### JOINT COMMITTEE WORKSHOP

### BEFORE THE

# CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:

Preparation of the 2009 Integrated )
Energy Policy Report )

Docket No. 09-IEP-1D

Transmission Planning Information And Policy Actions

ORIGINAL ORIGINAL

CALIFORNIA ENERGY COMMISSION

HEARING ROOM A

1516 NINTH STREET

SACRAMENTO, CALIFORNIA

MONDAY, JUNE 15, 2009

9:00 A.M.

DOCKET

09-IEP-1D

DATE JUN 15 2009 RECD JUL 14 2009

CALIFORNIA REPORTING, LLC

52 LONGWOOD DRIVE

SAN RAFAEL, CA 94901

(415) 457-4417

Reported by: Mary Clark, CERT\*D-214

1	COMMISSIONERS PRESENT
2	Jeffrey D. Byron, Commissioner, Presiding Member, IEPR Committee, Siting Committee
3 4	James D. Boyd, Vice Chair, Associate Member, IEPR Committee
5	Karen Douglas, Chairman
6	Associate Member, Siting Committee
7	SPEAKERS PRESENT
8	Suzanne Korosec, IEPR Lead
9	Judy Grau Strategic Transmission Planning Office
10	Dave Olsen Center for Energy Efficiency & Renewable Technologies
11	Roger Johnson
12	Engineering and Corridor Designation Office
13	PANELISTS PRESENT
14 15	Chuck Najarian, CEC Moderator, Session #1 Panel Discussion - Achieving a Coordinated Statewide Transmission Planning Process
16	Dave Olsen
17	Center for Energy Efficiency & Renewable Technologies California Energy Commission
18	Tony Braun California Municipal Utilities Commission
19	
20	Juan Carlos Sandoval Imperial Irrigation District
21	Jim Shetler Sacramento Municipal Utility District
22	
23	Jon Eric Thalman
24	Pacific Gas & Electric
25	Patricia Arons Southern California Edison

1	Mohammed Bashir Los Angeles Department of Water and Power
2	Karen Edson
3	California Independent System Operator
4	Nancy Ryan California Public Utilities Commission
5	Grace Anderson
6	California Energy Commission
7 8	Roger Johnson, CEC Moderator, Session #2 (For all interested parties) - Staff Proposed Transmission Corridor Designation Selection Methodology
9	ALSO PRESENT
10	Bob Stuart BrightSource Energy
11	Faramarz Nabavi California Wind Energy Association
12	Helen O'Shea
13	Natural Resources Defense Council
14	Karen Mills California Farm Bureau
15 16	Laurie Ten Hope, Advisor to Commissioner Byron California Energy Commission
17	Susan Brown, Advisor to Vice Chair Boyd California Energy Commission
18	INDEX
19	Page Introduction
20	Suzanne Korosec 6
21	Opening Comments
22	Commissioner Jeffrey Byron 8
23	Vice Chair James Boyd 10 Chairman Karen Douglas 19
24	Over and Goals for Today's Workshop
25	Judy Grau 10
	Renewable Energy Transmission Initiative (RETI)

## CALIFORNIA REPORTING LLC (415)457-4417

1	Phase 2A Results	
2	Dave Olsen	17
3	Session #1 Panel Discussion - Achieving a Coordinated Statewide Transmission Planning Process	
5	Session #1 Stakeholder Questions and Feedback Directed to Panelists	68
6 7	Session #2 (For all interested parties) - Staff Proposed Transmission Corridor Designation Selection Methodology	
8	Session #2 Questions and Feedback	142
9	Closing Comments	185
10	Adjournment	193
11	Certificate of Reporter	194
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

### PROCEEDINGS

MS. KOROSEC: We'll go ahead and get started.

I'm Suzanne Korosec. I lead the Energy Commission's

Integrated Energy Policy Report Unit, and welcome to
today's workshop on Transmission Planning and Corridor

Designation Opportunities. This workshop being conducted
jointly by the Commission's Integrated Energy Policy

Report and Siting Committee.

Transmission planning continues to be a major issue in California. We have an aging transmission infrastructure and needed upgrades and/or replacement, coupled with the need for new transmission infrastructure to access renewable resources to help us meet the state's greenhouse gas reduction goals, both complicated by long lead times for permitting and building transmission infrastructure, so it's essential that we do have coordinated statewide transmission planning process as well as a long-term strategic transmission plan.

Transmission planning is also a major component of efforts underway at the national level. In fact, on Friday I read testimony for a hearing open house energy and counter subcommittee on the energy environment to discuss proposals for new transmission legislation. FERC Chairman Wellinghoff called for a national policy commitment to develop the transmission infrastructure

bringing renewable energy from remote areas into our metropolitan areas, and also stressed that transmission planning needs to look beyond the needs of a single utility or even a single state.

So before we start in on technical discussions, I need to cover a few housekeeping items. Our restrooms are out in the atrium through the double doors and to your left. There's a snack room on the second floor at the top of the stairs behind the white line. And if there's an emergency and you need to evacuate the building, please follow the staff outside to Roosevelt Park, which is diagonal to the building and wait there until it's safe to return.

