Mr. Garuba, just to finish the point?

4 MR. GARUBA: I'm sorry, at that location on the
5 western side of the CECP there's a grade separation
6 between the rail tracks and the CECP site of approximately
7 ten feet, so the -- it's not going to pop up the bluff --
8 I'm not an expert at that, I'm not going to testify to
9 that. But the berm isn't there. It's for visual
10 mitigation that's proposed on the western side of the
11 CECP.

12 HEARING OFFICER KRAMER: Thank you.

13 MS. SIEKMANN: So there's -- Mr. Garuba, is there
14 a second berm suggested for visual on the east side of the
15 CECP from the train?

16 MR. GARUBA: Not for the trains, no. There is
17 the eastern berm. The second berm is VIS-5, the condition
18 of certification that addresses cumulative impacts in
19 terms of an I-5 expansion.

20 MS. SIEKMANN: I'm sorry, I mean the west side, I
21 mean the west side. I apologize.

22 MR. GARUBA: Okay. And for the western berm, the
23 existing berm, there's -- we could talk about that more
24 for safety, but in terms of alternatives, we didn't --

25 MS. SIEKMANN: No, is there a cost associated

1 with that second berm on the east side?

2 MR. GARUBA: I think the Applicant suggests to
3 use some fill there, and it was discussed in terms of
4 workers' safety; and I think we can talk about that
5 tomorrow. But there's not a cost associated with it.

6 MS. SIEKMANN: Okay. Thank you.

7 What I'm trying to get to is just extra
8 associated cost versus the alternatives.

9 MS. VAHIDI: Again, I just want to point out CEQA
10 is very specific about consideration of cost in that just
11 because something is of a higher cost, when we -- as
12 analysts we have to look at it, we can't consider the
13 cost. So if it's feasible, that's just a general point of
14 information from CEQA.

15 MS. SIEKMANN: Okay. I think I should correct
16 what I'm saying.

17 I understand, I appreciate your explanation. And
18 I should just say is there extra infrastructure that has
19 to be added in this as compared to the alternative. So
20 thank you.

21 In the -- on page 6, page 6-21, I guess it's
22 section 6-21, it says building a new major power plant at
23 an alternative site would increase environmental impacts
24 as San Diego would have an additional power plant.

25 If the proposed CECP is built in an alternate

1 location and Encina is eventually removed, wouldn't we
2 have the same number of power plants?

3 MS. VAHIDI: I'm sorry, I'm actually still trying
4 to locate where you were reading from.

5 MR. MONOSMITH: I think we're talking about the
6 brown field versus green field development and the
7 comparison there and the alternatives, all of which we
8 looked at would be in green field, undeveloped,
9 nonindustrial as compared to the existing site. So that
10 was part of our evaluation criteria.

11 MS. SIEKMANN: So if CECP were built in an
12 alternative location and Encina were removed, then we
13 wouldn't have an extra power plant, correct? If the
14 Encina were -- the property was able to be returned to
15 green field, we would still have the same number of power
16 plant sites, right?

17 MS. VAHIDI: I mean, if you're talking quantity,
18 but you're talking about taking out five units, and
19 remember that that site's been an industrial facility
20 since the -- since the fifties, so returning the site to
21 a, quote, unquote, green field is not as simple as -- and
22 I'm not going to get into that, but --

23 MS. SIEKMANN: And I understand that. But the
24 thing is since we've all been talking about it being
25 decommissioned in 2017, I mean --

1 MS. VAHIDI: Sure.

2 MS. SIEKMANN: Okay. I just wanted to bring --
3 ask also, since Mr. Garuba stated that 200,000 cars pass
4 the proposed Encina site every day, is there an
5 alternative site that would have more visual impacts than
6 the CECP?

7 MS. VAHIDI: Depends on the visual receiver, so
8 to say depends on the land use that's actually viewing it.
9 And there's a lot that goes into that, which I'm sure was
10 attested to by visual staff, but there's different
11 considerations given when you're driving down a freeway
12 and looking at something versus when you're in your home
13 or your backyard looking at something.

14 Again, I'm not the visual expert for the Energy
15 Commission so I'm not going to testify to that, but that's
16 a general, you know, observation that I have based on my
17 experience with projects.

18 MS. SIEKMANN: Since this is a tourist community
19 and many of the people who are driving by are tourists,
20 wouldn't that -- would that be an impact that you would
21 consider as a viewer since it would affect the economy of
22 Carlsbad?

