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BEFORE THE
CALIFORNIA ENERGY COMMISSION

In the matter of,)
) Docket No. 11-IEP-1D
)
Preparation of the 2011 Integrated)
Energy Policy Report)

Joint IEPR and Electricity & Natural Gas Committee Workshop
Electricity Infrastructure Need Assessment

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

TUESDAY, NOVEMBER 23, 2010
9:00 A.M.

Reported by:
Kent Odell

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 Jeffrey D. Byron, IEPR and E&NG Associate Member
 Robert Weisenmiller, E&NG Presiding Member

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ALSO PRESENTPUBLIC: (* Via WebEx)

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 Council

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1 P R O C E E D I N G S

2 NOVEMBER 23, 2010

9:10 A.M.

3 MS. KOROSSEC: All right, good morning, everyone. I
4 think we'll go ahead and get started. I'm Suzanne Korosec.
5 I manage the Energy Commission's Integrated Energy Policy
6 Report Unit. Welcome to today's workshop held by the
7 Commission's Integrated Energy Policy Report Committee and
8 the Electricity and Natural Gas Committee on Assessment of
9 Electricity Infrastructure Need as part of the 2011
10 Integrated Energy Policy Report, or IEPR, Proceeding.

11 I'll start with just a few housekeeping items. For
12 those of you who may not have been here before, restrooms
13 are in the atrium, out the double doors and to your left; we
14 have a snack room on the second floor at the top of the
15 stairs, under the white awning; and if there is an emergency
16 and we need to evacuate the building, please follow the
17 staff out of the building to the park that is diagonal to
18 the building, and wait there until we're told that it's safe
19 to return.

20 Today's workshop is being broadcast through our
21 WebEx conferencing system. Parties need to be aware that it
22 is being recorded. We'll make an audio recording available
23 within a few days after the workshop, and then we'll have a
24 written transcript available within about two weeks.

25 We have a very simple agenda today, starting with

1 opening comments from the dais, followed by a brief overview
2 from Dr. Jaske and David Vidaver, on staff's proposal for
3 electricity infrastructure need assessment in the 2011 IEPR,
4 and then we'll move directly to public comments. We'll take
5 comments first from those of you here in the room, and then
6 we'll turn to the folks that are on WebEx. For those of you
7 who are here in the room, please come up to the center
8 podium and use the microphone so that the WebEx people can
9 hear you, and also so we can capture your comments in the
10 transcript. It's also helpful if you can give the
11 transcriber your business card when you come up to speak, so
12 we make sure that your name and affiliation are reflected
13 correctly in the transcript. WebEx participants can use the
14 chat function in WebEx to let the coordination know that you
15 have a question or comment, and we'll open your line at the
16 appropriate time. We're also accepting written comments
17 until the close of business on December 10th, and the Notice
18 for today's workshop, which is available on the table out in
19 the foyer are also on our website, it tells you the
20 procedure you need to go through to get those comments into
21 the Docket.

22 Just some very brief context for today's topic. The
23 2009 IEPR identified the need for a statewide Integrated
24 Planning Process for electricity infrastructure that
25 balances our policy goals to reduce environmental impacts of

1 energy production and use with the need to maintain
2 reliability and affordability of electric power. California
3 has strong energy policies in place to increase the use of
4 preferred resources like energy efficiency, demand response,
5 renewables, distributed generation, combined heat and power,
6 and rooftop PV. In addition, our new Governor's Clean
7 Energy and Jobs Plan identifies the need for a plan and
8 timeline to make new homes and commercial buildings in
9 California zero net energy, as well as the need for a
10 renewable energy plan by July of this year, to expedite
11 permitting of high priority generation and transmission
12 projects. His plan also sets aggressive goals for 12,000
13 megawatts of localized and distributed generation by 2020,
14 and 8,000 megawatts of additional large-scale renewables,
15 along with increased combined heat and power projects. At
16 the same time, we have other policy goals like decreasing
17 use of once-through cooling technologies and power plants,
18 retiring aging power plants, modernizing the State's
19 transmission system, and reducing greenhouse gas emissions
20 in the electricity sector. So, the 2009 IEPR identified the
21 need for a more coordinated planning and assessment process
22 for electricity infrastructure, that allows decision-makers
23 to set priorities, identify trade-offs, and turn these
24 broadly framed objectives into specific actions and,
25 eventually, into something like a statewide blueprint for

1 what the electricity system will need to look like to meet
2 our various policy objectives, while still providing
3 reliable and affordable electricity to consumers.

4 So, today's workshop is looking at staff's proposal
5 for a need assessment project which is an important
6 component of developing that kind of a blueprint. Dr. Jaske
7 will provide a brief overview of the staff's proposal, but
8 first let me turn it over to the Commissioners for opening
9 comments.

10 COMMISSIONER BYRON: Madam Chair, I hear Ms.
11 Korosec's voice, but where is she? I don't quite - oh,
12 there she is back behind the -

13 MS. KOROSEC: We have a very large monitor up here
14 now, so...

15 COMMISSIONER BYRON: You're invisible to us up here.

16 CHAIRMAN DOUGLAS: So, opening comments, I'll be
17 very brief. I'm pleased to be here and thank staff for the
18 white paper that they've put out for our review and for
19 public comment. As Ms. Korosec indicated, we are looking at
20 how to bolster analysis of distributed generation storage
21 and how to integrate the renewable energy plan that the
22 Governor-Elect has called for in the Clean Energy Jobs
23 platform, and integrate those concepts into the concepts
24 that we'll be talking about today. So, there will be a
25 considerable amount of work that we'll be doing to scope and

1 integrate all of these ideas. We'll look forward to public
2 comment on all of that. Commissioners? Commissioner Byron.

3 COMMISSIONER BYRON: Thank you, Madam Chair. I've
4 been looking forward to this workshop for a while and I
5 appreciate the fact that there are so many of you here today
6 to participate in this discussion, we really value your
7 input. I would characterize it this way: so far, siting
8 power plants in California has been a piece of cake. You
9 know, we fully mitigate most all the impacts for natural
10 gas, there's few overrides that are necessary - even the
11 large solar plants that we've been permitting, the large
12 solar thermal plants where we've had immitigable impacts and
13 had to override them, we've somehow managed to get through
14 that process and produce, I think, very good projects. But
15 now, of course, we've got these other constraints, the
16 priority reserve has pretty much gridlocked the South Coast,
17 we're going to soon reach transmission and renewable
18 integration limitations, which have not take effect yet, and
19 the once-through cooling limitations and deadlines are going
20 to prove pretty formidable here soon, as well. Add to that
21 that, in California, we have disparate processes of
22 procuring electricity, siting plants and transmission, and
23 the multiple jurisdictions - it's going to get an order of
24 magnitude more complicated in the ensuing years. And can we
25 site new power plants and retire aging plants in this newly

1 constrained environment? Can we make some no-regrets
2 decisions early on, on how much and what type of generation
3 and where it will be needed? How can we convince local
4 jurisdictions what's going to be needed? And really, are
5 the utilities and the developers ready for this more highly
6 constrained environment? They always amaze me in coming up
7 with projects that fit our policy needs and fit all these
8 constraints, but I think it's going to get much more
9 challenging now.

10 So, this Commission is certainly interested in
11 looking at what can be done ahead of time to prepare for
12 what I think is going to be a very difficult environment.
13 We've put some of our best minds to work on this and, in the
14 2011 IEPR, we will begin to address this in a more
15 significant way. I think you'll hear today that the staff
16 has got a lot of - they're well aware of many parallel
17 efforts that are trying to address the very aspects of this,
18 it's incumbent upon this Commission to try and figure it out
19 and put the whole picture together. So, I certainly look
20 forward to today, I think this is a very important subject
21 for this Commission to address, if not perhaps the most
22 important for the next couple of years.

23 COMMISSIONER WEISENMILLER: Actually, again, I would
24 like to thank everyone for their participation today and, in
25 the subsequent phases of this process. This is my first

1 time on an IEPR on this side of the dais, so looking forward
2 to working through a lot of interesting issues with folks.
3 Obviously, most of my focus so far here has been on siting,
4 but now it's time to shift more over to the planning part.

5 I think Commissioner Byron hit the challenges that
6 we really, I think, as the white paper has pulled together
7 or focused on, is the South Coast between the once-through
8 cooling priority reserve issues and emerging greenhouse gas
9 regulations, of how to deal with reliability needs there in
10 the Basin, and the tradeoffs between generation and
11 transmission as we shift more to renewables. I think, as
12 this paper has worked its way out, other events have
13 occurred, obviously we have a new Governor, and the new
14 Governor has a Clean Energy Jobs Program, and we will
15 certainly refocus this IEPR to reflect the election and
16 those priorities. In particular, we have a very strong
17 focus on the Renewable Generation and Transmission Plan that
18 will be done by July. I think we will build off some of the
19 priority exercises we are now going through as part of the
20 REAC group, look at priorities next year on siting and
21 transmission for renewables, it certainly will build off of
22 the lessons learned process that we're launching on siting.
23 But ultimately, I think, there is a lot of work that is
24 going to have to be done on the DG part, I guess the bottom
25 line is we certainly take the Governor's goals of 12,000

1 megawatts of DG, 8,000 megawatts of utility scale
2 renewables, seriously. And we will come up with a plan to
3 meet those targets, and certainly we look forward to
4 everyone working with us on that. At this point, we're
5 still trying to think through the implications, although I
6 think one model to think of is the BUC Strategic Plan for
7 Energy Efficiency. I think the State needs a similar
8 document on renewables, I suspect that is what the Governor
9 contemplated. So, with that, again, welcome to this
10 process. We'll obviously be rethinking and we'll re-
11 struggle or re-scope parts of this, but the bottom line is
12 we will get the renewable plan out on time.

13 MS. KOROSSEC: All right, I think we'll turn it over
14 to Dr. Jaske and David Vidaver to take us through the staff
15 proposal.

16 DR. JASKE: Good morning. For the record, my name
17 is Mike Jaske, in the Electricity Supply Analysis Division.
18 With me is my colleague, David Vidaver, and also co-author
19 of this paper. We are seated here at the table, we don't
20 have a Powerpoint presentation, what I'm going to do is
21 literally give you a guided tour through the paper, so I'm
22 going to take maybe 20 minutes or so and turn the pages and
23 hit some high points, paraphrase what is there, sort of
24 staff's way of bringing the most important pieces to our
25 attention this morning.

1 So, in the Executive Summary on the first page, the
2 2009 IEPR, of course, made a decision that the Energy
3 Commission would create a more formal, quantitative,
4 integrated need assessment element of future IEPR's, so here
5 the staff is with a specific proposal about how to do that.
6 You've already identified the fact that we have been
7 pursuing as agencies -- U.C., Energy Commission, ARB/ISO, in
8 particularly -- the California Clean Energy Future, a way of
9 bringing together all of our policy goals and merging those
10 with, in particular, the reliability concerns that are a
11 responsibility of the ISO and other balancing authorities.
12 Now we have Governor Elect Brown with a very similar vision,
13 but different in some particulars, and as Commissioner
14 Weisenmiller just now mentioned, distributed generation
15 being one that is seemingly, in particular, emphasized more
16 so than in California Clean Energy Future.

17 There are a number of applications for this effort
18 that are identified on page 2, one that is not called out
19 perhaps as much as it ought to have been is that the
20 passages in the Warren-Alquist Act, Public Resources Code
21 25301, 2 and 3, all directly say that the Energy
22 Commission's IEPR should undertake assessments, you can use
23 it as assessment of need at some point in there; we've done
24 that in a formal way in the 2005 IEPR, paid more attention
25 to policy issues in the 2007 and 2009 IEPR's, and now, as

1 indicated before, we are sort of turning to a more fully
2 quantitative assessment of what kinds of infrastructure are
3 needed. There are a number of other applications that one
4 can imagine, the information use of this, the bringing
5 together of the numeric consequences of all these various
6 disparate policies, and the constraints of reliability, a
7 lot of rhetoric conflicting with the person speaking it on
8 who tend to push single-purpose solutions to our electricity
9 needs and problems. So, to the extent those can be more
10 readily understood and comprehended by bringing together an
11 overview assessment of how pieces fit is another purpose.

12 And finally, of course, Commissioner Byron
13 highlighted the potential application of this to our own
14 power plant licensing, or the licensing activities for power
15 plants that even other jurisdictions do. Do we need all the
16 power plants that are being proposed? Are what's being
17 proposed by various developers what is needed? Do they fit
18 into the locational and operational flexibilities or a
19 template that we are beginning to understand that we need,
20 but yet we don't have sort of quantitative magnitudes ready
21 to hand, to guide the generating industry?

22 Some key terminology are identified on page 3.
23 These are taken straight out of the last IEPR, and there is
24 this cascade of concepts on the top of that page from vision
25 to blueprint to need assessment to need conformance.

1 Certainly, the CCF document is a vision and Governor Elect
2 Brown's Jobs Energy Policy document is another vision. They
3 are not in themselves sufficiently complete to do planning,
4 and they need to be translated into this concept of a
5 blueprint. So, this architectural metaphor of a vision, you
6 know, a rendering that is the dream, then there's a
7 blueprint that's necessary to really understand how a
8 building would operate, and the engineering firm could
9 actually construct it, lots of details. There are many ways
10 to translate the same vision to different blueprints, and
11 unfortunately, that's where we are today; there is not
12 agreement about how to take the vision, whether it's the CCF
13 version, or Governor-Elect Brown's, and spell it out.
14 Everyone incorporates 33 percent renewables by 2020 - what
15 does that mean? How much is in-state? How much is out-of-
16 state? What kind of technologies? Where are they located
17 within state? All of those different ways of answering
18 those questions lead to different transmission, different
19 types and amounts of the generating technologies themselves,
20 portions that would fall to Energy Commission licensing vs.
21 local processes. So, there are numerous ways in which we
22 don't yet have a blueprint that is the simple execution, one
23 step after another, until you actually get there. That
24 leads, of course, to a lot of uncertainty, so our need
25 assessment proposal features being explicit about much of

1 this uncertainty, tracing through alternative assumptions,
2 showing their consequences, contrasting one to the other,
3 that's our notion of how to address this uncertainty. We're
4 not going to solve it with this proposal, we're going to try
5 to illuminate it, make it sharper so that where there are
6 choices, we can assist in understanding the magnitude of
7 what different choices mean.

8 And finally, need conformance. This proposal is
9 only to do the planning stage, the evaluation. We're not
10 proposing anything about how to take the next step, which
11 might be to say, given a particular power plant, does it fit
12 the geographic, or operational characteristics this analysis
13 suggests? That's a logical next step, but that's not part
14 of this specific proposal.

15 Perhaps now is the time to take the caveat that is
16 imbedded in the document in a couple of places and just
17 highlight it, particularly in light of the comments that
18 Commissioner Weisenmiller made about DG. It's certainly the
19 case that a high DG vision of the future can be handled in
20 the apparatus that we are proposing; the problem is that
21 there are many other dimensions of Distributed Generation
22 that this proposal can't handle. We are not in this
23 proposal endeavoring to describe the impacts on the
24 distribution system. We're not capable as this project is
25 designed to understand where the distribution system can

1 handle Distributed Generation in significant amounts, and
2 where it is not. We're not able in this particular project
3 to be clear about the costs and the requirements of any kind
4 of Smart Grid technologies that will allow those distributed
5 generation facilities to actually operate harmoniously as
6 part of a whole system, so certainly we can put in a high DG
7 future in this apparatus we're proposing, it will show
8 lesser need for other kinds of resources, but it wouldn't be
9 a complete assessment and an ability to contrast a DG future
10 vs. a different future. Many of those questions can, of
11 course, move farther than what I'm saying right here, we can
12 ask the right question, but whether we can fully evaluate
13 Distributed Generation vs. other things is very unlikely for
14 this project. There may be some supplemental attention
15 within the IEPR that can move farther on that particular
16 subject.

17 Page 5 of the paper lays out sort of the basic
18 simple equation that, you know, guides the capacity version
19 of need, so we're simply projecting peak demand with
20 escalating it by a planning reserve margin and making the
21 appropriate adjustments for supply side resources, and
22 seeing if we have a position or negative number. We're
23 going to do that at the balancing authority area level,
24 we're going to do that to the extent we're able through
25 assistance from the ISO at local capacity areas, and that

1 will tell us some things about where we have surpluses and
2 deficits of resources going out into the future.