Today's workshop is being broadcast through our WebEx conferencing system. Parties should be aware that we are recording the workshop. We'll make that recording available on our website immediately after the workshop. Once the written transcript is completed, we will post that and replace the WebEx recording on our website.

For speakers and commenters today, please be aware we've been having some minor difficulties with our audio for WebEx, so please speak very closely into the mic. It will sound like you're speaking very loud in the room but the WebEx people will be able to hear you a little bit better.

This workshop is being held under the 2009

Integrated Energy Policy Report or IEPR proceeding. The Energy Commission is required by statute to prepare an IEPR every two years that provides an overview of energy transit issues in California and also provides policy recommendations to help the state meet our energy goals.

In 2004, Senate Bill 1565 added a requirement to the Public Resources Code for the Energy Commission to adopt a strategic plan for the state's electric transmission grid that identifies and recommendations actions to ensure reliability, relieve congestion, and meet future growth in electricity loads and to include that plan in biennial IEPR. So the results of today's workshop we'll get into that document, which is the 2009 Strategic Transmission Investment Plan, which will be adopted along with the 2009 IEPR in November of this year.

So with that brief introduction, Commissioners, I'll turn it over to you for opening comments.

COMMISSIONER BYRON: Thank you, Ms. Korosec.

Good morning. I'm Jeff Byron and I chair the Energy

Commission's Integrated Energy Policy Report Committee.

I'd like to welcome everyone here this morning. I see a

lot of familiar faces, and I very much appreciate your

being here for this important IEPR workshop.

The Chairman I think will join us shortly. This

is a joint, is it a joint committee?

VICE CHAIR BOYD: Yes.

COMMISSIONER BYRON: Yes. Siting and IEPR as you know on the various transmission issues that are extremely in the state, and we're really interested in the input of all the stakeholders that are involved in this process and the public. Commissioner Grunig had planned to be here. She wrote me yesterday indicating that she would not be able to make it. As I indicated, the Chair will be down shortly.

We're very interested I think you'll see. In open dialogue, I think you'll see that that the staff has created some sessions that are really conducive to that and we welcome your input and comments particularly on some of the recent staff thinking with regard to how we'll go forward with the renewable energy transmission initiative.

As many of you know, the Strategic Transmission Investment Plan is a requirement of the legislature of this agency. We're required to do it every two years, and that's why we need to move forward quickly with this workshop and follow up to the May 4<sup>th</sup> workshop on the same subjects so that we can indeed produce an IEPR to the November time frame as required by legislation.

I'll keep my remarks brief this morning, but I

would like to also introduce my advisor to my left, Ms.

Laurie Tenhope. All the way to the right is Commissioner

Boyd's advisor, Susan Brown, and Commissioner Boyd who is

my associate member on the IEPR committee. Commissioner,

do you have any comments?

VICE CHAIR BOYD: Thank you. I think you've covered it all for the subject since you chair both the Siting Committee and the IEPR Committee. I defer to your judgments and look forward to Commissioner Douglas's participation as the other member of the Siting Committee. I'm a veteran of the Integrated Energy Policy Report, so nothing more needs to be said. This is my fourth one I guess through all these yeas, so let's get on with it. Thank you.

COMMISSIONER BYRON: Okay. Well, we're really just following through on a lot of your earlier recommendations here. Ms. Korosec, let's go ahead. I think when Commissioner Douglas comes, we will give her an opportunity as well to make some comments, and that would be following whatever presentation is going on at that time.

MS. KOROSEC: All right. So we'll start with Judy Grau from the Strategic Transmission Planning Office.

MS. GRAU: Thank you, Suzanne. The first thing I'd like to do is if everyone could take out their copy of

the agenda. We do have some changes and additions, and so

I'd just like to make everyone aware of those.

On page 2 where we list the panelists for the

first session, we have some folks that say invited by

first session, we have some folks that say invited by their name. They are now confirmed, so Pat Arons from Southern California Edison, is she here?

IDENTIFIED FEMALE: Not yet, but she'll be here.

MS. GRAU: And Karen Edson from the California
Independent System Operators is confirmed. One more
thing, do we have a representative from Los Angeles
Department of Water and Power?

MR. OLSEN: Mo Bashir (phonetic).

MS. GRAU: Mo Bashir. Okay. Thank you. And then finally on the next page, the invited stakeholders, from BrightSource Energy replacing Author Haubenstock is Bob Stuart, and instead of Dariush Shirmohammadi we have Faramarz Nabavi representing the California Wind Energy Association, and the Environment representative is Helen O'Shea with the Natural Resources Defense Council.

And one other note, Dave Olsen's presentation, we do have an (inaudible), a one page of recommendations. There are handouts in the back next to his presentation. It's a separate one-page sheet so make sure you all get that also.

As Suzanne noted, we are WebExing this

presentation this morning, and so what we will do when we do open the floor for comments, we will take comments in the following order, first from the dais, second from parties in the room, and then third from the WebEx participants who have either typed a question in the chat function of WebEx or have raised their hand online.

And just a few other instructions for those on WebEx, you can communicate with the WebEx host during a full-screen presentation if you think hit keyboard's escape key and then you can type a message in the tab window. And please send a message only to the host; otherwise, it will be read by all other WebEx participants, and please we ask do not send messages to the presenter because he or she will not be able to see it. And so on WebEx if you would like to speak during the workshop, again hit your escape key to exit the full-screen view at the PowerPoint slide, and then you can used the raised hand function in the participants window.