23 MS. VAHIDI: Again, if you're talking about the
24 impacts of the proposed project, I'm not going to testify
25 to that. So --

1 MS. SIEKMANN: The CECP?

2 MS. VAHIDI: No. I'm not the visual expert for
3 the Energy Commission for the visual impacts.

4 MS. SIEKMANN: Okay. I'm sorry, it just said
5 visual prominence of power plant development within these
6 sites, so that's why I asked the question.

7 Thank you.

8 HEARING OFFICER KRAMER: Well --

9 MS. SIEKMANN: I'm done.

10 HEARING OFFICER KRAMER: Okay. I was going to
11 suggest though that this panel did prepare the analysis,
12 so it presumably collected --

13 MR. MONOSMITH: Well, we'll talk to that, Kerry,
14 on visual. Would you like to hear about that?

15 HEARING OFFICER KRAMER: Surely the panel should
16 be able to answer that last question.

17 MS. SIEKMANN: Okay. Thank you.

18 MR. DEBAUCHE: Can she repeat the question again?

19 MR. RATLIFF: Was the question whether
20 tourists -- it could affect many of the people who were
21 driving on the freeway would have greater -- more visual
22 sensitivity to a project like this or --

23 MS. SIEKMANN: My original question had to do
24 with the fact that -- my question, since Mr. Garuba stated
25 that 200,000 or so people drove past the proposed CECP

1 site every day, wouldn't that be the location that would
2 have the highest visual impacts, number of people who
3 would have a visual impact on a daily basis.

4 And I believe staff's answer was, well, you know,
5 those people that are driving by aren't sitting in their
6 home.

7 And I just wanted to continue the discussion
8 saying that you can't -- I feel you can't discount those
9 200,000 people because so many of them are tourists that
10 are making visual decisions on a city and affecting the
11 economic impact of that city by those impacts. So I would
12 not discount any of those people driving by in the visual
13 impact.

14 HEARING OFFICER KRAMER: Well, I didn't hear an
15 objection, so you don't need to argue against one. Just
16 go ahead.

17 MS. SIEKMANN: No, I think he's asking me what
18 the question was.

19 HEARING OFFICER KRAMER: Well, go ahead and ask
20 the question.

21 MR. DEBAUCHE: I think it's important to stay on
22 point here.

23 What she's talking about is direct visual impact
24 of the proposed project. That is not what the alternative
25 section does. What the alternative section is doing is

1 evaluating the alternative sites to see if building the
2 CECP at that site would reduce or minimize visual impacts
3 of the proposed project.

4 MS. SIEKMANN: So wouldn't all the alternative
5 sites be less of a visual impact?

6 MR. DEBAUCHE: That's not over exist- -- existing
7 conditions is a power plant at the site. Existing
8 conditions at the alternative locations is open space or
9 undeveloped land. You're talking about building a power
10 plant with a stack at a site that's not built versus an
11 existing site with a power plant stack.

12 MS. VAHIDI: Talking about the net visual change
13 right now.

14 MS. SIEKMANN: I was too.

15 MS. VAHIDI: Right now there's a power plant next
16 to the I-5.

17 MR. DEBAUCHE: Right now the tourists you're
18 talking about are driving by a power plant with a stack.
19 The proposed project would be a power plant and a stack,
20 versus the people that may be driving by the Oaks North
21 site, which don't see a power plant and a stack, now they
22 would. That's how we determine that visual impacts would
23 be not lessened at any of the alternative sites.

24 HEARING OFFICER KRAMER: You're saying then the
25 degree of change at the alternative sites would be greater

1 than it would be at the project site.

2 MS. VAHIDI: Yes. Yes.

3 MR. DEBAUCHE: Correct.

4 MS. VAHIDI: And to answer -- I don't know if
5 this answers your question. As far as the consideration
6 of tourists versus other folks, that was not a
7 consideration.

8 MS. SIEKMANN: A question for -- my last question
9 for the city. I would like to ask you about the visual at
10 the Oaks North.

11 MR. GARUBA: Yes, ma'am.

12 MS. SIEKMANN: Visual -- what should I call it?
13 I'm so tired. I'm so sorry.

14 The visual view impact at the Oaks North site.

15 MR. GARUBA: Yes, ma'am. The Oaks North site,
16 staff has testified that the Oaks North site has
17 significant elevation rises in excess of a hundred feet of
18 going west to east, there's actually a peak, and then it
19 drops back down.

20 We would -- if the Commission pleases, we would
21 at some point, you know, love to take you there so you
22 could see what we're talking about because I think it
23 really represents -- when you get on site, it's pretty
24 vivid.