3 We're going to propose to do this for all of the
4 balancing authorities in the State, and so that's one of the
5 ways in which this effort can be differentiated from what
6 the PUC is doing for IOU's within the ISO, and the ISO
7 itself focusing more narrowly on transmission and system
8 operation questions, as opposed to overall capacity
9 assessments.

10 On pages 10 and 11 are the beginning of staff's
11 proposals, so, as I was just saying, a bunch of supply
12 demand balance tables, different balancing authorities,
13 local capacity areas, imagine doing them numerous times with
14 alternative sets of assumptions to give a fleshing out to
15 the uncertainties that exist. So, one unresolved challenge
16 that we have in providing a picture of what this uncertainty
17 means is visual techniques for bringing all these different
18 versions of the future -- alternatives futures - into some
19 coherence so that policymakers like you and other users of
20 the information can see at a glance what it means. There
21 are some techniques out there with different kinds of
22 modeling backgrounds to provide a way of synthesizing, you
23 know, dozens or hundreds of cases, and sort of bringing
24 visual techniques to show what they mean. We'll be trying
25 to evaluate those as we get to the point of developing

1 actual software.

2 One of our most challenging dimensions of this
3 subject is to try to disaggregate capacity down into
4 different -- or into buckets, let's call them -- to have
5 different operating characteristics. The ISO is giving us
6 very good ideas about how renewable integration leads to
7 increasing need for regulation, up or down, for load-
8 following within the hour, to a lesser extent load-following
9 across hours, and so forth. So, we are honing in on what
10 the different ways of describing the services, the capacity
11 provides, but we are only at the beginning steps of trying
12 to actually identify a method which can be cranked through
13 systematically and consistently across a whole different set
14 of assumptions in order to understand how those requirements
15 change from one set of assumptions to another.

16 Page 12 identifies that we're planning to go out
17 probably to year 2022 in this analysis. The last IEPR went
18 out to 2020, naturally, the next sense is to try to go two
19 more years.

20 Pages 13 and 14 describe some challenges that we
21 have, I won't repeat each of them, they're written up with
22 some care. Hopefully the commenters today will provide some
23 feedback on those.

24 Pages 15 and 16 start a very lengthy table that
25 identifies both the specific inputs that staff proposes to

1 use, as well as what we identified now as the best source of
2 those. And Appendix A to the paper goes into more detail
3 about those sources and some challenges with trying to make
4 use of them. One of the things that the last IEPR called
5 for in Chapter 3 was not only instituting this integrated
6 needs assessment capability, but trying to do so on an
7 integrated basis, or a consolidated basis, or a cooperative
8 basis with the PUC and ISO. We have no doubt that both the
9 PUC's long term procurement planning process and the various
10 forums that the ISO supply a good bit of the information
11 that we need for this project, and we don't propose to
12 reinvent the wheel, we propose to acquire those items of
13 information and make use of them. To some extent, they may
14 need to be tweaked or adapted, translated, you know, into
15 different geographies, but I think there is a strong desire
16 to make use of that which exists and these tables call out
17 in some detail where that comes from, and some of the
18 challenges with them.

19 Page 20 identifies our project schedule. Staff
20 proposes to do this in two iterations. Sometime in the
21 spring, we identify here in May, we would put out a
22 preliminary version of the results. We would hold some
23 workshops, perhaps staff workshops or committee workshops,
24 or some combination of those, get some feedback over the
25 course of the summer we would refine the results, bring in

1 new elements of information that are only available then,
2 and put out a revised version in August.

3 Page 21 identifies - let me sort of express this in
4 the sense of the caveat - what we're proposing for this
5 project encompasses some of the dimensions of numerous other
6 analyses that I'm sure will be underway as part of the IEPR.
7 Next month, I believe, there is going to be a workshop on
8 renewable net shorts, all of the ingredients to go into that
9 are the same elements that are quantitatively going to be
10 assessed as part of this need assessment effort, so there
11 are actually a variety of renewable net shorts that one can
12 imagine, depending on certain kinds of assumptions. There
13 are, of course, as Commissioner Weisenmiller mentioned, a
14 host of issues in Southern California having to do with OTC
15 power plant retirement or replacement, the source of offsets
16 for new or repowering power plants, the extent to which
17 demand side measures can reduce load and, therefore, lessen
18 the amount of dispatchable capacity that must be located
19 there, the degree to which transmission development can at
20 least somewhat substitute for the locational requirements
21 that exist today, and allow us greater flexibility about
22 where to locate fossil power plants away from the coastal
23 area itself, or perhaps take a greater advantage of
24 renewable development than we might otherwise be able to.
25 Those are dimensions that will be encompassed within this

1 project, but we'll be encompassing them in the sense of
2 let's make some reasonable - let's identify the reasonable
3 range of assumptions and use those as part of our apparatus
4 and crank through alternative futures. So, this need
5 assessment project can encompass these particular issues of
6 Southern California, but it's not the best way to address
7 the issues themselves. The IEPR needs to tackle directly
8 some of the questions of OTC implementation, of the source
9 of offsets for fossil power plants. And there are numerous
10 issues of moving those topics forward that are separate from
11 and outside of this need assessment effort.

12 Starting on page 22 and then going on for several
13 pages are some particular issues that staff highlights in
14 trying to pull together this integrated need assessment
15 engine and crank through alternative assumptions. I'll just
16 quickly list off what they are: better understanding of how
17 transmission is a complement to generation, for example,
18 where there are renewables, obviously there has to be at
19 least a gen. tie, if not something more developed in order
20 to integrate that resource into the grid; improved
21 understanding of instances where generation and transmission
22 are substitutes, so, a moment ago I mentioned the
23 possibility that some OTC capacity might not need to be
24 replaced, you know, in its current location if transmission
25 is improved within the sort of urbanized LA Basin, and then

1 allow greater flexibility of that type and location of the
2 generation needed to serve load. An issue which came up in
3 some of the limited amount of discussions staff was able to
4 have with other parties before finalizing the paper is this
5 whole issue of, is a capacity oriented focus as we're
6 proposing here sufficient? Or, is it necessary for some or
7 all of the cases, to evaluate them in parallel with system
8 simulation models so as to understand fuel use and GHG
9 emissions, displacement of out-of-state resources? That's a
10 major commitment to accomplish that in our ability to crank
11 cases, you know, system simulation model setting will be
12 very limited. To the extent that that is necessary to
13 better understand all these nuances, and we may be looking
14 for some more short cut methods, than the full blown ones we
15 would normally be using. Clearly, the desire to reflect
16 reliability, you know, in conjunction with policy goals is
17 one of the motivations for capacity balanced tables at the
18 balancing authority area level, or the local reliability
19 area, but those, of course, are only particular facets of
20 reliability, there are other dimensions, other metrics that
21 would be desirable to try to understand, but which may be
22 beyond our reach in this cycle.

23 And I think I already mentioned earlier that we are
24 frankly torn between, you know, designing a whole series of
25 specific cases, CCEF case, a Governor-Elect Brown case, or a

1 PUC LTTP case vs. exploring the much wider realm or range of
2 uncertainty, or inputs and therefore results. Those are so
3 prominent among the industry that some combination of
4 specific cases, and then a more systematic examination of
5 uncertainty may be the best way to go, but that's a topic
6 for which we're very interested in receiving feedback.

7 Let me just quickly call to everyone's attention
8 this Section 4, starting on Page 24 where we are describing
9 how we're attempting to coordinate with the PUC and ISO,
10 doing so predominantly in the sense of trying to make use of
11 the inputs into those proceedings, and the results that are
12 generated within those proceedings to the extent they all
13 match up to our schedule. Many of the submittals that the
14 investor-owned utilities will be making into the PUC's LTTP
15 Proceeding pursuant to the about to be issued Scoping Memo
16 are hopefully able to satisfy our needs and, for the
17 publicly-owned utilities, we'll be relying largely upon the
18 results of the demand and supply forms that they submit to
19 the Energy Commission. Staff has conducted workshops on
20 those demand and supply forms, there will be a transmission
21 workshop, I believe, next week, and all of those will come
22 before the Commission to be adopted, and their due dates are
23 off into the late winter and spring next year.

24 Section 5 of the paper, starting on page 27,
25 addresses uncertainty as a key dimension of what we're

1 trying to do here, we don't think it's appropriate to just
2 focus on the particular views that the CCEF vision has, or
3 Governor-Elect Brown has, or the PUC's LTTP Scoping Plan as
4 staff understands it today, and there are many other ways in
5 which the future can unfold, and trying to understand the
6 uncertainties on inputs and translate those through into
7 uncertainty and the results and what's needed according to
8 the various levels of this aggregation, you know, is I think
9 something that we're trying to contribute to and bring to
10 bear in a more systematic fashion than has been the case
11 previously.

12 Starting on page 29, there is some very brief
13 discussion of a whole range of possible purposes, of course,
14 one that is not literally in the paper is the one I
15 mentioned earlier today, the satisfying the requirements
16 within the Public Resources Code, itself. And among these
17 various bulleted items, there are some that staff indicates
18 are more likely to be usefully accomplished, successfully
19 accomplished, in this cycle than in others. We are
20 certainly not going to get into the specificity that is a
21 substitute for the CPUC's LTTP proceeding because we are not
22 going to be analyzing things at the bundled customer level,
23 or at just the IOU service area level, we're looking at
24 things at the ISO balancing authority level, perhaps SP and
25 MP26. We're not going to be getting into things at the

1 level of detail that lets this project be a substitute for
2 AB 1318, that needs its own specialized study and that is
3 being designed and initial work underway and hopefully we'll
4 be able to have a public workshop on that in the next month
5 or two.

6 In conclusion, let me reiterate what I hope the
7 paper itself says and my summary comments this morning, this
8 is a proposal, we are at the beginning of this project, we
9 don't have results, we don't even have the software to crank
10 this through developed yet. We are looking forward to
11 feedback, we're looking forward to feedback here today, in
12 the written comments that I think Ms. Korosec mentioned, I
13 think December 10th, that if there are more in-depth
14 discussions any of the stakeholders are interested in
15 pursuing with staff, we're happy to do that, too, over the
16 course of the next few weeks or months. So, we look forward
17 to any questions you have now and the comments from the
18 parties. Are there questions?

19 MS. KOROSEC: All right, do we have any parties
20 being brave enough to be the first to come up and respond to
21 staff's proposal? Mr. Kelly, always the first.

22 MR. KELLY: Thank you. Good morning, Commissioners.
23 Thank you very much. My name is Steven Kelly with
24 Independent Energy Producers Association. I appreciate the
25 opportunity to provide some feedback on the draft of the

1 report. A couple observations; first, I think it's
2 important to make a distinction between an infrastructure
3 assessment and a process that leads to need conformance.
4 This mechanism that is being discussed is an approach to
5 integrating those two things. And where I'm really
6 comfortable with the Energy Commission doing an
7 infrastructure assessment, I have more concerns about
8 delving into need conformance and I'll explain why in a
9 second. When I look at the Energy Commission and the
10 processes that you apply toward planning and, particularly,
11 the siting of generation, my foremost goal is to remind you
12 to do no harm and I think, in this context, particularly, we
13 need to evaluate the processes moving forward to make sure
14 that they provide the information that you need in a timely
15 manner, but do not harm the development of generation
16 resources that are needed to supply load, whatever the types
17 that you need, or that the State policy directs. Just as an
18 aside, I did print out the document from the website and I
19 noticed, at least in my document, it starts on page 21, so
20 naturally I'm always concerned about the first 20 pages of
21 any report that I haven't seen, so just as a little
22 notation, a little paranoid, maybe, but who knows? Let me
23 talk a little bit about a couple aspects here. I'd like to
24 talk about some of the design goals, maybe go through a
25 little bit of history since Mike and David and myself and a

1 few other folks have been here for a long time and have been
2 through some of this, and then talk about some issues and so
3 forth. First, and again, in the construct of do no harm,
4 I'm looking at the design goals, and when I synthesize those
5 down, I focus in on a couple attributes, one is to determine
6 the operating characteristics of future generation plants,
7 and that those should be essentially designed by State
8 planners. That seems to me something that comes out of this
9 analysis, which is an issue that needs to be further
10 discussed, I think. Secondly, the report speaks to
11 addressing how facilities in the siting process match
12 planners' estimates of future need, given a range of
13 scenarios. Given the complexity of developing a range of
14 scenarios and the reality of a range of scenarios, it's hard
15 from a developer perspective to plan in advance about what
16 should be trying to develop projects to meet state policy
17 goals in past years' siting process, and I think that
18 creates a problem which I'll address in a little bit more
19 detail. It really begs the question, which operating
20 characteristics are being sought? For what time frame? And
21 whose need is being determined? From a generator
22 development perspective, the signals that we take when we
23 enter California to develop new generation, or to serve
24 California load, that process starts way in advance of any
25 siting project coming to the Energy Commission. People

1 spend years trying to identify sites, work with landowners,
2 and so forth, spending lots of money before they even get to
3 you. And generally in this context in California today, the
4 primary factor that leads to actual development is whether
5 you have a PPA in California or not, whether you can finance
6 the project. That's coming from the utilities, usually.
7 Either the POU's or the IOU's, it doesn't necessarily come,
8 that price signal does not necessarily come from the Energy
9 Commission. A concern that I have is that we go down a
10 planning process that is constantly changing, that is not
11 sending signals to developers that are constant enough, and
12 stable enough, that people can actually go out and try to
13 develop the projects that are sought by the load serving
14 entities to serve consumers. And if that's the process that
15 we're going down, where we have perhaps the potential for
16 mixed signals over time, that undermine the ability of
17 developers to go out in advance to look for these sites and
18 work with landowners, I think that raises the question of
19 whether we are creating barriers to development, rather than
20 moving barriers to development. And my goal, and I hope
21 this Commission's goal, is to remove barriers to development
22 for the projects that you want. Now, let me talk a little
23 bit about history here, and I beg your indulgence, I'm going
24 to take a little bit of time to walk through kind of the
25 history that I've experienced in California and that many of

1 you have, that deal with the issue of particularly need
2 conformance. This Commission and other bodies have done
3 infrastructure assessments since time memorial, we will
4 continue to do those, but I really want to focus in on the
5 issue of need conformance and how that can undermine
6 development. Way back in the '90s, we had a biennial
7 planning process designed to do need conformance and
8 identify exactly what kind of projects were needed and
9 where. That imploded because the process was essentially
10 gained to create disincentives for developers to build
11 generation that were needed. The State modified the
12 statutes, removing the need conformance test, and creating
13 an environment where the private sector could come into
14 California and, on their dime, invest their money to develop
15 their projects, recognizing that many of those had to come
16 before the Energy Commission in the siting process where you
17 would review them from an environmental/CEQA perspective.
18 If they were able to pass that test, including all the
19 mitigation, the assumption was that they could be sited
20 here, and then the next decision was, would they spend the
21 money to develop the capital and infrastructure to build,
22 and that was another question - early on, it was in the
23 marketplace, now it was under a PPA structure, generally.
24 That process, the need conformance structure, was changed
25 back in the '90s because we had problems with that process.