And when we are ready and open up the floor, like I said, in the order, first the dais, then in the room and then WebEx, at that point the host will unmute you and you'll be able to ask your question. Thank you.

Okay. And as Commissioner Bryon noted, this is the second joint workshop between the Integrated Energy Policy Report Committee and the Siting Committee. The

first one was held on May 4<sup>th</sup>. And at that workshop, we accomplished several things. We discussed the load serving entities responses to the Commission's adopted transmission forms and instructions. We also heard about the status at that time of California's Renewable Energy Transmission Initiative or RETI, and the California Independent System Operator, CAISO, gave us an overview of the 2009 and 2010 transmission plans, and we also heard about a number of regional transmission planning initiatives and projects.

We had a panel discussion on facilitating coordinated transmission planning to achieve the state's renewable policy goals, and we had a panel discussion on valuing environmental decisions in transmission planning and permitting using a programmatic approach.

In addition to the oral comments received at the May 4<sup>th</sup> workshop, we received three sets of written comments after the workshop, and I'll just briefly mention those. The Metropolitan Water District of Southern California expressed concern that its Colorado River aqueduct transmission system was being studied by RETI for possible winter connection and/or reconductoring. And they recommended that because the RETI results were being vetted in our IEPR process, they recommended that the Energy Commission ensure each potentially affected

transmission owner receive prompt and direct notice of the consideration of a proposed transmission project in a plan at the earliest possible date.

2.1

The Transmission Agency of Northern California or TANC supports joint planning processes that facilitate investor-owned and publically-owned utilities' abilities to develop the necessary transmission infrastructure to meet their renewable energy goals as well as those of the state's. TANC believes that a statewide coordinated transmission planning process must be careful not to impede transmission development at the individual utility level. They note that accessing renewable energy is but one reason to build transmission but that the primary purpose for transmission is to reliably deliver energy to load centers.

In short, they believe a statewide plan must be descriptive but not prescriptive. The planning for specific transmission projects is best accomplished by the processes already in place at the CAISO and the individual utilities.

The final set of written comments was by the joint parties consisting of the CAISO, California

Municipal Utilities Association, Imperial Irrigation

District, Los Angeles Department of Water and Power,

Pacific Gas and Electric, Sacramento Municipal Utility

District, San Diego Gas and Electric, Southern California Edison, and TANC. Not coincidentally, many of these entities have agreed to participate as panelists in this morning's panel discussion on achieving a coordinated statewide transmission planning process.

In the written comments, the joint parties state that improvements to the existing planning processes are preferable to creating a new planning organization. And in that light, they have launched the California Joint Transmission Planning Group. This group is intended to coordinate existing transmission planning efforts among the major transmission owners and balancing authorities in California in order to eliminate duplication and streamline the process.

We will have an opportunity later this morning to hear from members of the joint parties about their process and how it may or may not fit with staff's strong and process diagrams, when we get to that Panel discussion. However, before that, we have a presentation by Dave Olsen on the RETI Phase 2A results. And Dave is the co-coordinator for the RETI effort, so he is our next speaker. Are there any questions from the DAIS?

COMMISSIONER BYRON: No question really, but I think as Mr. Olsen comes up, I'll make a comment or two.

MS. GRAU: All right. And do we have any

questions from the parties in the room? And moving on, do we have any questions on WebEx? Okay. Thank you.

COMMISSIONER BYRON: Mr. Olsen, as you're coming up and you're loading your presentation, if I just may I'd like to just take a moment to acknowledge the folks that participate in RETI and I always look for this opportunity.

It's kind of an extraordinary undertaking with the number of stakeholders. I know you're going to go through the objectives and some of the recent results and effort. And of course, your organization is under contract to the Energy Commission to help facilitate this initiative, but I just can't thank the stakeholders enough, the agencies that have been involved, the ISO, the PUC. I think you've been exemplary in trying to move forward a very important initiative in the state.

We all recognize the importance of renewables. The calculations indicate that we're going to need to build large sites and can't do this all in the load centers. I'd like to certainly thank you and Dr. Ferguson. I'm not sure if Rich Ferguson is here today, the stakeholders that are involved, and the environmental organizations that have participated at great hardship and peril at times.

David, thank you very much for shepherding this

through. We're not done. I hope you're not going anywhere for a while.

MR. OLSEN: No, not at the moment. Thank you very much, Commissioner Boyd and Commissioner Byron,
Advisors Brown and Tenhope. Thank you for this opportunity to give a progress report on the Renewable Energy Transmission Initiative.

Commissioner Byron, I'd just like to echo a lot of the comments you just made. I want to thank you first for the support of the Energy Commission in this undertaking and specifically your support because you followed our work closely. That's really made a material difference. And the Energy Commission staff also has really made extraordinary effort. I'd like to recognize Claire Loffinberg-Galardo (phonetic), who serves as the Energy Commissioner representative on the RETI stakeholder staring committee, Chuck Najarian and Don Condolian (phonetic). There are several other members of the Energy Commission who provided really extraordinary support along with the members of the coordinating committee of RETI.