25 From the homes in -- to the east, the stacks as

1 proposed that we identified through visual simulations
2 that I saw, you couldn't see them. One of the things that
3 isn't mentioned is that the Oaks North site is a planned
4 industrial site. It's dirt now, but in several years
5 there will be a number of facilities that are 35 feet
6 tall, give or take, all within the city guidelines, I
7 should say. So that will provide some buffer between
8 homes on the eastern portion of the city and the adjacent
9 city that are half a mile away and the location of the
10 power plant. The other homes at that site currently are
11 near a mile away. And they are also located in a
12 different jurisdiction.

13 MS. SIEKMANN: Thank you. No further questions.

14 HEARING OFFICER KRAMER: Thank you.

15 That's the end of the cross.

16 Any redirect?

17 MR. MCKINSEY: Applicant has no redirect.

18 MR. RATLIFF: No redirect.

19 HEARING OFFICER KRAMER: Anyone else?

20 Mr. Thompson.

21 REDIRECT EXAMINATION

22 MR. THOMPSON: Thank you. I believe one of the
23 staff panel referred to brown field and the difficulty of
24 returning the EPS to green field status or a green field
25 site.

1 Would you like to comment?

2 MS. VAHIDI: Is there a question?

3 MR. THOMPSON: Not to you.

4 MS. VAHIDI: Sorry.

5 HEARING OFFICER KRAMER: But you can comment
6 after he comments, if you choose.

7 MR. THOMPSON: But thanks for being so eager.

8 MS. VAHIDI: Sorry. I'm kind of sleepy.

9 MR. GARUBA: I would agree that the Encina site's
10 been there for 50 years or 60 years and cleaning it up
11 would be very difficult. The city anticipated that.
12 That's why we created a redevelopment agency, to do just
13 that.

14 HEARING OFFICER KRAMER: Any other redirect?

15 Okay. That will close out the topic, the
16 testimony, that is -- well, actually the committee may
17 have a couple of questions.

18 COMMISSIONER BOYD: Yeah, I've got a couple of
19 questions. Sorry about that.

20 There's been a lot of reference to the, I
21 believe, June '09, or at least the '09 RFO by SDG&E, and
22 it seems to weigh in on things. So can anybody tell me
23 what that RFO asked for, baseload, peaking?

24 MR. MCKINSEY: It's an exhibit.

25 MR. GARUBA: Oh, did you put --

1 MR. MCKINSEY: No, I think you did.

2 MR. GARUBA: I don't actually think we put it in,
3 but we'd be happy to give you a copy.

4 MR. MCKINSEY: I just saw it in your exhibits.

5 HEARING OFFICER KRAMER: Do you think you used
6 the acronym "RFO"?

7 MR. GARUBA: The "RFO" stands for Request for
8 Offer.

9 There were seven product demands in this RFO. I
10 am aware that SDG&E went out with a renewable RFO separate
11 from this.

12 The seven products were -- the first one was a
13 demand to response, and it was short term. The delivery
14 starts were in 2012 and the term was for three years.

15 The product two was new generation. The term was
16 20 years, and the delivery starts with 2010 to 2014. That
17 was for 200 megawatts -- was it 200? I'm sorry, a
18 hundred -- a minimum of a hundred megawatts. That was
19 actually the product that --

20 COMMISSIONER BOYD: Was that defined in any way
21 as peaking --

22 MR. GARUBA: Yes, sir

23 COMMISSIONER BOYD: -- or base load?

24 MR. GARUBA: No, sir.

25 HEARING OFFICER KRAMER: I'm sorry, maybe

1 Exhibit 218? Is that correct?

2 MR. GARUBA: Product two, new local generation
3 products online in 2010 to 2014. SDG&E seeks a minimum of
4 100 megawatts of peaking or intermediate class resources
5 as new construction or expansion project. Keeps going on.

6 COMMISSIONER BOYD: No, that answers my question.

7 The other question is what's the timing of all
8 this? When will a selection be made? Do you have any
9 idea, or award be made by SDG&E?

10 MR. THOMPSON: Do you have the schedule in front
11 of you, sir?

12 COMMISSIONER BOYD: No.

13 MR. THOMPSON: Okay. There are some different
14 dates for different products. The deadline to submit the
15 offers was last August 10th, and for some of the products,
16 including product two, the short list was to come out
17 three months after that, which would have been November 9.
18 And then there are negotiations, and they anticipate that
19 contracts would be executed three to nine months after
20 short listing, which would be -- what, January to October.

21 Does that help?

22 COMMISSIONER BOYD: That helps. Thank you. I'm
23 just trying to put all this into context in terms of the
24 competition that's been created here.

25 Okay. I guess that answers my question. Thank

1 you.