1 It was overly detailed, overly planned, and it ended up not
2 resulting in the types of generation that we needed and, as
3 a result of that, was one of the contributing factors for
4 the energy crisis because we were resource short during a
5 period of time that things went haywire. So, I just want to
6 reemphasize the reality from a developer perspective of the
7 need - the obligation for them if they want to develop
8 projects, to enter into the forum of California way in
9 advance of this needs assessment or the infrastructure
10 assessments that you're doing here, before they bring a
11 project to you to site. Millions of dollars are spent in
12 that process and what they're reacting to are relatively
13 clear signals about what the State needs, generally - not
14 specifically down to location because that allows, then, the
15 flexibility to go out and talk to developers. The problem
16 today is that, 1) there's a lack of transparency and we have
17 overly complex planning processes conducted by any number of
18 agencies in the State of California, all of which tend to be
19 sending slightly different signals about what's needed from
20 an infrastructure perspective, what's going to be built from
21 an infrastructure perspective, and so forth. Those have a
22 tendency to delay that advance work that I was talking about
23 a second ago, from a developer to get out and actually spend
24 the money because the question is, what is it that
25 California is going to allow to be built, and who am I going

1 to sell to. Developers need clear stable signals, they need
2 a process that is clear for the selection of the resource
3 that is going to go forward and they need a process that is
4 clear on the signals to build. And the extent to which
5 planning processes, which tend to be never-ending in
6 California, amongst a variety of agencies and entities like
7 the ISO, those multi-processes on planning tend to undermine
8 a developer's willingness to spend the millions of dollars
9 in upfront investment to build those projects. Currently
10 today, we have a multi-planning process that I don't think
11 is particularly helpful, we have RETI, which, compared to
12 the others, is quite transparent, we have the CTPG, which is
13 a precursor to the ISO's Transmission Planning Study, which
14 is not particularly transparent, particularly to developers.
15 It is controlled and operated by the utilities. We have the
16 ISO doing a 33 percent integration study, which is very
17 complex and detailed, which tends to be delayed because of
18 that. For better or for worse, it's just the reality of
19 planning in California. And then we have the PUC doing
20 integration studies, all of which are slightly different,
21 all of which may have slightly different assumptions, and
22 all of which means that most stakeholders cannot follow them
23 properly. We are not in a position, particularly an
24 association like IEP, to really track this in great detail
25 because there are so many different forums that this is

1 going on. The only ones who are able to follow this are the
2 State planners and maybe their consultants, and perhaps some
3 of the utilities if they view that they've got some
4 investment concerns there. But that's a problem. It's
5 creating a problem about the transparency of California's
6 process. From a developer perspective, what we face,
7 ultimately, at the end of the day, is for 75 percent of the
8 load, if we're interested in serving 75 percent of the load,
9 we're at the PUC and the LTTP, where the utilities
10 individually are applying the least cost best fit
11 methodologies to determine how each bidder fits into the
12 system. That, too, is not a particularly transparent
13 process. But that is, at the end of the day, the
14 determining mechanism that drives the PPA structure, that
15 drives the investment. So, I just want to point that out,
16 that that becomes from a developer's perspective the key
17 criteria right now for determining what you're going to do
18 and when you're going to do it. Third, I want to talk a
19 little bit about problems in modeling. We've been around
20 watching modeling and everybody in this room has been
21 watching modeling for way too long. Modeling typically, at
22 the level it's being talked about here, results in delays
23 because of the complexity and usually that's a tension
24 between transparency and complexity and we end up with no
25 transparency and inadequate satisfaction in terms of

1 sophistication on the complexity issue. Secondly, whenever
2 we turn down this process of complex modeling, invariably
3 the assumptions that get embedded in the model today, when
4 it comes out in a study work in 18 months is out of date.
5 Who predicted the economic recession that occurred in 2007?
6 If you go back and look at all the planning studies that
7 occurred in the mid-2000's, nobody saw that coming, at least
8 at the scale that it did. Nobody predicted the energy
9 crisis at the scale that it they did when they were doing
10 these planning studies. The problem is that the resources
11 that go into the modeling are fine for an infrastructure
12 assessment, but if it becomes a tool for need conformance,
13 the tool because out of date by the time it's being applied,
14 and that is what I think is a very big problem if we're
15 going to use it for that application. And then, finally,
16 this is not going to be a surprise to anybody at the dais, I
17 mean, as a stakeholder, we see continually bureaucratic in-
18 fighting between models about what are the assumptions, what
19 are the endpoints, and ultimately what that had, the effect
20 of that, is to delay decision-making. And again, to get
21 back to my first point, from a developer perspective, what
22 we want is some regulatory certainty. We want some price
23 signals that tell us what to do and when in advance, so we
24 can plan for it. The bureaucratic in-fighting that usually
25 emerges out of this kind of - when multi-agencies are doing

1 similar but slightly different modeling, it creates problems
2 from a developer investment perspective. So, what solutions
3 do I offer up from a concept perspective? First, we want to
4 see advance signals that would indicate what kinds of
5 projects, if they pass CEQA, are going to pass muster at the
6 Siting Commission at the Energy Commission. We're not
7 particularly interested in investing millions of dollars to
8 come to the Energy Commission with a project that meets CEQA
9 requirements and then have a finding that all of a sudden it
10 doesn't meet the needs of some planning study that was done
11 a couple years ago. The Legislature addressed this a while
12 back, if independent power producers, or even the utilities,
13 are willing to move forward and invest a dime on their
14 resources, we should have a process that allows that to move
15 forward. Secondly, we need to reduce - or increase -
16 regulatory certainty in the same regard. And I'm going to
17 point out the role of the least cost benefit methodology
18 that is employed today; if that's a problem because people
19 don't understand how it's being applied, and particularly
20 the agencies don't understand how it's applied, I would
21 recommend that we look at that methodology first, to find
22 out what resources that are being posed in these RFOs are
23 actually fitting the constructs that people have for the
24 desired products. If there is a problem there, we should
25 look at and fix that because that's the instrument that is

1 being used to send the primary signals to the development
2 community today. If the goal here is to tell other agencies
3 what the need is, then I think I would like to see a clear
4 signal of what I've seen to date amongst the various
5 agencies about agreement on that. I would like to know
6 where to go to make my arguments and not have to run amongst
7 four or five different agencies to work these issues out. I
8 beg to differ, I saw the Governor's statement on the
9 integration of the agencies, I've read it twice now because
10 I heard how glowing it is about what it tells the
11 development community; I don't see it there. I would like
12 to see the agencies be a little more affirmative about the
13 PUC is going to defer to the Energy Commission on X, Y and
14 Z, and that will be it, or the ISO is going to defer to the
15 Energy Commission, or the PUC is going to defer to the ISO,
16 or whatever. Right now, we don't have any of those price
17 signals. We don't know where to go. And we're being sliced
18 apart - all stakeholders, I suspect, are being sliced apart
19 by many different proceedings, and there's not enough time
20 to deal with all of them. So, I would just make that
21 observation. So, I guess, if I were to sum this up, I mean,
22 I think the Energy Commission has always been good at doing
23 infrastructure assessments, and I'm not necessarily taking a
24 position here about the need for that, per se, and this
25 report describes a need assessment that would probably be

1 very helpful to the State of California. I do have
2 discomfort with the notion that that need assessment, and
3 all that modeling, and all those scenario playing, are going
4 to have an impact on need conformance in the actual siting
5 case, where developers have done a lot of work based on the
6 signals that you provided them, and they come to you, pass
7 CEQA, pass all the tests that you have on your books, and
8 all of a sudden it's the wrong project, on the wrong street,
9 in the wrong neighborhood. We have troubles with that
10 because it takes, as I indicated the upside, three to four
11 years to find a street, to find a neighbor, and so forth, to
12 get a project moving. And that kind of certainty is
13 something that we're looking for about how you're going to
14 proceed on this, and where we can go to invest millions of
15 dollars over the next 10 years. So, those are my comments.
16 I'm happy to answer any questions, and look forward to this
17 proceeding over the next 18 months.

18 COMMISSIONER BYRON: I'm not sure he does. Do you
19 think he really does? Mr. Kelly, I like the way you think.
20 I understand - I believe everything you said and I think
21 they're all good comments that we need to pay attention to.
22 If I'm not mistaken, though, you described yourself early on
23 as being paranoid, maybe that was just with regard to the
24 document, but I sense a little bit of that all through your
25 comments, as well. The fundamental question I'd like to ask

1 you, and we could get into some other details, time
2 permitting, because I'm jotting down all the things you're
3 saying, you know, do no harm, the issues around State
4 planners setting operational characteristics for future
5 power plants, you know, the notion of coordinating and
6 sending the right signals to developers on what's expected
7 of them, there's no doubt about it, the developers are
8 incredible in terms of meeting all the various requirements
9 the State puts in front of us. But the fundamental question
10 I think I want to ask you is, instead of looking at what
11 we're trying to do here as additional constraints, what if
12 we were to not take on this assessment and, given the
13 environmental that I outlined earlier in my comments, that
14 you're going to be dealing with in the State going forward,
15 and Commissioner Weisenmiller and the Chairman added
16 additional things I failed to mention, such as greenhouse
17 gas reductions, etc., if we weren't going to do this kind of
18 analysis and we're going to provide this kind of additional
19 information that would inform other agencies and developers
20 like yourself, what would be the likelihood of your spending
21 millions of dollars to come before this Commission with an
22 AFC, and having to spend perhaps even more millions of
23 dollars and it not being approved? Wouldn't it be much
24 higher if we weren't going to do this kind of analysis?

25 MR. KELLY: Well -

1 COMMISSIONER BYRON: Your likelihood of success, I
2 think, would be lower is what I'm trying to point out.

3 MR. KELLY: Yeah, let me answer it this way. How
4 many projects have come to you in the last seven years where
5 you haven't been doing this kind of assessment? How many
6 millions of dollars have been expended by developers over
7 the last seven years to develop the projects that have been
8 sited here? And even the ones that you declined to site?
9 There is, for better or worse, a number of market signals in
10 California that developers are taking today and investing
11 millions of dollars on. So, if you're dissatisfied with the
12 rate that developers are bringing projects to you over the
13 last seven years, then maybe we've got to look at that and
14 figure out why that's occurring. But, if you are looking
15 back over the last seven years, particularly the last four
16 or five, and seeing a plethora of developers bringing
17 projects through this agency for siting, set aside all the
18 ones that are going through the local agencies for other
19 technologies, then the question is really, do we need to
20 change that? What's wrong with the horse we're riding
21 today?

22 COMMISSIONER BYRON: A lot of things.

23 MR. KELLY: Well, but you're getting the generation
24 that is coming through you. I mean, if there's something
25 wrong, it's the sense that the planning is disassociated

1 from - is spread across a number of agencies, perhaps, and
2 there's not one central place that is doing it, which is
3 true. And that's not something that I favor, necessarily,
4 but it's the question that keeps - that comes to my head all
5 the time is, if the Energy Commission were to be that focal
6 point, what does it matter? My members that want to serve
7 at least the 75 percent of load that is supplied by the
8 IOUs, respond to the signals that come out of the LTTP and
9 the methodology of least cost best fit that's applied to
10 review RFOs. Additional planning will just undermine that
11 in some respects, unless it's consistent. And if you're
12 here to tell me that you will be exactly consistent with the
13 LTTP process, and that they will accept all your
14 assumptions, and integrate that perfectly into their
15 process, that would be great, but I've not experienced that
16 to date.

17 COMMISSIONER BYRON: But you make it sound as though
18 this Commission is responsible for these - and I use the
19 word "constraints" - that this Commission is responsible for
20 all these constraints that a developer faces, and of course,
21 we're not. We don't have anything really to do with the
22 procurement process, except the demand forecast. We don't
23 have anything to do with reliability issues that need to be
24 addressed, you know, to meet the ISO's concerns. I mean, on
25 and on and on. We're not responsible for all these, we're

1 trying to integrate this on a statewide level and make sense
2 out of it.

3 MR. KELLY: Yeah, but if you succeed in integrating
4 it, that might be fine. If you succeed in simply adding
5 another layer to the planning process that's already there,
6 then that's not going to be helpful, and that's the problem
7 that we have in the state. We have a number of agencies
8 that are doing this planning work, and you may be the best
9 planner in the world, but if it's just in addition to all
10 the other plans that are going on, most of which are not
11 particularly transparent because they're so complex, where's
12 the help?

13 COMMISSIONER BYRON: And, again, that goes back to
14 my fundamental question. I would hope you'd be standing up
15 there, Mr. Kelly, begging us to do this analysis so that it
16 would help inform you as a developer coming to this process,
17 with a better understanding of how all these various - and,
18 again, I use the word "constraint," but all these various
19 issues are going to come together.

20 MR. KELLY: Well, I've been through -

21 COMMISSIONER BYRON: Because I don't think you're
22 going to be able to do it 10 years from now, five years from
23 now.

24 MR. KELLY: But I've been through a number of
25 planning processes over the last 15 - way too long - and the

1 reality is that it becomes a huge time sync, a huge resource
2 sync for stakeholders, and may not have any impact at the
3 end of the day, but you've got to cover your bases just in
4 case because you don't really know. And that's what I'm
5 talking about, is my concern that this is an additional
6 layer that has no impact at the end of the day. I mean, I
7 have, as a stakeholder, had to assess where I'm going to
8 apply my limited resources to the greatest effect. And if
9 you're telling me that this is the forum where we're going
10 to have the work, and this is going to apply to the ISO, and
11 this is going to apply to the PUC, and this is going to
12 apply to the Air Boards, and it's going to apply to the
13 local agencies, as well, great, I'll be here and we'll get
14 the bright people in front of you. But if you're doing
15 something in addition to all the time I'm spending at the
16 PUC, and all the time I'm trying to spend at the ISO, and
17 the CTPG, it doesn't work very well.

18 COMMISSIONER BYRON: All right, fair enough. We're
19 all competing for your time.

20 MR. KELLY: And I just want to go to the beach.

21 COMMISSIONER WEISENMILLER: Actually, look at it
22 this way, Steven, if it was easy, they wouldn't need you.
23 Your clients could just handle it themselves, but since it's
24 not easy, there's a need for the trade organization. I
25 think there's a lot of mythology, obviously, in California,

1 on issues, and I think part of your discussion is based in
2 some of that mythology. If you look at projects now in the
3 South Coast, they have been through here, they've been
4 permitted, they have contracts, they're not being built.
5 Why is that? It's not because the planning process is too
6 much, it's because it hasn't dealt with some of the issues
7 it should deal with. If you look at projects, if you look
8 at the Federal greenhouse gas regulations, if you look at
9 the EPA's recent regulatory guidance, that's coming. We can
10 have projects that have PPAs that get through our process,
11 and run into a brick wall at the EPA. Unless we figure out
12 a way in this process to deal with the greenhouse gas
13 issues, in a way which the EPA is going to listen to us,
14 otherwise your people are going to spend millions and just
15 stop after they get their permits from us. And that's what
16 we're trying to deal with in this process, is solutions for
17 the South Coast issue, and for the impending EPA issues.
18 It's not going to be cheap, it's not going to be easy, but
19 we have to do it.

20 MR. KELLY: I think that, I mean, we all understand
21 the problems in the South Coast, I mean, when I see language
22 that says, "We, the State planners, are going to define the
23 operational characteristics of these units and select the
24 ones that meet all that, and the location that we want
25 them," and blah, blah, blah, to me, that is a signal for

1 problems down the road. If what you're saying is the Energy
2 Commission is going to come out with a statement on the
3 assessments side of it, "You know, we need 11,000 megawatts
4 down in the South Coast, in-Basin," I mean, fine. We all
5 know that. But if it takes the Energy Commission to step up
6 in its planning process to make that statement, we would
7 support that. We would support things that will lead to a
8 resolution of the problems down there. It's not clear to me
9 that the need conformance aspect of what I'm sensing from
10 the narrative in the report necessarily solves that. And I
11 don't know whether SCAQMD is looking to the Energy
12 Commission to make an assessment of how many resources are
13 needed in the state to support either Grid reliability, or
14 whatever the public policy measures are that the state wants
15 to support; that should have come out, probably, of all the
16 precedent IEPR's that we've been doing over the last 10
17 years. I'm not certain that we need to fundamentally change
18 what we're doing in order to send that message to that
19 agency.

20 COMMISSIONER WEISENMILLER: I think, certainly, the
21 public in that area want a regulatory assessment that we've
22 done all the energy efficiency we can do, all the
23 renewables, all the DG, and that something is needed in that
24 Basin. Now, that certainly is something which could be
25 dealt with by a number of agencies, although I would argue

1 this is probably one of the best positioned to do that,
2 particularly if we can combine Edison and LAWP's issues in
3 the Basin, but similarly, if you just look at Avenal, I
4 mean, Avenal was permitted by here, it's now at EPA. And
5 you know, it's not moving. So, again, I think the current
6 system is broken. I don't know if the staff framework is
7 going to get us to where we need to get to, but that's the
8 purpose for having our workshop today is to start getting
9 comments on how to improve it so we can deal with the pieces
10 in the current system that are broken.