Certainly, the support of the Public Utilities

Commission, the California Independent System Operator,

and the publically-owned utilities together launched this

initiative in September of 2007, and it's taken their

active support to get to the point that we are today.

I've been working on their report.

All of this work really represents a huge amount of effort. If you had an opportunity to look at any of the appendices of the Draft Phase 2A report, you'll get a sense of the enormous amount of data that we've collected and analyzed. And as Commissioner Byron noted, this represents a really huge amount of work with each organization paying it's own costs by not only the transmission planners in all of the load serving entities and transmission providers, but all of the staffs of the state and federal permitting agencies, the environmental organizations who have devoted an enormous amount of time.

With all that said, what we have here in this draft report is very decidedly not a business as usual approach to conceptual transmission planning. And this nontraditional approach to conceptual planning I think has pretty much everyone uncomfortable. So a lot of the transmission planners are uncomfortable. Many of the renewable energy generators are uncomfortable. The environmental organizations are uncomfortable. I think as I go through the results of where we are today, you'll get a sense of why that is.

I think it's certainly an understandable result because it's really not a business as usual approach and it's appropriate for people not to be entirely comfortable

at this point. Let me emphasize that this is a draft report. The point of the draft is really to solicit comments. We have a public comment period going on right now. I'm going to talk a little bit more about that comment period. These are certainly preliminary results. We're looking to improve and refine this plan. We're very open to the larger task of how we identify the transmission infrastructure that's going to be necessary to meet state goals.

So with that preface, I'd like to go ahead and give you an overview of what I'm going to talk about.

First a very brief review of the RETI mission goals and structure and a review of the work we completed in Phase 1, then an overview of the two main tasks of Phase 2, which were to reconfirm and revise our competitive renewable energy zones that we identified in Phase 1, and then develop a statewide conceptual transmission plan.

I'm going to spend most of the presentation on that conceptual plan and then close with next steps for RETI.

We've been joined by Chairman Douglas. Madam Chair, would you like to make any remarks before I proceed?

CHAIRMAN DOUGLAS: Thank you, Dave. I don't want to interrupt the flow of your presentation. I'll just take this opportunity to welcome everybody as well to

the Energy Commission. Transportation planning is vitally important for the state for both meeting our renewables goals and improving -- Did I say transportation? That's because I was whispering with Commissioner Boyd about a transportation issue not too long ago, transmission planning, and so I'm very happy to see everyone today and very happy to be here today. Thank you.

MR. OLSEN: Thank you. So a brief review of the purpose and goals of RETI. The RETI's mission is to identify the transmission necessary to meet the state's policy goals. That includes both greenhouse gas reduction goals and the 33 percent renewable energy goal in 2020, to do so in a way that supports future energy policy development, and to do this in a way that minimizes both financial and environmental costs.

As we evaluate the transmission necessary, we want to do so in a way that then facilitates the siting and permitting of any of the potential lines that have been found to be -- subsequently found to be needed and do this evaluation in a way that also support the identification and preservation of corridors for transmission infrastructure.

Perhaps most importantly in creating a consensus statewide plan of build broad support for the actual approval of transmission projects, two main premises

underline RETI work. The first is that transmission that we need for 2020 has to be developed. We have to develop this proactively. We cannot wait for generator interconnection requests. We have to develop the transmission infrastructure now.

The most effective way to organize that development is around competitive energy renewable zones or CREZ. CREZ focus generation development into small geographic areas in order minimize both environmental impacts and costs. We can't afford to build transmission everywhere. If we can minimize the areas that we build the transmission to, that certainly will help control both those categories of cost.

The second measure premise underlying RETI is that the most effective way to build active support for approval of transmission projects is to involve stakeholders from the outset in helping to conceptualize the projects, what kinds of projects, where should they go, and how should they be organized. So those are the premises underlying RETI work.

To that end, RETI is structured as a stakeholder collaborative with the stakeholder steering committee directing the effort. The steering committee forms working groups as necessary, quite a few actually since the beginning of this whole initiative. There's a

coordinating committee made up of the Energy Commissioner, the Public Utilities Commission, the Independent System Operator, and the publically-owned Utilities that ensures that RETI meets state policy goals. There's also a plenary stakeholder group that's open to the public and welcome to all who are concerned about these issues of renewable generation development and other transmission necessary to support that development.

The structure of the steering committee actually includes -- we have 29 members at the moment. It includes all of the transmission owners and operators in the state, all of the power buyers in the state, all of the renewable energy generator representatives of all of those technologies, the state regulatory and permitting agencies, so not only the Energy Commission and Public Utilities Commission, but also the California Department of Fish Game, the federal permitting agencies, the military, environmental organizations, consumers, counties and tribes. So again, the steering committee -- the intent of the steering committee is represent a broad ranger of stakeholder interest and concern across the state.

COMMISSIONER BYRON: Mr. Olsen, if I may interrupt. The effort has been to be inclusive. Of course, this is a voluntary organization and it takes

resources and effort to attend. You've had numerous meetings I think on the order of one or two a week sometimes. Are there any key groups that we're missing at this point?