2 MR. GARUBA: My pleasure.

3 COMMISSIONER EGGERT: Actually, a question of
4 curiosity. In terms of the last comment you made about
5 the purpose of the redevelopment plan, have you done any
6 estimates of what it would take to sort of remediate the
7 current site, the CECP -- not the CECP, the current Encina
8 facility for the purposes that the city is contemplating?

9 MR. GARUBA: There have been discussions.
10 Nothing I would testify to. I will say that there are
11 provisions.

12 One of the benefits of creating a
13 redevelopment -- having a redevelopment agency and
14 creating a redevelopment boundary or plan or area is that
15 there are provisions as to site remediation that are
16 afforded those and those agencies, so they're able to help
17 with the process of remediation.

18 Power plants have been returned to green field
19 status in the United States. And again, if it pleases the
20 Commission, we would be happy to submit something from our
21 redevelopment counsel, Murray Kane. I think he has had,
22 actually, direct experience with this.

23 COMMISSIONER EGGERT: And I guess this may have
24 been addressed previously, but in terms of the -- what you
25 would envision actually going in that space, is that --

1 MR. GARUBA: Yes, sir. And let me say that
2 whatever ultimately goes there, the city would fully
3 expect a large public input process, including sort of a
4 shoulder-to-shoulder approach with the Coastal Commission
5 and a number of the agencies, the alphabet soup of
6 agencies that we deal with.

7 That being said, that site, especially when you
8 take into account San Diego Gas & Electric's property both
9 on the east and west side of the I-5 freeway represents
10 nearly 300 acres of just spectacular land. So we would
11 anticipate some kind of combination between open space,
12 both passive and active recreation uses, civic uses,
13 museums, some kind of tourist-serving commercial, because
14 that's a preference in the Coastal Commission,
15 destination.

16 We took a run at this a couple of years ago as a
17 local government. There was actually a builder that had
18 tried to cobble together the -- at least options on the
19 property. They came up with some plans. We clearly heard
20 the public when they said they didn't want residential. I
21 don't know if the city would support residential, but that
22 would need to be evaluated. There are planning
23 commissioners as intervenors; they might actually be
24 better suited to talking about what the vision is. And
25 I'd like to keep my job and not get too far out in front

1 with the vision.

2 COMMISSIONER EGGERT: Oh.

3 MR. GARUBA: The one thing I will say is that in
4 discussions with Cal Trans, we've made a high priority of
5 connecting the east and west sides of the freeway. They
6 have agreed in their plan, and it's what Mr. Martinez put
7 out, put forward yesterday. You'll actually see a
8 connection that Cal Trans has identified from the east to
9 the west side of the property. We've also talked about
10 some kind of an overpass or underpass. Sacramento has one
11 actually that connects, it goes right under the 5 to the
12 old town. We went up and took a look at that.

13 So we've been looking at some kinds of those
14 combination to increase pedestrian access, not vehicular
15 access but pedestrian access, from the east to the west
16 side. On that eastern boundary, it actually ties into our
17 golf course and then a fairly substantial rail -- I mean a
18 trail system, and then a hundred-acre park kind of on that
19 eastern boundary. So when you put it all together,
20 including the lagoon, it's well over 600 acres.

21 COMMISSIONER EGGERT: Okay. That's all.

22 HEARING OFFICER KRAMER: Okay. Thank you
23 everyone for your indulgence.

24 MR. MCKINSEY: If I'm correct, we're on schedule.

25 COMMISSIONER BOYD: Hurry up, it will still be

1 Wednesday.

2 HEARING OFFICER KRAMER: Okay. Well, we will
3 deal with the exhibits tomorrow unless somebody's dying to
4 do it today.

5 Mr. McKinsey, I need to see you about the one I
6 may be missing.

7 MR. MCKINSEY: The Taylor Miller letter?

8 HEARING OFFICER KRAMER: No, it's something else.
9 We can talk off line about that.

10 And the staff revised air quality and worker
11 safety fire protection sections. Those will be numbered
12 as 222, I believe it is, but we'll go over that again
13 tomorrow. I'm going to try to have a revised exhibit list
14 in the morning. So we are adjourned for the evening.
15 We'll see you at 9:00 a.m.

16 (Whereupon, at 11:55 p.m. the hearing
17 was adjourned, to reconvene at 9:00 a.m.,
18 Thursday, February 4, 2010, at this
19 same location.)

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CERTIFICATE OF REPORTER

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

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

IN WITNESS WHEREOF, I have hereunto set my hand this 17th day of February, 2010.

TROY RAY

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