11 MR. KELLY: Well, but all your historical IEPR's
12 dealt with assumptions based on energy efficiency demand
13 response, penetration of a certain amount of renewables, and
14 so forth. And I'm not saying don't do that, you've done
15 that for 10 years. Now, I may not be sensitive to what
16 SCAQMD is indicating that they need from this agency as a
17 declaration of why SCAQMD should move forward and work on
18 those projects, we would endorse that; but what I'm sensing
19 is a fundamental change of the process that has been used in
20 the past, and maybe I'm misinterpreting what this proposal
21 is, but it strikes me as very different, or else we wouldn't
22 be talking about it, from what has been employed in the
23 past.

24 COMMISSIONER WEISENMILLER: But, I mean, if you look
25 back at the MRW Study on Greenhouse Gas, if you then look at

1 the Avenal Decision, but then look at the current -- recent
2 EPA Regs on that, there's a lot of stuff to do to basically
3 deal with the greenhouse gas permitting parts that,
4 certainly, this agency as part of its siting process, you
5 know, if we can build it in, it's going to be a lot easier
6 than, you know, giving your people the permit and saying,
7 "Go deal with EPA next and figure out how to deal with their
8 issues." So, if we can basically, as part of our process,
9 set that up - but, again, if you look at that part, that's a
10 different strain than the '80s, '90s, need conformance
11 question. But, certainly, we're not trying to step back
12 into that, but trying to step past Avenal to the next step
13 on greenhouse gas assessment.

14 MR. KELLY: Well, let me - we worked - IEP worked
15 with your agency, at the resources agency, and here on you
16 Regs on GHG, and I thought that was a very positive outcome
17 where we all recognized that, if somebody is siting a new
18 facility and, by definition, displacing an existing
19 facility, or even another facility with a higher heat rate,
20 the presumption is that you're getting a GHG benefit. I
21 haven't read the most recent Avenal transcripts. I guess
22 where my concern is, last summer I was reading transcripts
23 in this agency about projects that were being sited, and
24 reading a narrative that was telling me, you know, coming
25 from the context of those transcripts, you know, "You've

1 brought me the wrong technology," or, "Your technology is in
2 the wrong location." From the developer perspective, it's
3 hard to deal with that kind of environment.

4 COMMISSIONER WEISENMILLER: Yeah, but I mean, the
5 developers should be smart enough to know that, in
6 California at this point, we're looking for renewables, and
7 that's going to have consequences in terms of renewable
8 integration. And renewable integration, the types of
9 facilities that they're going to build, should not be
10 something base load, but it should be pretty flexible, and
11 that's certainly the message people are getting, so I think
12 that part of it, again, if someone hasn't gotten that
13 message from just the physical market and the regulators,
14 you know, they probably are going to lose a lot of money in
15 development, but -

16 MR. KELLY: I totally agree with you, and they're
17 losing their money. I guess, though, the part that we're
18 teasing out here is the role of the Energy Commission to
19 define the operational characteristics of these units at
20 specific geographic locations. And what level of detail
21 we're talking about there. I mean, if that process moves
22 forward, and then there's a parallel process at the PUC on
23 the LTTP and least cost best fit methodology, which is
24 presumably doing almost exactly the same thing, it creates a
25 tension that is not helpful in my view.

1 COMMISSIONER WEISENMILLER: That certainly can be an
2 issue, but I think the thing that would drive a lot of need
3 in the future would be renewable integration, that's an
4 issue which I don't think any of us have our arms around
5 very well, I mean, as you indicated, the ISO is certainly
6 taking a lead more trying to crunch that through; we would
7 certainly hope that we can rely upon that assessment in this
8 work. But, again, I don't even think at this stage we have
9 - you now, we're still trying to frame that in a way that
10 people believe the numbers coming out of the ISO, and that's
11 what we're relying on, but, I mean, we don't really intend
12 to re-crank all those wheels. But we do need - that's going
13 to be a huge driver of our study is the ISO's renewable
14 integration work.

15 MR. KELLY: Well, I think that's right. We had the
16 ISO two-year study, or whatever the heck that's going to
17 take, and then it comes over here for 18 months, or 12
18 months, or whatever it is -

19 COMMISSIONER WEISENMILLER: How about a workshop
20 here? I don't need 18 months.

21 MR. KELLY: Well, but until you get it integrated
22 into your final decision, that has no bearing. And then it
23 goes over into the LTP, which is an 18-month process,
24 before there is a decision there that's telling developers,
25 "Okay, this is what we want to do." That is a huge gap of

1 time. And all of the assumptions that went into the ISO
2 study work over here are out of date. And we get pleadings
3 at the PUC which has occurred this year, well, all of a
4 sudden we don't need that now, things have changed, and
5 we're fighting that. And the need for regulatory certainty
6 and price and development signals going forward is something
7 that is critical for the industry, for the investment that
8 is needed, and I'm just emphasizing that, if we're bringing
9 it altogether, that's great, but if we're adding on an
10 additional layer, then it's not clear to me that it's
11 particularly helpful, except for maybe some discreet issues
12 related to, you know, once-through cooling in the South
13 Coast, I don't know.

14 COMMISSIONER WEISENMILLER: I think you should also
15 assume with the new Administration that there will be a
16 pretty good zero basing of energy activities among all the
17 agencies, so we're going to certainly become more - hope
18 become more efficient. But I think, again, the question for
19 IEP in its participation is, how do we frame this so that we
20 can deal with removing some of the barriers that come in
21 after we're done? I mean, that's what we're trying to do
22 here, not erect more barriers to getting in the door. But
23 there are real barriers out there and we certainly need your
24 help in trying to figure out how to address those.

25 MR. KELLY: We look forward to that discussion, as

1 well.

2 COMMISSIONER WEISENMILLER: Yeah.

3 MR. KELLY: Thank you.

4 CHAIRMAN DOUGLAS: I don't have any questions.

5 Thanks, Steven.

6 MR. PETTINGILL: Good morning, Chairman Douglas and
7 Commissioners Byron and Weisenmiller. I am Phil Pettingill
8 with the California ISO and, first of all, I'd just like to
9 thank you for the opportunity to provide comments, you're
10 kicking off a new project, it is certainly a challenging
11 initiative. I guess what I wanted to do is start off with
12 the notion, I guess, that Suzanne did, you know, that if the
13 idea here is a more coordinated blueprint to help meet the
14 State renewable energy goals, then we would certainly say
15 start from the basis of the California Clean Energy Future,
16 and the document certainly recognizes that, but recognizing
17 that we're going to move through a transition to a new
18 Administration, the CCEF and that whole vision that we all
19 worked on together certainly becomes the foundation. We've
20 identified most of the elements that you've certainly
21 identified in your report, and many of the elements we think
22 that are going to affect the Grid as we move forward over
23 the next 10 years or so. So, in terms of the foundation, to
24 start there. But let me provide some specific comments. It
25 looks like, you know, and the Staff Report is trying to

1 bring together valuable information, there is an awful lot
2 of activities going on between the different agencies,
3 whether it's the PUC, CEC, or us at the ISO. And to bring
4 that information together is certainly going to be valuable
5 for a new Administration and all of us that are trying to
6 move down this path over the next 10 years. On the other
7 hand, though, I think it will be beneficial as we go through
8 this process with you, to be really clear on what is the
9 proposal going to provide because, certainly, re-doing work,
10 or re-analyzing, or reproducing, can certainly be costly,
11 and very likely unnecessary, given the activities that are
12 going on. We are certainly, at the ISO, well aware of the
13 fact that we've got operational challenges with air
14 restrictions in the South Coast, once-through cooling, as
15 well, and so, you all know, we do operate most of the Grid
16 in the system, but we also do a fair amount of technical and
17 operational studies to understand what are the implications
18 of the fleet that we have today, and how that fleet might
19 change over the coming years as we all work to implement the
20 environmental policies. So, that work, we appreciated, was
21 highlighted in the report by Dr. Jaske and Mr. Vidaver, you
22 know, the renewable integration studies. It's certainly
23 very complex, very challenging to try to understand how
24 large penetrations of renewables are going to affect the
25 operation of the Grid. The transmission that's going to be

1 necessary to connect those renewables, and if not just those
2 renewables, then how will it help us in resolving the issues
3 of once-through cooling and air emission restrictions, as
4 well? But more specifically, as Mr. Kelly said, the reason
5 we know there's 11,000 or 8,000, or 10,000 megawatts
6 required in areas like the LA Basin is because of the local
7 capacity studies that we produce on an annual basis. We
8 think it's important to try to communicate that information
9 to all of the agencies and developers in the state to
10 understand, given the fleet that we have, or given the
11 transmission that we have, then what are the requirements to
12 be able to reliably operate the system? And we're certainly
13 committed to continue doing that. So, as you know, we've
14 worked collaboratively with you, PUC, Air Board, and others
15 to put together the California Clean Energy Future, and we'd
16 certainly continue to do that as we go forward, but again,
17 trying to be careful that we're not replicating or redoing
18 work. We look more specifically to the proposal, I think
19 there's maybe three things to think about, trying to produce
20 a real precise quantification of need at this point of time
21 is likely to just be impossible, frankly. We can get an
22 idea, a direction, a path to head towards, but to get
23 something specific is going to be probably impossible. And
24 maybe three key points to think about as we do that: the
25 most challenging one, of course, is just the fact that we

1 don't want to get too far out ahead of the defined
2 processes, and the timeline that is outlined in the proposal
3 starts to do that, asking for deliveries in May, when
4 certainly some reports or analyses may not be available in
5 May. We're trying to produce a final report in October when
6 those things may not be available for your final report.
7 But, I think more specifically, just drilling down the
8 issues and the interaction between generation and
9 transmission is certainly going to be a challenge for all of
10 us. At this point, there is such a significant change in
11 generation technologies, we're seeing that, you're seeing
12 that, with your siting efforts in some of the solar
13 projects, that to try to understand how those technologies
14 will be operating eight and 10 and 12 years from now will
15 certainly be difficult today, and will certainly drive - or
16 not drive - the need for additional transmission or other
17 generation to support those. So, that interaction between
18 generation and transmission is a challenge primarily because
19 technology is starting to drive the different products that
20 are coming into the system. I think the second area I
21 wanted to help our here was just the approval of new
22 generation, as Commissioner Byron and Weisenmiller raised.
23 It's going to be a challenge when we look at the air and
24 water restrictions, and we should all expect that those will
25 change over the next eight, 10, and 12 years. So, we've got

1 some idea what the process is today, but it will change, and
2 that of course, then, makes trying to shoot towards a target
3 eight or 10 or 12 years from now a very difficult challenge.
4 To recognize that those permit processes will be modified is
5 certainly something for us to consider, and so our approach
6 has been to look at sort of a breadth of options. What do
7 we think would happen if things were sort of the status quo?
8 Where do we think things would go if there was significant
9 change in those permitting or other requirements? And more
10 importantly, what if there was a significant penetration of
11 other technologies? And, Commissioner Weisenmiller, you
12 mentioned the new Administration focusing on 12,000
13 megawatts of DG, certainly the California Clean Energy
14 Future said 5,000, so that said, we recognize we need to go
15 in that direction, maybe we're off by a few thousand
16 megawatts in 10 years from now. But certainly, if we're
17 designing a system to incorporate 5,000 megawatts, we've now
18 got a lot of the infrastructure and the processes in place
19 that I believe will get us to the 12,000 that the new
20 Administration would like to get to. So, again, just to
21 sort of summarize these opening comments, we look forward to
22 working with you, I think we still ought to use the
23 California Clean Energy as a framework, and more
24 importantly, we're going to work together to try to make
25 sure that we have a reliable electric system as we convert

1 the infrastructure that we have. There were three sort of
2 key questions for today, and I wanted to just touch on the
3 first couple because I think it's helpful to really think
4 about what we already do have. The first question is, well,
5 what kind of cases, what kind of breadth of analysis should
6 go into this particular activity. And I would certainly
7 point out to you that, coming out of the California Clean
8 Energy Future, and what's already been adopted at the PUC,
9 is a 3 X 5 matrix. There is already 15 different scenarios
10 that we've worked together to identify. Given this is the
11 first time through this initiative, I would certainly
12 suggest that is a place to start, that gives us enough
13 breadth and enough understanding, but more importantly, it
14 would be consistent with the analysis processes that are
15 already in place if you stay with those cases. And then,
16 finally, you know, where does this go - maybe question 2 was
17 where does this go in terms of the range of need and so
18 forth and so on, and I'd take you back to that matrix. When
19 that matrix is talking about high load, low load, high
20 imports, low imports, high DG, low DG, I think we've got a
21 pretty good sense of what the breadth of possible futures
22 are in at least going through this first round. So, let me
23 stop there and say thank you very much for comments and, if
24 you have any questions, I'd be happy to try to answer those.

25 COMMISSIONER WEISENMILLER: Actually, thanks a lot,

1 Phil, I think this helps. I think the one question as we're
2 going through our planning is, in terms of what's the
3 current expectations on the renewable integration studies,
4 if you could sort of fill us in on that that would help.

5 MR. PETTINGILL: Yes. Well, going back just a half
6 step, as you know, we've put out a report on 20 percent,
7 that's pretty detailed, pretty specific, on what we think is
8 an initial indication when we're at a 20 percent
9 penetration. We are already producing preliminary results
10 through the PUC's Long Term Procurement Proceeding, so we've
11 talked about how we go about this methodology for 33
12 percent, and in their workshop on November 30th, we're going
13 to be presenting our Step 2 results, those Step 2 results
14 will actually start to identify similar outputs that we had
15 in that 20 percent analysis, so what do we see as sort of
16 maximum levels of regulation, or load-following, those kinds
17 of numbers under a 33 percent case.

18 COMMISSIONER WEISENMILLER: And I guess, just to
19 sort of fill out the rest of the space, also, could you give
20 us an update on where the ISO's transmission planning
21 process is at this point? Again, when to expect some
22 conclusions there?

23 MR. PETTINGILL: Yes. Well, where we are right now
24 is we're going through our annual process, generating a plan
25 for our portion of the Grid. We're expecting to have a

1 draft report, or certainly near final results, by next
2 month, December. That will roll into January of next year,
3 where we would have a final transmission plan. That plan
4 looks out for 10 years, so it identifies what our needs are
5 for years 1, 2, 3, 4, 5, and then jumps out to year 10. So,
6 that takes us to the year 2020 and we have incorporated in
7 that plan a 33 percent RPS. So, I think you'll get a pretty
8 good sense of what are the specific transmission upgrades
9 that are needed, you know, in the year 2020, and for 33
10 percent RPS program. We've made a number of assumptions in
11 that, we've looked at - considered retirement of some of the
12 once-through cooling plants, and so forth and so on. So, I
13 think that will be very informative in terms of the
14 additional transmission that may or may not be required by
15 the time we get to 2020.

16 COMMISSIONER WEISENMILLER: Just to circle back on
17 uncertainty for a second, obviously, trying to focus on
18 uncertainty as part of this process is going to be a
19 challenge. I guess one of the upcoming workshops we're
20 going to have is going to deal more with the economy part of
21 that, you know, because we were trying to figure out what
22 some of the major uncertainties were, certainly when
23 California gets out of the doldrums is a key part of this,
24 and as I said, certainly in the next couple months, at one
25 of our upcoming workshops, we'll try to focus more on the

1 economy. But, in terms of as we struggle through the best -
2 obviously, if you deal with uncertainty on some level, you
3 can just - in order to provide range, you could justify any
4 actions. In terms of as the ISO struggles with uncertainty,
5 what's the best way you've found so far to try to deal with
6 that?