MR. OLSEN: In terms of interest to be representative, I would say not. One of the criticisms that we hear of RETI is that it is industry dominated. And I think if you look at the structure, it's hard to sustain that criticism because of the number of governmental agencies, both state and federal, the local organizations, the environmental organizations, the renewable generators, so this is neither a utility-dominator nor really an industry-dominated structure.

There is great concern that environmental organizations in particular across the state do not feel adequately represented. We have two environmental representatives on this 29-member steering committee, and there are literally hundreds of local environmental organizations, many of them active in areas in which a generation development -- a renewable generation development and/or transmission development is proposed, many of them in the Mojave region, and they do not feel that they are adequately represented. This is something that our steering committee has struggled with from the outset.

The balancing act here is to have a small enough steering committee that is able to function and reach collective decisions. If this were to be a 50-person steering committee, for example, it would be effectively impossible I think to function in this way.

COMMISSIONER BYRON: Or you would be aging at a much faster rate.

MR. OLSEN: So this is -- This is an ongoing balancing act to attempt to address the concern that not enough local environment perspective is represented in RETI considerations. We have had a number of public meetings especially in desert area. We have another one next week.

COMMISSIONER BYRON: I believe -- Is it this week?

MR. OLSEN: No. It's June  $18^{\rm th}$  actually in Victorville.

COMMISSIONER BYRON: That's this week.

MR. OLSEN: It is this week. Good point about the aging information. So I will tell you that the public meetings that we do have are very well attended by local environmental organizations, you know, in the affected areas. But there's still very much or very much an issue here that we're looking for ways we could build in greater local environmental or just a concerned citizen kind of

perspective as we go forward, so more public meetings or any ideas people have about how we could do this more effectively would be most welcome.

COMMISSIONER BYRON: And I think I'd like to add one more thing, and I apologize for interrupting. I think over the course of the last two years, I've met with just about everyone of these stakeholders at least once or more, and there are concerns that are expressed on the part of each of them that this is a government-run organization and that this is -- the agencies are trying to control it and we are not.

We have worked very hard at maintaining a stakeholder control over the process. Accordingly, the community is there to provide guidance, but this really is a stakeholder-run process and we welcome the involvement of the public and these other constituents that you mentioned to the extent that they can participate. But it's extremely difficult, I know, because of the amount of time and effort it take and the detail that's involved in this, but I just wanted to make that emphasis.

MR. OLSEN: And I would also like to second as someone who works both with the steering committee and with the coordinating committee, I greatly appreciate the fact that the agencies on the coordinating committee really do defer to the steering committee, so this is a

stakeholder-led effort all the way.

VICE CHAIR BOYD: Mr. Chairman?

3 | COMMISSIONER BYRON: Please.

VICE CHAIR BOYD: May this grumpy, aged

5 Commissioner make a comment?

COMMISSIONER BYRON: Go ahead. Your aging process has slowed.

VICE CHAIR BOYD: Dave and I go way back even before my years on the Commission. I just want to thank you for all the work he's done on this project. But I just want to say the comments that have been going back and forth here about how people feel they haven't, you know, they would like to be represented and they haven't been represented. It's just so unfortunately typical and not atypical of our society.

I mean I've decided at my age we're incredibly tribal and that every tribe doesn't have a representative at the table. Then they claim process doesn't work and people have a tough time delegating up to other representatives, so I think you've done an outstanding job. I think you've done the best that you possibly can do in the -- in as far that and I don't know how far that may not be. We've evolved in our ability to handle issues like this, so I think the process has been quite good.

And I agree with Commissioner Byron that you and

that he in particular continues to try to reach out to everybody, but you would be extremely aged if you did touch everybody and they couldn't rely on some of their peers to represent their points of view. So I think you've done more than I would have expected to possibly under the circumstances.

MR. OLSEN: Thank you very much, Commissioner. I will say though that, to everyone here and there are many of my colleagues on the steering committee and many people who have been actively involved in putting this plan together and certainly all of the governmental and agencies representatives here, the reason that we're here really is to find a way to make it easier and faster to actually approve transmission infrastructure.

And all of us who see this need in wanting to achieve that result, have to continue to work to find ways to make it possible with public and concerned people in every local area, so that when we do have a transmission project that is up approval, we can assist the decision makers in actually in approving that transmission. So this is a task I would say for all of us who want to get transmission actually approved is to find out how we can bring enough of the public along to make it easier to improve these facilities.

So to go on to just a brief review of Phase 1

work in RETI. Phase I the purpose was to identify and rank competitive renewable energy zones. We did this with three reports. The first report in last May set out the assumptions and the methodology that we would use to actually identify competitive renewable energy zones, so this is where we agree, the stakeholder collaborative agreed on all of the assumptions about technology operating characteristics and costs and all of those kinds of things.

We followed that up with two reports, and finally the Phase I gave a report last December and identified 29 CREZ in California and several out of state areas. And we did this using a three-step process really. First was to identify environment exclusionary, so areas in which generation development was actually prohibited or would be so difficult because of the sensitivity of the lands involved that we could not -- it just would not make sense to foresee generation development there.

And then we did an economic analysis of all the projects each technology, the four major technologies that we consider, biomass, geothermal, solar, and wind. We aggregated the most economic of those projects into these small geographic areas that had the best resource potential, and then applied a relative environment ranking to those projects to identify a relative environment score

for the CREZ. We also performed a number of sensitivities analyses to under the uncertainty around major assumptions about cost and timing of development.

2.1

In Phase 2 to go on, there are too many tasks. The first was to confirm the developability of generating projects in each CREZ, and then to revise the boundaries and descriptions of those CREZ as necessary. To that end, the steering committee formed a CREZ revision workgroup, which was also assisted by the environmental workgroup that was formed in Phase 1.

The second major task of Phase 2 work was to prepare a conceptual transmission plan. And for that work, the steering committee formed a conceptual planning workgroup. The planning workgroup subsequently established several subcommittees to carry out the specific tasks. For example, evaluating out of state resources in more detail, a workgroup on how the report — how the results of this ranking or evaluation of transmission assets should be performed or how it should be reported, rather.

And finally, we had two panels of environmental experts that assisted us in evaluating the environmental impacts of potential transmission lines.

The work of revising the CREZ really was an on the ground job, so actually going to these particular CREZ

that we analyze using satellite and mapping information in Phase I, and getting a sense of on the ground, what were the issues that would either make permitting generation projects difficult or perhaps infeasible.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

One of them -- One of these issues was the parcelization of land ownership, which we did not appreciate in Phase 1 work. So for example, if there are many, many owners of a projected generating project area that makes the -- it makes it infeasible to think that generating project could actually be developed. example, more of the criteria that this group came up with is if there are more than 20 owners per a two-square-mile area or a project site area, that would mean that a generation developer would have to negotiate with so many owners that it would make the likelihood of a generation development there would certainly make it unlikely. So we moved projects that had been placed on areas that had many, many owners and found alternative locations. some cases that meant adjusting the boundaries of the CREZ.

We also applied the effect of the Bureau of Land
Management one-percent cap on development in desert
wildlife management areas. This is an issue that we
certainly knew about in Phase 1, but we did not have and
BLM could not provide us with GIS coordinates for these

areas in Phase 1. We took that into account in Phase 2 work and revised the CREZ appropriately.

We also certainly took note of the proposed

Mojave Desert National Monument in this work. And as the
result of this real in-depth look at our CREZ, we revised
the estimate of the energy output potential of each of the
CREZ, and calculated a new economic and environmental
ranking of each of the CREZ. And here is that ranking
displayed as a bubble chart. The size of the bubble is
proportional to the energy in each of these CREZ. The
environmental -- relative environmental concern is on the
x-axis with the larger numbers representing a higher
environmental concern. The relative economic score, which
is a measure of both cost and of value of the energy
output of the CREZ is on the y-axis, again with higher
costs going up.

You'll note that the out of state areas, so starting here at Oregon, Nevada, British Columbia, Baja, they're all in the middle of the environmental concern axis. That's because we could not get comparable environmental data on out of state areas to evaluate them in the way that we had evaluated the environmental concern of the California areas, so the workgroup made the decision of assigning the median environmental score of all of the California workgroups assigning that to these

out of state areas until such time as we can obtain comparable environmental data to evaluate those out of state areas. So this is the new economic and environmental ranking of CREZ as revised as a result of the Phase 2 work.

Any questions before I go on to conceptual transmission planning? So I'd like to turn now to the draft conceptual transmission plan. Once again, the draft -- the word draft here is italicized to draw attention to the fact that it is a draft. We are looking for comment, and this is preliminary in a number of ways, as I will indicate.

I'd like to start with a summary of the results and the major outcomes. Then I'm going to review the caveats and limitations associated with the plan, review the guidelines for compiling this plan that were established by the stakeholder steering committee, walk through the methodology that we used to evaluate all of these potential transmission connections, talk a little bit about how we group them into transmission groups, how we then ranked these transmission groups, and then talk about recommendations and the next steps toward this conceptual planning and exercise.

So summary, the first thing to say that this draft plan assesses the relative value of line segments to

access and deliver renewable energy from CREZ, so we're not looking at all power. We're looking at renewables flows from CREZ.

The base case scenario that I'll talk about here evaluates a little over 100 network line segments, so network segments again, not trunk lines or generation tie lines but actually connections to the interconnected network of California and the western interconnection.

The scenario groups these 100 network line segments into 14 renewable foundation lines, 13 renewable delivery lines, and a set of renewable collector lines. I'm going to talk about each of those groups. It recommends -- The plan again in summary recommends that the foundation lines and the delivery lines be studied immediately by the California Independent System Operator and the publically-owned utilities, any of these lines that not already being studied. Several are.

Again in summary, these foundation lines and delivery lines represent what the planning group believes to be the least-regrets upgrades to the California grid. So again, least-regrets additions are transmission facilities that likely to be needed regardless of renewable generation development, regardless of how the load grows in the state.

And finally, this plan utilizes existing right-

of-way and existing corridors to the greatest extent possible, so that's in summary.