7 MR. PETTINGILL: Well, that's why I was really
8 focusing on the matrix of possible future cases. In there,
9 we're pretty comfortable that there is what, I guess, we
10 would characterize as sort of a normal load case. If the
11 economy, you know, sort of recovers, and we move back to a
12 normal projection over the next 10 years, that's certainly
13 something that we should all at least plan for because, in
14 our case, we're concerned mostly about having sufficient
15 infrastructure. So, if that load does come back, we've got
16 to make sure we've got enough transmission and generation
17 facilities to serve it. Now, we can then sort of take away
18 from that with some of the other policy initiatives like
19 high DG, energy efficiency, and some of the other
20 initiatives that may take away some of that load. Now, of
21 course, I know you can appreciate that, for us, being the
22 System Operator, we're always concerned about things like
23 Distributed Generation. Distributed Generation can
24 certainly cause problems for us in the sense that, if it's
25 behind the meter, or it's not clear to us that it's

1 offsetting real load, what happens when, certainly, from
2 time to time we've seen this, the generators trip off,
3 they're not available, they're not serving the load? Now we
4 are expected to be able to pick up that load. We've also
5 got to be concerned about the Federal Reliability Standards
6 that will say we need to maintain operating reserves to
7 serve that load, even though it's being served by a
8 generator most of the time, what happens when that generator
9 trips? So, those are the kinds of things that we're going
10 to be concerned about as we go forward from a planning
11 standpoint. We want to know what all of the load is, but
12 certainly recognize that it could be offset by some of these
13 initiatives. It creates a breadth of options or
14 considerations for us when we're looking at the
15 infrastructure, and we feel pretty comfortable if we're
16 looking at a wide enough bookshelf, then we can identify
17 sufficient infrastructure to cover the outcomes. That's the
18 way we deal with the uncertainty.

19 COMMISSIONER BYRON: Mr. Pettingill, just a couple
20 of questions, in fact, maybe a few comments before I ask you
21 questions. I feel like I'm in a position where I can say,
22 "Let's not overstate Governor-Elect Brown's energy policy
23 statement around DG." I mean, I like it, we're all in favor
24 of looking at it, but let's recognize it for what it is. I
25 believe that document was prepared before he was elected

1 Governor. And it's not necessarily had the benefit of
2 public input and all the vetting that we go through, so
3 let's recognize it for what it is.

4 MR. PETTINGILL: Agreed, and I hope you appreciate
5 that was part of the reason why I wanted to really reinforce
6 the California Clean Energy Future, because all of us
7 working together, were able to vet those kinds of numbers
8 and those objectives, because we think those are actually
9 realistic.

10 COMMISSIONER BYRON: And we recognize the concerns
11 that the ISO has around increased amounts of Distributed
12 Generation, and renewable DG, as well. And I don't think
13 this analytical effort really can even address that, I mean,
14 in fact, I sense a little bit of - maybe this is a bad word,
15 but I sense a little paranoia in some of your comments, as
16 well - there's not a great deal of precision that can
17 result, and correct me if I'm wrong, Mr. Vidaver, and Dr.
18 Jaske, the word "precise" is nowhere in this white paper
19 that we've written here.

20 DR. JASKE: I think it would be unreasonable to
21 think that one can be precise, that there is, in fact, a lot
22 of uncertainty that is not probably as recognized as it
23 ought to be, in an attempt to be overly-precise.

24 COMMISSIONER BYRON: And, in fact, I don't even
25 think you can or will be addressing Distributed Generation

1 in this analysis, correct?

2 DR. JASKE: As I said, it can be done in the sense
3 of either adding to supply, or reducing demand if it's
4 behind the meter, but that's a far cry from really
5 understanding all of its implications to the Distribution
6 System going forward.

7 COMMISSIONER BYRON: Uh huh. I think the workshop
8 Commissioner Weisenmiller has planned on the renewable net
9 short will help inform this perhaps to a great extent. But
10 what we're saying up here at the dais is that we're paying
11 attention to this potential policy redirection, we're
12 certainly interested in it, it may not fit the ISO's model,
13 or even in the investor-owned utilities model for moving to
14 a more distributed source of generation, but we're going to
15 look at this more carefully. But let's get back to the
16 analysis, some of the comments that you mentioned. We're
17 certainly starting from the clean energy - the California
18 Clean Energy Future document, and I think at least twice you
19 mentioned about duplicating previous analysis, there's no
20 agency that looks at these issues really on a statewide
21 basis, and that's what we're trying to do here. We're going
22 to rely heavily upon the work that the ISO does, we're not
23 interested in duplicating efforts here, it's really more an
24 integration effort that's underway. As I said, precision
25 is really not going to be possible. And you had indicated

1 about not getting too far out in front of when material and
2 information might not be available. I recognize that
3 analysis and the input might not be done when we'll need it
4 to complete our work, but we've got to get out in front of
5 this issue. I just think it's crucial. We can't wait and
6 sit around, and we're frustrated at times because the
7 analysis that other agencies do is not necessarily available
8 in a timely way for our work, we've got to move forward on
9 this, we've got to try and understand this at least from
10 some sort of qualitative way. So now, my questions if I
11 may? You mentioned operational characteristics of new
12 technologies that are changing the way you're going to be
13 operating the Grid. Give me an example or two of that
14 because I just can't - I mean, we've seen the output
15 profiles of solar and wind, we understand the challenges
16 around that, what kind of additional technologies are you
17 talking about when you are saying that they will change
18 operating characteristics of the Grid?

19 MR. PETTINGILL: Well, I don't think we've actually
20 seen where solar facilities are going to go. There is just
21 a significant change in the kind of research and development
22 that is happening in different types of solar. Today, you
23 see the solar thermal facilities, but certainly there is a
24 huge shift to photovoltaics, for example, that you wouldn't
25 necessarily see, but we're certainly seeing. And part of

1 the reason for that is, you know, as there is greater and
2 greater penetration, their pricing point is reducing. So,
3 compared to a solar thermal facility, it's starting to look
4 like projects are now shifting to photovoltaics, so that is
5 the first one that comes to mind. Now, the design of the
6 photovoltaics is certainly going to change, as well, and we
7 start looking at how these solar facilities are being
8 designed out there, that they're starting to have different
9 operating characteristics. For us, the solar thermal
10 provides some value in the sense that it's got some ride-
11 through, you know, when it loses the solar, we still get
12 some energy out of it, photovoltaics don't. Now, once the
13 industry starts to understand that, we're certainly
14 optimistic that we're going to see some changes to that.
15 More importantly, one of the more recent things we've done
16 is say, "Well, can we see those facilities ramp in or ramp
17 out so that they're not just turning on and off like a light
18 switch?" We'd much rather have the dimmer than the light
19 switch on those kinds of facilities.

20 COMMISSIONER BYRON: I see.

21 MR. PETTINGILL: So, those are the kinds of things
22 that I was thinking of and mentioning. And I guess as a
23 follow-up point to that, to think about for a second is,
24 again, if we see high levels of Distributed Generation, what
25 type of technologies will those be? Is it going to be all

1 rooftop solar? Or, are we going to bring back fuel cells?
2 What will be the type of technologies that go into these
3 high levels of Distributed Generation, whether it's 5,000 or
4 some other number? And those are the kinds of things that
5 we get concerned about because, certainly, if it were only
6 5,000, that represents 10 percent of our peak load on the
7 system, and that starts to be a pretty significant concern
8 to us as the System Operator. So we just need to be aware
9 of it and understand, as we're doing the studies, how it's
10 going to affect operations.

11 COMMISSIONER BYRON: Fair enough. And that makes
12 perfectly good sense. Let me ask one last question, and I
13 think this -- I could infer the answer is yes from
14 everything you've said -- but I want to ask you, do you see
15 value in this Commission doing this kind of analysis and
16 work going forward? Do you see any benefit to it? Or is
17 this, as Mr. Kelly's concern was, a potential duplicative or
18 constraining effort on the work that they'll be doing? Will
19 this be helpful to the ISO or not?

20 MR. PETTINGILL: Well, thank you. I mean, because
21 one of the points I said, and maybe it was too early on in
22 my comments, was, to pull together and to be able to
23 describe what we are doing is probably a very helpful
24 exercise, and if what I'm hearing you say is not to do
25 reanalysis, not to redo what has been done, but to put it

1 together and put it in a single story, having worked real
2 closely on the California Clean Energy Future, I can share
3 with you that that was an effort and very much like what I'm
4 hearing you describe here. If we're going to pull pieces
5 and parts together and put it into a nice, clean story about
6 where things are going, or what needs to happen, or where
7 there would be value in the system, then I think that's what
8 I was trying to communicate.

9 COMMISSIONER BYRON: Okay, good. I can tell you, my
10 time at this Commission, certainly I've learned most of our
11 time seems to be trying to consolidate the efforts of how
12 many different energy agencies and environmental agencies do
13 we have in the State, we seem to spend a lot of time on that
14 exercise, and thank you for your efforts on that Clean
15 Energy Future, I think that is a very helpful document.
16 But, again, it doesn't decide anything, and it doesn't bring
17 any precision to what we're trying to do, or analytical
18 capability. I think it helps us all understand how these
19 pieces come together. But thank you for it.

20 MR. PETTINGILL: Thank you.

21 CHAIRMAN DOUGLAS: And, Mr. Pettingill, I just have
22 a brief comment or invitation based on the discussion of DG.
23 As I noted, and we noted at the beginning of this, we're
24 really thinking about how to focus in on some of these
25 elements of the Governor-Elect's Clean Energy Jobs Plan and

1 better flesh out and better analyze some of these
2 components, so we will be asking staff, or we are asking our
3 staff, for their thoughts as to where we can get these gains
4 in DG that the Governor-Elect is looking for, what are the
5 needs, what types of analysis, what types of infrastructure
6 upgrades go along with it, what concerns might it raise, and
7 how do we deal with them. So, we'll be very interested in
8 your thoughts and your comments as we flesh out that element
9 of the work, and I would say the same about storage, both
10 concentrated and distributed storage potentials and
11 potential concerns, and needs around that. And my own
12 thinking is that, it's actually very beneficial for us to
13 spend some time developing those two chapters, where we
14 really do have different technologies to change the way we
15 typically think about the Grid, and to be able to integrate
16 that into the infrastructure analysis thinking that we're
17 doing, so we would be really interested in your thoughts.

18 MR. PETTINGILL: Great, well, we'll be here to
19 assist, definitely.

20 CHAIRMAN DOUGLAS: Excellent. Well, thank you.

21 MR. PETTINGILL: Thank you.

22 MS. KOROSEC: All right, anyone else in the room
23 here want to get up and speak? Please.

24 MR. SMITH: Well, good morning. I appreciate the
25 opportunity to stand here and speak in front of you.

1 Chairman Douglas, Commissioners Byron and Weisenmiller, my
2 name is Bob Smith and I am the Director of Energy Delivery
3 Asset Management and Planning at Arizona Public Service.
4 And just maybe a little bit about me because you folks
5 probably haven't ever met me before, but I've been with APS
6 for about 25 years, degreed engineer, I've been in
7 Transmission Planning and Operations for most of that time.
8 I've had extensive experience within the WECC
9 interconnection in terms of chairing committees, planning
10 and operating. I don't know if you recall a group that we
11 held, joint planning between the Southwest and California a
12 number of years ago, we refer to it as STEP, the Southwest
13 Transmission Expansion Planning Group, I actually chaired
14 that for a number of years, and currently chair the West
15 Connect Steering Committee. But if you've heard of West
16 Connect, it's a group of Southwestern utilities that have
17 formed an organization chiefly for market enhancements
18 initiatives, one of which is planning. We have three sub-
19 regional planning groups within West Connect that all rolls
20 up to the West Connect Planning Management Committee. I
21 probably have to do the required advertisement on APS. APS
22 is the largest electric utility in Arizona, it's got roughly
23 half the load in Phoenix and most of the other
24 municipalities in Arizona, with the exception of Tucson and
25 Kingman. And APS - and the reason I want to bring up APS a

1 little bit here is, I think we have a rich history of
2 working cooperatively with the California utilities, both in
3 terms of jointly owned power plants, transmission lines, and
4 I think we did a really good job up until a couple of years
5 ago of coordinating our planning efforts. And APS was
6 actually the first balancing authority to sign what at the
7 time was the Control Area Agreement with California when it
8 first started up, so we have a history of working
9 cooperatively with the California utilities. And what I
10 wanted to do with my comments this morning really is to
11 build on some of the things that I've heard from
12 Commissioner Byron regarding uncertainty of where we're
13 going to get permitting for power plants, where we may be
14 replacing retired generation, just all the issues that are
15 out there, it's been very interesting hearing about all of
16 the issues that you folks are facing because I think we're
17 all basically in the same swap, it's just a matter of how
18 deep it is, the various areas around the country. So, what
19 I wanted to really encourage you to do was in terms of risk
20 management, of how you're going to ensure the reliability of
21 your system, ensure that you meet the energy needs of the
22 folks here in California moving forward, and implement your
23 energy policies, to just make sure that you have a broad
24 range of alternatives that you're looking at. And the
25 specific alternative that I'm here to encourage you to look

1 at today is the inclusion of renewable generation in Arizona
2 and the potential plan to meet the energy needs and policy
3 desires of the State. So, I just want to point out, and
4 I'll be brief about this, but we have 20,000 megawatts of
5 renewable generation, primarily solar, as you can imagine,
6 that has announced the development, and are currently in the
7 interconnection queues of the utilities within Arizona, and
8 this is in a state that the peak load is really just barely
9 over 16,000 megawatts. So, obviously, even though we're
10 committed to meeting our renewable requirements within
11 Arizona, I think there is potential development there far
12 beyond what we can actually sync in Arizona, and we would
13 like to encourage you to look at that as a potential way to
14 meet your future needs. I think we have an environment
15 within the State of Arizona at both the legislation and
16 certainly the Arizona Corporation Commission, that is very
17 favorable for the development of renewable resources in
18 Arizona, and, in fact, yesterday we had as part of an open
19 meeting at the Arizona Corporation Commission, a discussion
20 of the recent Biennial Transmission Plan, I'm sure you all
21 have heard of the Biennial Transmission Assessment that is
22 done every two years within Arizona, the Corporation
23 Commission staff with the consultant looks at all the plans
24 that these utilities have put together, other studies that
25 we've been required to do, and basically makes an assessment

1 of the transmission system. And one of the things that
2 we've focused on the last couple years is developing
3 transmission plans for renewable transmission, to facilitate
4 renewable generation in Arizona. Up until recently, it's
5 predominantly been to meet the needs of renewable resources
6 within Arizona, but one of the two amendments that were
7 approved yesterday when the ACC approved the staff's
8 recommended Order regarding the BTA was that, over the next
9 two years, we would specifically study transmission to be
10 able to export renewable generation. So, this is an example
11 of the environment within Arizona. So, the other point I
12 wanted to make is the importance of coordination and
13 cooperation between the planning entities really throughout
14 the entire Western Interconnection, but specifically the
15 Southwest and California. I mentioned that I did chair the
16 STEP organization a number of years ago, and I really think,
17 since that group dissolved, that we don't have quite the
18 close coordination between the transmission planning folks
19 in the desert Southwest and California, like we used to.
20 And I think this is partly because the CAISO is still trying
21 to get their hands around how to integrate their process
22 with a California-wide transmission planning process. But,
23 just so you know, we're committed to continue to try and
24 strengthen that relationship and ensure that we do that
25 coordination upfront. So, in summary, I would encourage you

1 to look at the alternative of renewable generation in
2 Arizona, and look at supporting any transmission that might
3 be developed to facilitate the development of that renewable
4 generation. APS currently has a project from the Palo Verde
5 Hub into the Yuma area, the North Gila #2 line, and we're
6 certainly going to continue to work with the entities within
7 California to try and ensure that the infrastructure in
8 California is developed to maximize the benefit of that
9 line, and we also continue to look at the possibility of
10 developing the Arizona portion of the DPV2 line. So, with
11 that, I appreciate the opportunity to speak to you, we're
12 here to help you in any way that we can, and I'll take any
13 questions that you might have.

14 COMMISSIONER BYRON: Mr. Smith, thank you for being
15 here. I can't believe you came all that way just to tell us
16 to buy your renewable energy, though. Did I understand you
17 correctly?

18 MR. SMITH: It was a cheap flight. Certainly, there
19 would be benefit to the State of Arizona and APS would
20 support anything we can do to develop renewable generation;
21 if selling it to California will help do that, we'd like to
22 do that, however, we believe that it can be sort of a win-
23 win for both states if that, in fact, is what is necessary
24 to help you meet your reliability energy needs and energy
25 policy moving forward. So, I'm not telling you that that's

1 the best answer at this point, but just encouraging you to
2 keep it as an alternative.

3 COMMISSIONER BYRON: Okay, fair enough. So, I'd ask
4 you, could you make sure you firm that power up before you
5 send it across to California?