Now I call attention to two major outcomes. The first is that we have a recommendation of a broad set of stakeholders that these two sets of major lines, foundation lines and delivery lines, be studied immediately by the ISO and the publically-owned utilities. That in itself, getting this broad group, remember back to the composition of the steering committee, so all the transmission owners, and utilities interests, but also the generators the environmental groups, this broad set of interests recommending these two major steps of additions to the California grid to be studied. That in itself is a significant outcome.

The second is the development of a transparent and objective methodology for conceptual planning so that it allows for participation by a diverse set of stakeholders.

Conceptual planning is usually done by experts. It's a lot faster and a lot more efficient if transmission planners, who know the grid, know congestion problems, and have a sense of the dynamic interaction on the grid can identify potential new transmission connections. It's been very difficult to involve a broad range of stakeholders in this work of identifying potential

transmission connections. And it certainly hasn't made sense to look at environmental considerations at the conceptual planning stage when we're only talking about potential transmission or potential electrical connections.

The RETI approach does both of those things.

Instead of using expert judgment, it has an objective methodology that then makes it possible for non-expert stakeholders to help conceptualize where potential electrical connections would make sense and to do so in a way that builds in environmental considerations from the very beginning. That is a major departure and one of the major outcomes of the RETI to date.

To go on to the limitations of the plan, I will say that I think everyone that has been actively involved in the RETI initiative is acutely aware of the limitations of the draft plan that we have here in our Phase 2A draft report. Many of the caveats and limitations derive from the fact that this is all related to conceptual transmission planning. The purpose of conceptual planning is to recommend potential transmission projects for study. It's a very limited purpose. That's all. There are no decisions being made. This is a recommendation of potential projects for study.

Conceptual planning does not provide information

about actual power flows. It's about the actual amount of power that would flow, for example, from CREZ onto the western interconnective grid. It does not provide information about congestion. It does not provide information about the dynamic stability or interaction of the grid.

2.1

Conceptual planning does not determine need. It does not determine whether or not any particular proposed transmission project is in fact needed. That is a regulatory decision. That is not the function of conceptual planning.

And finally, conceptual planning cannot determine the extent to which the existing grid, existing transmission infrastructure could accommodate the flows of new renewable generation from each of these CREZ. We don't have the tools to do so with conceptual planning. That really does require power flow analysis to understand whether or not or the extent to which the existing grid could accommodate all of the new renewable generation that will be needed to meet the state goals in 2020.

The second group of limitations of this plan is that it is based on what we know today about the cost of generation from the different technologies, each of these different renewable generating technologies, the cost of those technologies. Certainly, the economics of these

CREZ are uncertain. The development patterns and timing is uncertain, so the best we can do today is to make an informed estimate with the information again provided and agreed to by the stakeholder steering committee.

So all the assumptions we have about the quality of the resources, the amount of solar insulation, or the energy in the wind in particular areas, and the cost of the technologies to convert those resources into electricity we're just using again stakeholder agreed assumptions about those costs and what we know today.

The plan is based on a shift factor methodology. I'm going to talk a little bit about that. This shift factor methodology can only approximate how power would flow on lines, so it's a rough approximation and nothing more.

And finally, this analysis that we have done to compile this initial conceptual plan is really a short-term look. It is not useful for the kind of benefit cost analysis that decision makers will have to employ to determine whether or not to approve a line. It looks only to 2020 when transmission assets have 50-year lives or more. So the transmission that we are beginning to plan right now will very likely be in service in 2060 or 2070.

So we also have made no attempt to quantify the benefits that any of these potential transmission projects

would provide to relieve congestion, deliver lower cost power to consumers, improve the reliability of the overall grid. There's no estimate of that whatsoever in this work. So those are some of the limitations of the plan.

The stakeholder steering committee established a set of guidelines for the conceptual planning workgroup to use in compiling this initial plan. First was to plan using a statewide perspective without respect to the ownership or operation of any of the potential transmission facilities. So in other words, the plan was not to be the sum of proposed transmission projects of any of the transmission owners. You know all of the transmission owners have proposed projects of their own that they've developed to meet the needs in their service territories. If you add all of those projects together, that's not necessarily an optimal statewide plan.

So in order to minimize the number of facilities, the guidance from the steering committee was to start with the CREZ, start with the renewable generation and identify the optimum set of transmission solutions that would provide access to those CREZ, without respect to who owns them or how they would be operated.

The second guideline has to do with the amount of energy that this infrastructure will have to accommodate. To do that we calculated something we refer

to as the renewable net short. This is the amount of renewable energy that each load serving entity will have to have in the year 2020. So if you add the renewable requirements of all of the load serving entities in California, that adds up to about 60,000 gigawatt-hours a year in 2020.

Now to provide a planning margin of the steering committee directive of the conceptual plan to actually be able to accommodate 1.6 times that amount or 96,000 gigawatt-hours a year of renewable energy in 2020, the purpose of having a planning margin is to allow for unforeseen eventualities and certainly to provide for competition amount CREZ, among transmission providers, so that the plan that we have or the guidance from the steering committee was to provide a plan that could actually accommodate 96,000 gigawatt-hours of renewable energy in 2020.

A third guidance was to develop a plan that was capable of providing access to all of the California CREZ and to out of state resource areas and in an amount of 15,000 gigawatt-hours of imports. So those are three broad categories of guidance as a starting point for developing this plan.