6 MR. SMITH: That would be worked out through the
7 PPA, I'm sure.

8 COMMISSIONER BYRON: The ISO is over here like
9 raising their thumbs. Again, thank you for being here.

10 MR. SMITH: Sure.

11 COMMISSIONER WEISENMILLER: Yeah, I certainly also
12 wanted to thank you for coming today and participating. I
13 think that it's certainly a good step, I think all of us
14 sort of wondered about how to reengage in the relationships
15 in the post-DPV2 discussion. I think, obviously, one of the
16 questions I had is, when we do the interconnections with the
17 Northwest, Bonneville has been able to use its system to
18 really facilitate backing up and trading. I mean, given the
19 magnitude of the resources you're looking at and the
20 magnitude of your loads, and the nature of your resources,
21 how are you going to deal with the intermittency issues
22 there?

23 MR. SMITH: So, we obviously don't have the
24 capability that the Northwest does in terms of all their
25 hydro and those kinds of things, but I believe the State

1 would certainly be open to tariffs, ancillary services, and
2 things like that, that could facilitate some firming of
3 resources, so obviously it is going to be on an individual
4 contract basis, the product that is being sold, and the
5 desire to purchase energy vs. capacity vs. firm energy in
6 California.

7 COMMISSIONER BYRON: But, Mr. Smith, you've been
8 involved in all these transmission planning activities for a
9 long time, you know that this hydro up in the Northwest
10 isn't turning out to be all that good of a thing for firming
11 up renewables, is it?

12 MR. SMITH: It is probably better than anything we
13 have in Arizona. No, I think, you know, the firming is the
14 huge challenge with variable generation, and it can be done,
15 it's just a matter of the penetration, where it's done, and
16 who is paying the cost of it. I think we have adequate
17 resources to provide that firming, it's just a matter of
18 you're running units off economics, and having more spending
19 reserves than we have today. So it's a product that has to
20 be factored into the price of the energy.

21 COMMISSIONER BYRON: Well, you're probably aware
22 that this issue of in-state vs. out-of-state renewables is
23 crucial here, it's probably why we today don't have a 33
24 percent RPS bill is a lot of the discussion around that
25 particularly issue.

1 MR. SMITH: I am, yes. I'm just encouraging you,
2 again, to look at alternatives for whatever policy develops
3 in the future.

4 COMMISSIONER BYRON: All right.

5 COMMISSIONER WEISENMILLER: In terms of - back to
6 DPV2, looking out 10 years, do you think that egg can be put
7 back together in the Arizona portion on line in the next 10
8 years, or what?

9 MR. SMITH: Absolutely. I think, really, all that's
10 required is just a matter of who - where we're going to get
11 cost recovery for the line. I mean, I think it's certainly
12 permissible in the State of Arizona. Edison already has a
13 lot of the permits other than the HCC Certificate of
14 Environmental Compatibility, the CEC. So, I think if there
15 was a firm desire on a number of parties in Arizona and
16 California to see that line built, sure, we could build it
17 in a couple years.

18 CHAIRMAN DOUGLAS: I don't have any questions.
19 Thanks for being here.

20 MR. SMITH: Okay, you bet. Thank you very much.

21 MR. SKINNER: Good morning, Chairman Douglas,
22 Commissioners Byron and Weisenmiller. I'm Nathaniel Skinner
23 with the California Public Utilities Commission, Energy
24 Division. And I have some general comments, as well as a
25 few questions. The first comment is that, if the Needs

1 Assessment is designed to function like the following
2 aspects of the CEC's Incremental Uncommitted Energy
3 Efficiency Analysis, from the 2009 IEPR, it could provide
4 benefits to policy discussion at the appropriate agencies.
5 The Incremental Uncommitted EE Analysis had a stakeholder
6 process to improve data quality and information. This
7 information was then transmitted as a range of possibilities
8 to the Public Utilities Commission, allowing stakeholders
9 and our energy efficiency and LTTP processes an opportunity
10 to provide their insight as to what future was likely to
11 occur. Given this, if the current IEPR focuses on other
12 data and analytical weaknesses, we support it; however,
13 we're concerned that the needs assessment could be
14 duplicative of other analyses such as the LTTP or the
15 CAISO's Transmission Permitting Process. If the proposed
16 need analysis produces results that do not match the LTTP
17 adopted by the PUC or the TPP adopted by the ISO, which is
18 quite possible if different methodologies and/or data are
19 used, then it will create a significant amount of work to
20 resolve and explain these differences. For an example,
21 conducting in-depth analysis of non-event based Demand
22 Response is something we look forward to working on with the
23 Energy Commission, and to accurately forecast the impacts of
24 new and different Demand Response programs on both the
25 demand and supply side. While we note that the staff needs

1 assessment acknowledges the quality of information provided
2 by the IOUs and the CAISO, Energy Division believes that
3 attaining similar quality data from other sectors of the
4 statewide Grid is an important step in enhancing the IEPR
5 generally and the needs assessment, specifically.
6 Additionally, close collaboration between the sister
7 agencies on the Energy Commission's demand side and the
8 Public Utilities Commission supply side analyses helps
9 improve product of both agencies. And while the Energy
10 Division is sensitive to the need for the CEC to control the
11 workload created in the AFC process, by recent events, we're
12 equally concerned with the need for the AFC process not to
13 become a significant barrier to entry in the current market
14 for new generation resources. A balance between these two
15 concerns must be reached in a way to benefit the goals of
16 both agencies. The AFC process is not designed to evaluate
17 cost and benefits with competing projects and it also should
18 not be used as a method of picking winners or losers in the
19 IOUs' RFOs. Energy Division will work with the Energy
20 Commission on the Needs Assessment, but we would ask that
21 the Energy Commission use our proceedings inputs and outputs
22 whenever possible for CPUC-regulated entities. And, as a
23 last comment, the staff paper does not mention the PUC's
24 statutory responsibility to determine the need for
25 transmission projects under its review; however, we think

1 that the Need Assessment could fill a crucial role by
2 helping to identify, quantify, and understand the
3 implications of the risks and uncertainties inherent in the
4 CPUC's RPS scenarios. With those comments, I also had a
5 couple of questions that I think would help inform the
6 discussion around the Needs Analysis. The first would be a
7 good definition of what is meant by central station power
8 plants and by bulk transmission. So, are these the areas
9 that are specific to the CEC's AFC process, or generation
10 that falls underneath that? We are also interested if there
11 would be a stakeholder process for helping determine the
12 total range and potential cases for analysis, or if that
13 would be determined by staff, or the Commissioners? And a
14 final question would be, how does staff anticipate resolving
15 differences or discrepancies between its analysis and
16 analyses like the 2010 LTPP system track for entities such
17 as the IOUs? And I wanted to thank you for your time and if
18 you have any questions?

19 COMMISSIONER BYRON: Well, I think it would be good
20 if we give Dr. Jaske and Mr. Vidaver a chance to respond a
21 little bit to some of these, and I'm going to preface - I'll
22 give them a few moments to think about responses, but, Mr.
23 Skinner, thank you for being here, but I can't help but
24 notice, most of all of these comments seem to be very
25 protectionist in terms of some fear or concern that we're

1 treading on CPUC toes here. The fact that the paper doesn't
2 mention what's in the statute with regard to PUC
3 requirements around transmission, the concern that it'll
4 take a great deal of work to resolve differences between the
5 outcome from this analysis and the efforts that you're doing
6 in the LTP, the concern that the AFC process could become
7 an impediment, and I may not have gotten it correctly, but
8 that we're picking winners and losers over here at the
9 Energy Commission from your RFO process - I should say, from
10 the investor-owned utilities - so maybe I'm misunderstanding
11 or mischaracterizing the concern, but we're not really
12 interested in this kind of protectionism, we're looking for
13 cooperation amongst the agencies so we can demonstrate to
14 the public that we are indeed working together to resolve
15 what are some serious concerns about how we're going to site
16 generation and transmission in this state given all these
17 constraints. So, I don't expect you to respond to that,
18 unless you'd like to, I'm really stalling here for my staff
19 to respond to some of your concerns.

20 MR. SKINNER: Right. And I would say that our
21 concerns are largely over duplication of processes, creating
22 additional uncertainty. We definitely understand, and the
23 staff paper acknowledges, many sources of information which
24 are common, which could be drawn from the LTP Proceeding,
25 as well as other proceedings at the Commission. And I think

1 I'll just conclude with that point to your -

2 COMMISSIONER BYRON: Are these your comments? I'm
3 always curious where the comments come from. Are these your
4 comments that you're providing today?

5 MR. SKINNER: These are the Energy Division's
6 comments.

7 COMMISSIONER BYRON: Okay.

8 DR. JASKE: Well, let's try to tackle Mr. Skinner's
9 comments sort of in reverse order. As I indicated, we are
10 seriously considering the idea of cases, you know, as a way
11 of portraying a package of assumptions that are being used
12 in some other agencies forums; so, you know, an LTTP case
13 could, you know, readily be generated by using exactly the
14 assumptions that will be in the forthcoming Scoping Memo of
15 President Peevey, so in that instance there wouldn't be any
16 discrepancies at all. Alternatively, one could take that
17 particular view of the future and join all the supply and
18 demand modification assumptions with a different load
19 forecast such as the one that the staff anticipates
20 generating, you know, this spring, so you in effect get a
21 minor variation on LTTP by virtue of combining it with a
22 different base load forecast. So, I think we would
23 anticipate, if we go down the path of showing a range in
24 specific cases, to have a result that the PUC staff would
25 agree is, in fact, you know, their LTTP assumptions. There

1 might be, you know, minor variations, in addition to that.
2 His second question about where range of uncertainty might
3 come from, and how they might be developed, we haven't yet
4 investigated the idea of some sort of working group or task
5 force to help us assemble a whole range of views, you know,
6 that might be one way to be as inclusive about sources of
7 different views in the future, but I think the whole point
8 of the uncertainty section of the paper is for this project
9 to assemble and crank through, you know, a wide range of
10 alternative views of the future, and show what they mean in
11 terms of results of the various balancing authority
12 capacity, or local capacity area, or to the extent we're
13 able, you know, divvying those up into some sort of
14 operating regime. So, I don't see that there's any reason
15 not to have an open public process about what those
16 assumptions are or where they come from. And defining
17 central station generation and bulk transmission, I don't
18 think I'm going to try to get into a precise definition of
19 those, but we're happy to talk with stakeholders off line
20 about exactly what we mean by that. Maybe they are ideas
21 and their questions will help sharpen some delineation that
22 Mr. Skinner thinks are important.

23 MR. SKINNER: Thank you. And I think, just as a
24 comment, Energy Division greatly appreciated the
25 collaboration with the Energy Commission both on the 2009

1 IEPR and, particularly, as I said earlier in my comments on
2 the structure and format for the Incremental Uncommitted
3 Energy Efficiency Analysis. And I think the bulk of my
4 comments were designed to highlight areas where there is
5 plenty of room for close cooperation between the two
6 agencies, and we'd like to see that relationship continue as
7 it has both with the Energy Efficiency work, and as it has
8 been with our 2010 LTTP process, with our relationship with
9 the Energy Commission, as collaborative staff.

10 COMMISSIONER WEISENMILLER: I guess the one
11 question, one of the areas where I think the PUC needs to
12 dig a little bit is that, and actually I first came across
13 the issue when I was working more with the Energy Commission
14 staff on Sunrise, is that obviously you have a lot of
15 contracts now for resources, and have probably the world's
16 best database on cost of fossil fuel units in California,
17 and cost of renewables in California, and obviously that's
18 under some degree of confidentiality, whether negotiations
19 are going on, but I would urge you certainly, as I have
20 urged your Commissioners, to start releasing some of that
21 data. Again, you can try to figure out when it's
22 appropriate to keep it confidential, and when it is would
23 certainly be very useful to have more data in the public
24 forum on CT costs, combined cycle, solar, to start moving
25 some of that so we can actually bring that into the public

1 consciousness.

2 MR. SKINNER: Thank you.

3 CHAIRMAN DOUGLAS: I don't have any additional
4 questions, but I appreciate your being here and your
5 engagement in this process and, of course, we are looking to
6 add value and bring information and integrate information in
7 this process, so we think working closely with the PUC and
8 the ISO is how to do that.

9 MR. SKINNER: Thank you for your time.

10 MS. FRAZIER-HAMPTON: Good morning, I'm Janice
11 Frazier-Hampton from PG&E. I would like to first thank you
12 for the opportunity to be here, Chairman Douglas,
13 Commissioners Weisenmiller and Byron, and also staff. While
14 I won't go into a lot of detailed comments, I do have a
15 couple of high level observations that I would like to make.
16 First of all, I agree very much so with some of the comments
17 made previously about the ability to be part of this
18 process, and the importance of making sure that we're not
19 adding on another layer to the process, but that we work
20 together to ensure that information that is currently
21 provided through the CPUC's Long Term Procurement Planning
22 process, the ISO's Renewable 33 percent process, and other
23 issues that are currently underway, that we work together to
24 make sure that we're using the information that is already
25 available. I would also like to say that, to the extent we

1 think about what renewable integration means, and how those
2 costs are determined, that while there are various models
3 and approaches that can be used, in addition to what the ISO
4 is doing from a simulation study approach, PG&E has also
5 presented a model that it thinks may also be useful in
6 trying to ascertain what some of those costs may be. We
7 welcome the opportunity to continue to work collaboratively
8 with the various agencies to ensure that, from a stakeholder
9 perspective, a lot of views are considered, and when one
10 talks about cases, as well as ranges, I would advocate that
11 not only do we have cases as we are considering what the
12 costs are, or what the needs are, and that kind of thing,
13 what we also consider are a range of uncertainty. I don't
14 know that we have to look at every single case that's
15 currently being considered in the LTTP process, perhaps one
16 could look at two or three of those cases, while at the same
17 time look at a broader range such as what if there is an
18 economic upturn in the next three to four years, what if
19 other things occur. I think there is value to be considered
20 in that process. Again, I appreciate the opportunity to be
21 here. Thank you for the time, and if you have any questions
22 for me, I'd be more than happy to answer them.

23 COMMISSIONER BYRON: Ms. Frazier-Hampton, thank you
24 for being here. Can we expect more in the way of written
25 comments from PG&E?

1 MS. FRAZIER-HAMPTON: Yes, we will be providing
2 written comments.

3 COMMISSIONER BYRON: Excellent, so got your primary
4 concern, but let me ask you a couple of things. One is, we
5 don't see the RFOs, we are not involved in that process,
6 obviously. Are they becoming more specific? In other
7 words, part of what we're trying to determine here is what
8 kind of generation is going to be required, where is it
9 going to be required, characteristics around it, the firming
10 issues that the ISO brings up. Are your RFOs getting more
11 specific geographically and output characteristic-wise, and
12 firming-wise? I don't know how to change those things into
13 words.

14 MS. FRAZIER-HAMPTON: And I don't know that I can
15 answer that question precisely with respect to the details
16 of the RFOs that we're getting, however, I do know that,
17 from our perspective, we need to make sure that we have the
18 ability to consider the type of characteristics that the
19 generators can provide to us, that those developers and
20 those resources can provide. So, we look at the need for
21 whether we'd need additional ramping up and down, whether
22 load-following, those types of characteristics, so they're
23 critical in our decision-making. Whether or not we're
24 getting that level of detail in the more recent RFOs, I
25 can't necessarily opine to that, but we can certainly - I

1 can get more information and provide you that answer.

2 COMMISSIONER BYRON: I see that - and correct me if
3 I'm wrong, gentlemen, I turn to my staff - that's part of
4 what we're trying to characterize here, that it helps inform
5 the RFO process. It's become clear to me by the time and
6 application for certification comes to this Commission,
7 there is a great deal of money and effort and time that's
8 gone into it, but a lot of things have not been considered.
9 And I think you know, we get a number of folks that appear
10 before this Commission saying, "These are bad projects and
11 bad places." And what we're trying to do is avoid that as
12 we add all these additional - and I keep using the word
13 "constraints," but what I mean by that is all these
14 additional requirements that the Legislature and others are
15 imposing on the procurement process, or let's say the
16 generation process in this state. And, of course, we've got
17 Mr. Smith that wants to send us his renewables from out of
18 state. So, gentlemen, am I - I guess I'd like to ask for
19 your comments on this, Dr. Jaske and Mr. Vidaver, do you see
20 these RFOs at all? Are they becoming more specific? Will
21 our process help inform the RFO process on the part of the
22 PUC and the IOUs?

23 DR. JASKE: Well, we'll let Mr. Vidaver amplify what
24 I have to say, but you know, the RFOs themselves are public,
25 it's the responses to the RFOs, and the criteria by which

1 the utility sift through the bids that are received, that's
2 what is not public.

3 MR. VIDAVER: As you know, Commissioner, we don't
4 sit in on the discussions of individual bids that take place
5 in the procurement review groups.

6 COMMISSIONER BYRON: You had to work that in, didn't
7 you, Mr. Vidaver?

8 MR. VIDAVER: Yeah, I had to. I'm sorry. Mr. Kelly
9 made an interesting point. The bottom line is what happens
10 with regard to least cost best fit, that's what merchants,
11 generators, developers need to know, that is somewhat
12 shielded from them, as Dr. Jaske pointed out, what goes into
13 a least cost best fit determination is certainly public. I
14 just want to say something about, that Mr. Kelly said we
15 have a rather large overhang of permitted generation that
16 has not been built, which arguably, or not arguably, would
17 only be built with a long term PPA with the utility. The
18 fact that 9,000 megawatts of generation came in here and got
19 sited, and wasn't deemed suitable by the regulators for a
20 permitting agreement is, I think, what we're trying to
21 avoid. It's, of course, up to the Commission to decide the
22 extent to which it uses the information that the
23 infrastructure assessment would provide in deciding whether
24 or not a plant should be permitted, but I think what staff
25 is hoping for is that you get fewer projects coming in who

1 really don't have a chance at the PUC, and with the
2 utilities.

3 COMMISSIONER BYRON: Thank you. Ms. Frazier-
4 Hampton, just one last question. Do you see the analytical
5 effort that we're attempting to undertake here as being
6 needed or useful for your company in going forward with
7 procuring energy?

8 MS. FRAZIER-HAMPTON: I do see value in attempting
9 to make sure that we have a broader state perspective, not
10 just focusing on the ISO's portion. So I certainly see
11 value there. I also see value to the extent there is more
12 transparency or information that is available to all the
13 stakeholders; however, my concern does come to how we make
14 sure we do not duplicate -

15 COMMISSIONER BYRON: Got it.

16 MS. FRAZIER-HAMPTON: -- we do not have inefficiency
17 of our resources that are used in putting together all these
18 plans.

19 COMMISSIONER BYRON: I think that's a consistent
20 theme we've heard from everyone here today.

21 COMMISSIONER WEISENMILLER: Yeah, I think obviously
22 PG&E is a joint utility with gas and electric, and the gas
23 side has got a lot more focus in recent months. And I guess
24 the one thing which we want to make sure going forward is
25 that, as we look at gas power plants, that the potential

1 implications back on your gas pipeline system, you know,
2 works through - I mean, obviously I know everyone is waiting
3 for the NTSB Report to tell you what the root cause was, but
4 somehow I think, going forward in this IEPR, we're going to
5 have to be factoring that in on our gas analysis and its
6 implications for our electricity planning just in terms of
7 whatever the real top 100 problem points are, to make sure
8 we're not putting power plants there. So, certainly, we're
9 going to need your help in figuring out how best to connect
10 between your gas operations and/or gas pipeline system, and
11 the power plant questions on this infrastructure study.

12 MS. FRAZIER-HAMPTON: Okay, thank you.

13 CHAIRMAN DOUGLAS: Thank you.

14 MR. SILSBEE: Good morning, Chair, Commissioners,
15 and Commission staff. I appreciate being here today. I'm
16 Carl Silsbee, Manager of Resource Policy and Economics for
17 Southern California Edison Company. At the outset, let me
18 express willingness to provide reasonable support to
19 Commission staff for their efforts to analyze infrastructure
20 need. I've already met with them to discuss some of the
21 work that they plan to undertake and offered to provide the
22 year 2020 datasets that we have available to us for analysis
23 of renewable integration. We're also going to provide
24 whatever experiences that we have in running the production
25 simulation model that staff plans to use for this work, the

1 Plexos model. The input datasets, by the way, that we're
2 talking about are based on publicly available information.
3 We're also anticipating a process where we work in close
4 collaboration not only with the PUC, but the CEC, in
5 developing the Edgar analysis that we expect the CPUC to
6 direct shortly in a scoping ruling. One comment is, there's
7 a lot of sources of data for this analysis and we do hope
8 that there will be a thorough vetting of those data for us
9 and other stakeholders as part of this process. In reading
10 through the staff white paper, I found it a mix of
11 ambitiousness and cautious realism. The comments that Dr.
12 Jaske provided orally this morning focused on the latter,
13 rather than the former, and I appreciate that and I would
14 caution you to take those caveats or limitations seriously,
15 given the complexity of the work that we're doing, and all
16 of the points that Commissioner Byron made in his opening
17 comments about the gridlock and the problems with all of the
18 competing, largely environmental, but also process
19 constraints that we face, particularly in Southern
20 California. I think that the work that staff has
21 anticipated doing will be incremental and not definitive. I
22 think that's true of all of the studies that are being done
23 at the present time and by various players, and so it will
24 contribute incrementally to all of our knowledge, and all of
25 our understanding of the complexity and the issues we face.

1 But part of the IEPR process is going to have to be the
2 synthesis of those results, in trying to understand the
3 meaning and the substance of a variety of different inputs
4 to the overall process of moving forward over the next
5 decade. With regard to some of the caveats, we do support
6 not prioritizing at this time, at least. Bundle procurement
7 issues and identification of specific storage needs, I think
8 that needs to await further work in some of the CAISO Phase
9 II efforts and distribution needs. We're also very mindful
10 of the practical limitations that Dr. Jaske mentioned with
11 regard to the interplay of transmission analysis and some of
12 the generation siting issues. These are issues that will
13 get worked out slowly over time, I think, rather than in a
14 single study. We do appreciate staff's efforts to look at
15 the entire state instead of just the three IOU service area
16 profiles, I think that is a unique position this agency
17 brings to resource planning issues. But we also appreciate
18 staff looking at years other than 2020, which has been the
19 focus of all of the renewable integration work to date,
20 other than, I believe, some of the 20 percent study work.
21 Particularly, they focused on 2017 and 2022. I do caution
22 that putting together two input datasets for different
23 periods in time is a complex undertaking. I think that will
24 be a challenge for staff to accomplish. And, you know,
25 there may need to be mid-course corrections as work goes

1 forward. As you take some of these results, what I would
2 ask you to consider is how your actions can enhance
3 competitive markets for generation and retailing, and how
4 you can provide regulatory certainty to those who are the
5 ones investing money in the infrastructure necessary to move
6 us forward over the next decade, and that investment is not
7 just utilities, but it's also private parties, and I think
8 it is incumbent on us to think about what are the processes
9 by which we encourage that investment, instead of just
10 ordering it. This is a mixed environment. Certainly the
11 state has spoken very strongly about achieving certain
12 environmental goals, but it has also spoken through AB 1890
13 and AB 57 about creating a competitive market with retail
14 choice. So, we need to take that into consideration as we
15 think about how to move forward. Finally, I would like to
16 offer some brief comments in response to the questioning of
17 the previous two speakers by Commissioners Weisenmiller and
18 Byron with regard to the information that comes out of some
19 of the utility RFO procurement. The CEC publishes a widely
20 noted document each IEPR cycle called the *Cost of Generation*
21 *Report*. That report represents staff's views on the cost of
22 various renewable and conventional technologies. There is
23 an issue of how does one take some of this information and
24 filter it, if possible, into that kind of a document, but I
25 would certainly encourage and invite the CEC to return to

1 the PRG Group of Edison and, by doing so, gain access to
2 some of this information in a manner to help further the
3 Commission's understanding of what the reasonable ranges are
4 of some of these different technologies, and also to provide
5 the Commission's thinking on some of the issues that you
6 raised with regard to practicality of some of the siting of
7 specific projects. So, thank you.

8 COMMISSIONER WEISENMILLER: And, too, the difficulty
9 with your suggestion on a procurement review group, is I'd
10 like to get those data into that report, you know, and
11 again, you could argue, well, maybe not this year's data,
12 but some previous year's data, but just having the staff
13 look at it still doesn't get the actual numbers into the
14 report, and that is my goal is to get as many real numbers
15 as we can into that *Cost of Generation Report*.

16 MR. SILSBEE: My experience looking at data, and it
17 is somewhat limited because I, myself, don't look at the
18 results of our RFOs because I'd rather not know what those
19 figures are, but I did work on the so-called Edgar Analysis
20 for our Mountain View Power Plant project a few years ago
21 and, in doing so, we compared the cost of Mountain View to a
22 wide range of similar technologies, and I was struck by the
23 range of cost of individual projects, cite specific aspects,
24 permitting difficulties, competency of the developers, all
25 create a tremendous range in cost. It isn't as if a

1 specific RFO number is all of that instructive. And the
2 other point there is, what we were trying to do in that
3 analysis, is look at costs, but the RFOs are getting bids
4 and there is a distinction because people don't necessarily
5 bid their costs.

6 COMMISSIONER WEISENMILLER: Another question for you
7 is, you are certainly - you are part of ground zero on sort
8 of the air quality issues, and so we're back to the issue of
9 how do we use this forum to try to address some of the
10 constraints in the South Coast in terms of if Edison has any
11 specific suggestions.

12 MR. SILSBEE: You know, I think a lot of it is
13 trying to struggle through and understand what, in my mind,
14 are some of the critical knowledge development pieces, the
15 interactions that parts of the system have with other parts
16 of the system. Dr. Jaske talked about how location,
17 location, location matters with regard to renewable
18 development and its impact on transmission needs. As we
19 delve in to try to understand the PM10 and the OTC and the
20 renewable integration issue, I think we develop
21 understandings of some of those relationships, too. It's
22 those linkages I think are particularly important. So, for
23 instance, two or three years ago, we were just barely
24 scratching the surface to understand that we might need to
25 build new power plants to meet the needs of ancillary

1 services and that the ramping and the load-following, even
2 if they weren't needed for capacity, and I think that's very
3 much on everybody's mind today. And so, creating some of
4 these insights of relationships, I think, is a critical
5 contribution, and I encourage thinking in those areas.

6 COMMISSIONER WEISENMILLER: What about -- one of the
7 things we're struggling with on that sort of
8 interrelationship is the inertia question in the Basin, how
9 far has Edison gone in terms of assessing the inertia -- for
10 the generation inertia needs in the South Coast Basin?

11 MR. SILSBEE: We're definitely looking at it. I
12 don't think I'm going to point where I can share any end
13 results, we haven't seen any.

14 COMMISSIONER WEISENMILLER: But you anticipate
15 having a better understanding of that this year or next
16 year? What is the sort of timing?

17 MR. SILSBEE: Hopefully early next year.

18 COMMISSIONER WEISENMILLER: And we talked earlier
19 about, obviously the CAISO has a very complicated approach
20 on renewable integration modeling, while I guess Antonio at
21 PG&E has a much more simplified model. I don't know if
22 Edison has done any evaluations of the trade-offs on those
23 different modeling approaches?

24 MR. SILSBEE: We have and it's a complicated issue
25 in that I think there are a lot of perimeter values in the

1 renewable integration model, and the strengths and the
2 weaknesses of the model come into one's belief as to the
3 validity of a lot of those perimeter values. You know, we
4 and PG&E and the CAISO and others have filed rounds of
5 comments before the CPUC on this issue, I'm sure it's
6 something that your staff has access to if you want to go
7 through the blow-by-blow. At this point, we've made our
8 comments and I think we're looking to the PUC to give us
9 some direction on how they would like to proceed with the
10 use of these various modeling approaches in the LTTP.

11 CHAIRMAN DOUGLAS: Thank you.

12 COMMISSIONER BYRON: Yes, thank you, Mr. Silsbee.

13 MS. KOROSEC: Anyone else here in the room who would
14 like to speak? Okay.

15 MR. ASLIN: Good morning. My name is Richard Aslin
16 and I work for the Pacific Gas & Electric Company, where I
17 manage the Economics Forecast and Quantitative Analysis
18 Section. And I think PG&E, as Janice mentioned earlier,
19 will be filing more detailed written comments, but while I
20 was here today, and I've had your attention, one thing that
21 I wanted to tee-up just specifically was, in Section 5,
22 under addressing uncertainty. There is a section which
23 talks about the uncertainty due to the economy and the
24 economic expansion, which we all hope will follow this very
25 long and very tedious recession that we've been in. But I

1 think that's all good because I think that's one of the
2 things that came out of the last IEPR was there was an
3 effort to try to model uncertainty around the economic
4 future, but one of the things that we also explored in the
5 2009 IEPR was the uncertainty in the projection of demand,
6 which is due to climate change, itself. And I think that is
7 an area which I would like added to this uncertainty
8 analysis, if possible, because I think just a one degree
9 Fahrenheit change in the projection of the expected maximum
10 temperature would create about a 2,000 to 3,000 megawatt
11 increase in the expected demand forecast. And I think a lot
12 of the climate change studies indicate that, if your
13 reference period is, let's say, the last 30 years and your
14 normal's are coming from there, that you're likely to be off
15 by as much as five to seven degrees Fahrenheit, and that's a
16 very very large change, something that we should, I think,
17 really think about. And also, it would be very interesting
18 to look at how the economic expansion on certainty plays out
19 in the local areas because the local area economy has been
20 much more - there is much more volatility there than there
21 is at the service territory level, or at the state level.
22 It would be very interesting to see how that will play out,
23 as well as climate and the interaction between climate.
24 There's been a lot of work done on climate change and its
25 impact on energy demand, and I think we could - we don't

1 need to really reinvent the wheel here, we could just kind
2 of pick up on some things that are out there already. So,
3 to the extent that there was a workshop scheduled for
4 looking at economic uncertainty, it might be - I would hope
5 that we could have a workshop that would be looking at how
6 are we projecting what the likely temperature is going to
7 be, going forward, how are we doing that and are we doing
8 that consistently. And that's all I have.

9 COMMISSIONER BYRON: Mr. Aslin, you've always added
10 good comments on our IEPR process, and I thank you for that,
11 in the past. And it's interesting, I would have never
12 thought this one, so this is definitely an out-of-the-box
13 thought here, and I mean that in a positive way, this is
14 good, we wouldn't have thought about this one and the fact -
15 and I assume when you say a 2,000 to 3,000 megawatt demand
16 change, that is just in-state, correct?

17 MR. ASLIN: Yes.

18 COMMISSIONER BYRON: So this is extraordinary, but
19 also, don't we know from climate change research that
20 there's a lot of increased variability, as well, in these
21 temperature variations? In other words, it's nice to take a
22 nice simple one or two degree number and put it in the
23 model, but it's that variability problem, too, isn't it?

24 MR. ASLIN: Yes, that's kind of what I - that's why
25 I was saying that's what I'd like to see added to the

1 uncertainty analysis piece, is to see what is the impact on,
2 first of all, the demand forecast, but more importantly, how
3 you meet demand when you start to look at different ways
4 that the future of climate could unfold. If you look at the
5 way that we're - maybe this is too technical, so if it is,
6 I'll take it offline, but when you look at what we call the
7 one and two temperature scenario, so that's the expected
8 value of the one and two, but that expected value is drawn
9 from a distribution, and if we looked at the 95th percentile
10 of that distribution, we would come out with quite a
11 different answer about what that was, and when you think
12 about one and 10, used for local planning, the distribution
13 around that, that's the expected value of the one and 10,
14 but the distribution around that is also very large. And,
15 again, when you look at the sensitivity of peak demand to
16 temperature assumption, it starts to become a very large
17 number and I think it's something that we should think about
18 if we're thinking about uncertainty in the demand forecast.

19 COMMISSIONER BYRON: So let me ask two questions,
20 one of you and one to my staff, do you know, is this factor
21 considered into any of the matrix of scenarios that are
22 being developed by the ISO or the LTP? I think we know the
23 answer.

24 MR. ASLIN: I think the answer is no.

25 COMMISSIONER BYRON: Correct. So, let me turn to my

1 staff, do you guys want to add another variable to your
2 highly imprecise analysis at this point? In other words,
3 I'm really asking - I'm not looking for a commitment from
4 you, I'm trying to understand, would this make much of a
5 difference in the analysis that you're doing?

6 DR. JASKE: I think that we need to figure out a
7 means by which this project can encompass the kinds of
8 things that Mr. Aslin is talking about. When we're focused
9 on, you know, what is the predicted value 10 years from now,
10 you know, we get hung up on all kinds of precision things.
11 And to the extent this is what we're overtly trying to
12 recognize, the uncertainty that exists either about future
13 assumptions, or methods of translating assumptions into
14 results, we need to figure out how to be a little more free
15 about how we do that translation and encompass things in
16 maybe a softer way than we might have traditionally tried to
17 do. So, I - we'll try to go down that path.

18 MR. ASLIN: I appreciate that. Thank you very much.
19 And I'm more than happy to work with staff on anything that
20 you're working on. I think the last round of the IEPR, I
21 would say, was very insightful and I think the working
22 relationship with staff really improved quite a bit, and I
23 hope that that will follow through on this next IEPR. I'm
24 really looking forward to that.

25 COMMISSIONER BYRON: Great, and that's what I meant

1 earlier by my comments, your contributions were very
2 helpful.

3 COMMISSIONER WEISENMILLER: Yeah, I had a follow-up.
4 Talking about the economic uncertainty, I guess -
5 historically, my impression was that some of the issues
6 people have ran into in uncertainty is not considering
7 changing demographics, so the classic example when you look
8 at the '50s electric forecast, it simply didn't consider the
9 shift of women into the workforce, or the shift to suburbia,
10 and thus the models were - the results were not that useful.
11 So, I think one of the things that we're trying to tee-up
12 for the uncertainty workshop is also the demographic
13 uncertainties in terms of what is going on in California
14 with sort of aging population, potential lifestyle changes,
15 you know, talking about what is going on with immigration
16 out of state, but I think it's important that we think about
17 some of the demographics or sort of sociological changes,
18 too, that might well affect our economics and our loads over
19 the long term.

20 MR. ASLIN: Yes, I think that's very important. I
21 would just say, just anecdotally, that one of the things we
22 noticed during this economic downturn was that our
23 residential demand actually went up, and the question was
24 why did that happen, and I think the answer was maybe it was
25 because there was more people at home.

1 COMMISSIONER BYRON: Yes.

2 MR. ASLIN: And so, you know, with the aging of the
3 population that might be something that we're really not
4 fully considering in the models that we have because we're
5 focused on some other things. So, you're right, there are
6 these kind of long term trends and demographics are really
7 what drives a lot of the demand forecasts, the economic
8 cycle is up and down, but the demographics are there, they
9 have a much more, I think, maybe inertia.

10 COMMISSIONER WEISENMILLER: Yeah, and I was going to
11 say, on your point on the climate stuff, the weather stuff,
12 I mean, that was very very good, I know at one point I tried
13 to look at the Western Gas demand and tried to look at 40
14 years correlations, and the distributions of temperatures
15 are by no means Gaussian, or I never could find a simple fit
16 and the correlations across the regions, again, were not
17 predictable. The only thing you could ultimately just
18 basically just keep running weather tapes to see what the
19 variation looked like and, of course, going in the future
20 you can't just simply say, "Let's focus on the last 40 years
21 and crunch that through." So, how to take that into account
22 is going to be very interesting and very challenging.

23 MR. ASLIN: It will be, but there has been quite a
24 bit of fundamental research and stuff done on that, so - and
25 the climate change models have come a long way in terms of

1 having a more specific regional granularity than they had
2 previously, and we could pick up on that sort of work that's
3 been done. So, that was all the comments I had, actually.

4 COMMISSIONER WEISENMILLER: That's great. Thanks.
5 I mean, certainly the more you can point us to the existing
6 research and we can build off of it, the better.

7 MR. ASLIN: Right, thank you.

8 MS. KOROSEC: Anyone else here in the room? Okay,
9 we do have a couple people online, too, I just wanted to
10 note that we need to hit them before we wind up.

11 MS. RASBERRY: Good almost afternoon, Commissioners.
12 Tamara Rasberry representing the Sempra Energy Utility
13 Company, San Diego Gas & Electric, and Southern California
14 Gas Company. And I don't want to belabor what's already
15 been said from our sister IOUs, whose points that we agree
16 with, so I'll just reiterate quickly that the Sempra Energy
17 Utility Companies do support the Commission's efforts on the
18 IEPR this year, and look forward to working with you and
19 providing all the data resources that you need. We're also
20 encouraged to see that the Commission wants to coordinate
21 with other efforts throughout the state to do pieces of
22 this, as stated earlier, coordinating - collaborating, I
23 should say - with the CPUC's LTTP process. And we also
24 agree with the statements made by PG&E and Edison earlier of
25 making sure that the Commission keeps a wide range of

1 scenarios as they move forward on this Needs Assessment
2 Plan, and consider any facts that may come up that aren't
3 part of the State's policy plans currently. Thank you.

4 MS. KOROSEC: All right, anyone else here in the
5 room? All right, could you open - oh, we have Carl Zichella
6 on the line, who wants to make comments. Carl, go ahead.

7 MR. ZICHELLA: Thank you, good morning. This has
8 been a very interesting workshop and, first of all, I wanted
9 to say, as a stakeholder in a Renewable Energy Transmission
10 Initiative, Western Governor's Western Renewable Energy Zone
11 process, and the Western Electricity Coordinating Council
12 Transmission planning process, I think the statewide focus
13 that is being proposed here is really important, but I also
14 want to emphasize the need to look more broadly.
15 California, although it's the largest consumer of
16 electricity in the West, is part of this integrated system
17 that benefits us in many ways, and can benefit us in many
18 ways. I'm representing today the Natural Resources Defense
19 Council, I should say, I'm the Director of Western
20 Transmission for the NRDC. I wanted to first touch upon the
21 issue of coordination between the agencies. Steve Kelly
22 raised this issue and the desire to not add layers, but to
23 add efficiency, and to the extent that we can address these
24 things, and get the various parts of our transmission
25 planning network to function together, I think the better

1 off we're definitely going to be. And part of the reason
2 for that is because we need to really look better at how we
3 balance our resources across these different jurisdictions.
4 I noticed in the document that there was an emphasis on
5 balancing area authorities focusing on their own
6 territories, and even as we're trying to look statewide at
7 this, I think one of the key components we're going to need
8 to consider as we try to judge how much transmission we're
9 going to need in California to meet our renewable energy
10 goals and our overall energy goals, is how we can best take
11 advantage of the advantages across our system. The comments
12 that were made from the representative of Arizona, I
13 thought, were interesting from the standpoint of wanting to
14 collaborate more with California in terms of exporting power
15 to the State, but I would also urge that we consider these
16 relationships, not just with Arizona, but Nevada, Oregon,
17 and other states, in terms of balancing services to the
18 Grid, and better taking advantage of the strengths of
19 various types of renewables that we have across the regions.
20 This follows on the kinds of planning being advocated by the
21 Federal Energy Regulatory Commission across the entire
22 country that is calling for broader regional planning for
23 transmission across regions, jurisdictions, and assessing
24 the benefits of complying with Federal and State policies
25 like our own AB 32, as positive attributes for assigning

1 cost allocation for transmission. These are trends that I
2 think we ought to get ahead of and be part of and not just
3 look inward quite so much. Being able to balance across
4 broader geographic areas means we may need to build less
5 transmission, or it may enable us to zero in on the
6 transmission that truly is, and to use RETI and California
7 Transmission Planning Group parlance, RETI being the
8 Renewable Energy Transmission Initiative, you know, least
9 regrets sorts of decisions about what to build, things that
10 are truly going to benefit and enhance the stability,
11 reliability, and the ability of the system to integrate
12 variable resources. So, I want to really encourage a look
13 at balancing area coordination in terms of the transmission
14 infrastructure needs that we're going to need, and I did not
15 see that emphasized as strongly as I would have liked,
16 anyway, in the staff papers. So I wanted to encourage that.
17 Also, I wanted to praise the emphasis on looking at storage
18 capacity. This is something that is coming of age right
19 now. We're looking out five years, seven years, and as
20 others mentioned, the traditional transmission planning
21 cycles about a decade, you know, I do think within that
22 frame, we're going to see the kinds of innovations and
23 storage that we've been expecting. We do have some rather
24 significant storage capacity projects out there already, the
25 30 megawatt battery project, for example, in Texas. These

1 things can play a critical role in helping to smooth out the
2 variability of our renewable energy resources as we go to 33
3 percent, and I want to mention, and beyond because we have
4 AB 32 greenhouse gas reduction goals, and as was pointed out
5 by the PG&E representative, a great deal of uncertainty
6 about how climate will affect our energy consumption needs,
7 going forward. So, I support the idea about incorporating
8 climate impacts on energy demand and consumption in our
9 transmission and generation needs, as part of the
10 uncertainty analysis that we'll be looking at. I think I'll
11 stop there. I wanted to thank you for doing this and
12 especially for looking statewide, it really is important and
13 I do think, to the extent that we can figure out how to fit
14 our pieces together, rather than have things done, as Steven
15 Kelly so passionately pointed out, sequentially or adding
16 layers that could create additional duplicative review. We
17 really need to avoid that if we're going to hit our climate
18 goals, and I know that's not the intention, but I do know,
19 as was indicated actually by some of the comments today,
20 that people are well and truly seated in their silos and not
21 always willing to step out of them, and if we're going to
22 use all the various attributes of our Grid, from pumped
23 hydro in the Central Valley, down to desert solar, and
24 hopefully large solar in the Southern San Joaquin, you know,
25 we're going to need to look across these silos both in terms

1 of policy regulation and system operation, and I know that's
2 a difficult thing to do because our institutions were
3 created along the way sort of as we went, but now is the
4 time to sort of think about how we can make these things
5 operate, get the maximum benefit out of our existing Grid,
6 to build the enhancements and network upgrades we actually
7 need to build, and not to build stuff that we don't need to
8 build, so that we can keep public support behind the
9 transmission infrastructure that we're going to need in the
10 coming decades.

11 CHAIRMAN DOUGLAS: Thank you, Mr. Sichella.
12 Questions?

13 COMMISSIONER BYRON: No real questions, Mr.
14 Sichella, but thank you very much for your comments, very
15 helpful. And here we're trying to look at, you know,
16 statewide -- all these issues on a statewide basis and you
17 trump us and say we really ought to be looking regionally,
18 so point well taken.

19 COMMISSIONER WEISENMILLER: Yes, Carl, certainly
20 thanks for your participation and we look forward to your
21 help this year.

22 MR. ZICHELLA: Thank you.

23 MS. KOROSEC: All right, that's the end of the
24 comments that we have from folks online. Is there anybody
25 else here who would like to make any kind of comments? All

1 right, then I think we are to Next Steps.

2 As we mentioned earlier, written comments are due
3 December 10th at 5:00 p.m. and, Mike, did you want to talk
4 again about your willingness to meet with outside parties to
5 discuss this further?

6 DR. JASKE: Yeah, just in case anyone didn't hear
7 that, we are, as I said, very much at the design stage of
8 this. We're happy to meet with folks who want to talk about
9 this in more detail, and we'll try to figure out how to have
10 some intermediate steps at a minimum where we can sort of
11 share progress as it goes.

12 CHAIRMAN DOUGLAS Thank you, Dr. Jaske.
13 Commissioners, are there any closing comments? Commissioner
14 Byron.

15 COMMISSIONER BYRON: Thank everyone for their
16 comments today and we do look forward to the additional
17 written comments that we will receive. I jotted down some of
18 the main messages that I got - do no harm; don't duplicate
19 effort; don't add another layer to existing process. In
20 other words, when I add these all up, they say "don't make
21 this more difficult than it already is." I turn to my
22 staff. If but only we could have gotten rid of the need
23 assessment phraseology, but as you'll read in the paper,
24 they kept it for various reasons and it does bring up these
25 concerns. We've got it, okay, we appreciate the concerns -

1 also being spread more thinly, I'm very conscious of that
2 working in Government service and just seeing how much
3 effort has to go into everybody covering all these bases and
4 keeping track. You all do an extraordinary job, but I know
5 we don't make it easy for you. I particularly liked Mr.
6 Silsbee's comment, and I think it's correct and accurate,
7 that this analysis will be incremental and not definitive.
8 I hope that addresses some of your concerns, it is not
9 precise, nor do I think it transgresses on others' turf. I
10 would ask you to consider what the future will be like if we
11 don't begin as a state to take on or undertake this work.
12 I'll draw my conclusion; I think we will have another energy
13 crisis of different proportions and of a different kind in
14 this state. Mr. Smith is probably enjoying himself,
15 listening to California go on about all its constraints and
16 issues, as he says "take our renewable power." And there
17 are issues around that which we have to deal with, as well.
18 I think the agencies, the IOUs, the developers, are going to
19 have a much more difficult time if we do not begin to
20 undertake this kind of an analysis and integration effort
21 now. And perhaps, in addition to informing us as a state,
22 perhaps the best result from all of this could be that it
23 would provide some consensus, or be the basis for justifying
24 the no regrets kind of projects that we know we will need to
25 undertake. And I guess one last comment, a couple of folks

1 including our own staff indicated the potential value of
2 returning to the procurement review groups, we all love
3 access to information, Mr. Vidaver is an info junky, and I
4 think we all are, we like information and that's what we
5 thrive on around here. But, as Commissioner Weisenmiller
6 pointed out, even if we got to see it, and have access to
7 it, it's not usable to us in our documentation and the
8 analysis we do. As one of my fellow Commissioners says, we
9 don't know what we don't know, but we do have a completely
10 public and transparent process here at this Commission. Our
11 work and analysis will be completely open to review,
12 comment, and criticism, but I think, in the end, it's going
13 to be much more informative. I think, in the end, it's
14 going to be of value and I hope that you will all take it
15 that way. I apologize to those that commented because I'm
16 very sympathetic that it is going to take some time and
17 effort to participate in our process, and it's enriched
18 because of that participation. So, Madam Chair, I applaud
19 the efforts of the IEPR Committee this year and going
20 forward next year in undertaking this analysis. We, of
21 course, put this recommendation in the '09 IEPR, I would
22 have liked to have seen this work done a couple of years
23 ago, and it will not be completed in any definitive way this
24 year, it will probably have to be reevaluated and looked at
25 again, but if we don't begin undertaking this now, we're

1 going to be behind the eight ball once again when all these
2 issues become much more critical than they currently are.

3 COMMISSIONER WEISENMILLER: Yeah, again, I certainly
4 would like to thank the staff for putting up the straw man
5 for people to react to, and obviously we've gotten a lot of
6 reaction, and certainly appreciate the comments, and as
7 Commissioner Byron indicated, certainly urge everyone to
8 provide written comments. I think what we're looking for in
9 the written comments, again, are ways to deal with, again,
10 what I'll characterize as the issues, the bottlenecks, South
11 Coast is one example, certainly the emerging greenhouse gas
12 Regs are another, to do that efficiently and effectively
13 given state resources, and to think a little bit about the
14 phasing, you know, we've laid out sort of an optimal
15 process, we realize that some events, I think, as we were
16 scoping this, have sort of slid back in time already, so
17 that I think, as we look forward, certainly I think we have
18 to be thinking of a multi-year process to get to where we're
19 going, with this being our first steps, as opposed to
20 definitive or getting there, but, again, what's the most
21 efficient way to do this so that we can make some progress
22 this year, some more next year, and some more the following
23 year. By "this year," I should be saying 2011, as opposed
24 to 2010. But anyway, more steps as we go forward to
25 ultimately help give this sort of road map and presumably

1 linking that back to our siting decisions, ways to simplify
2 things. So, again, I think we have a straw man, we're
3 certainly looking for proposals, I think the proposals
4 should help us reshape it, but expect that we need to move
5 forward in this direction. So, thanks again for your help.

6 CHAIRMAN DOUGLAS: And I'd like to join my fellow
7 Commissioners in thanking everyone who participated in the
8 workshop. We certainly have a lot of work to do and I agree
9 that it's incremental and that we're building on what we
10 have, and integrating and synthesizing, and identifying
11 areas where we absolutely need more work. So I appreciate
12 everyone being here, look forward to receiving the written
13 comments, and thank staff for their work in getting us going
14 in this process. So, with that, seeing no more public
15 comment, we are adjourned.

16 [Adjourned at 12:06 P.M.]

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