Now to walk through the methodology that the conceptual planning workgroup used to evaluate these

potential transmission connections, so the first thing here is that the conceptual planning workgroup identified about 100 potential transmission solutions that could be useful in providing access to the 29 CREZ across the state, every part of the state, and out of state resource areas. So we have about 100 different line segments.

To evaluate them, we started with the Western Electricity Coordinating Council 2018 configuration. What that means is all of the lines that the WECC expects to be in place in 2018 in the entire western interconnection. To that configuration for the entire western interconnection, we added the 106 line segments that our conceptual planning workgroup has identified as potentially being useful to provide access to CREZ, and that became the RETI system configuration that we used for purposes of analysis.

We then calculated the renewable net short for each load serving entity. Each load serving entity provided their estimate and the steering committee verified that. That again in the aggregate adds up to 60,000 gigawatt-hours a year of renewable energy in 2020.

We then used this information to calculate what are called shift factors. These are also known as distribution factors and they work like this; these shift factors were calculated by or calculated for RETI by San

Diego Gas and Electric Company. We're very grateful for enormous analytical work supplied by SDG&E. By using a computer program called AVB Grid View. The shift factors insert a small amount of energy from each CREZ one at a time, and then withdraw that energy from each load serving entity load center in proportion to that load serving entity's net short, so we have a flow of energy from CREZ to load centers.

The program -- The Grid View program then calculates the amount of energy injected at each CREZ that would flow on every line into the WECC grid because it's an interconnected grid including the 106 lines in the RETI model configuration. So in that way, we come up with a shift factor that represents a proportion of energy from CREZ flowing on one of the RETI line segments, so that is the heart of the analytical methodology that the steering committee has used to evaluate these 100 potential line segments.

With that shift factor information, we then combine that shift factor information with four sets of energy data from the CREZ so that the four sets of energy data are first the economic ranking of each CREZ, so we have that information from Phase 1, the environmental ranking of the CREZ. Remember back to the bubble chart. We had both economic score and environmental score for

each CREZ, so we've taken that information, combined it with shift factor information, so we have a sense of both flow from CREZ and the value or the ranking of the CREZ. We're taking that into account.

A third set of energy information is the actual amount of energy, how many gigawatt-hours of wind or solar or geothermal generation does that CREZ produce. And a fourth set of energy information here from the CREZ represents the commercial interest in that CREZ as indicated by either the amount of energy under power purchase agreements or in positions in interconnection hues.

So we took those four categories of information, CREZ economic score, CREZ environmental score, the amount of energy -- amount of renewable energy from each CREZ, and the commercial interest energy from each CREZ, combined it with the shift factors and produced a ranking of these line segments.

With that information, we then grouped these 100 line segments into different functional groups that provides us the transmission group energy information. So now we information about the energy from the CREZ on these line segments.

We then combine that with information about the cost of building these transmission facilities, and the

relative environmental concern associated with the transmission solutions to these CREZ, so at the end here we have a set of transmission groups that have energy access information, have environmental concern information, and investment cost information.

You know this is detailed stuff. I appreciate everyone -- Many of you, I know, are veterans. Those in the room have been through this before. If this is your first time through, it will give you a sense -- it would help you appreciate the kind of analytical work that has gone into this, a lot of thinking by a lot of people to come up with as far as we know a new and unprecedented way of evaluating renewable energy flows on transmission lines, so that's what's new about this and one of the reasons it's difficult. It's the first time.

So the groups that we've ended up with, as a result of this analysis in our preliminary plan here, it's again first a set of renewable foundation lines. We call them foundation lines because they increase the flows both north and south as needed up and down the state. They essentially are additions to the California backbone grid. There are 14 of them. They carry power from any CREZ, and they're likely to be useful regardless of how renewable generation develops. That's again why we called them least-regrets.

The second group is renewable delivery lines.

Delivery lines move energy from the foundation lines to cities. There are 13 of these particular line segments.

They carry power from several CREZ, not as many as the foundation lines, but more than usually two or three CREZ.

The third transmission group we call renewable collector lines, and these carry power from CREZ to the foundation lines or the renewable delivery lines. Usually they access just one or two CREZ, so they carry proportionally less renewable energy. Their function is just to collect it and bring it to these major upgrades to the grid. Some of them are connected to inter-ties providing access to out of state energy.

To look at what these mean on the map, starting with Southern California, the foundation lines are in green. It's a little difficult to see on this map, but you'll see here, for example, from Kramer to Midway and then going north. Delivery lines are in orange and collector lines are in blue, so many collector lines bringing power from, for example, geothermal, solar, and wind areas and bringing that power then to the foundation and delivery lines.

On the map, some of the delivery lines -- actually some of all of the categories are overlaying on top of one another. We don't have the map display

software to be able to show all three line segments simultaneously. That's something we're working on right now, but this will give you a sense of the scope of the line segments that have been identified to provide access to the CREZ.

Then looking at Central and Northern California, again the foundation lines in green, so a major line coming up the middle of the state, a delivery line here, and then to Tracy and then to Sacramento, major collector lines to Northern California and then out of state to Oregon and British Columbia.

As we then look at the ranking of these groups of foundation lines, delivery lines, and collector lines, we have three different categories. If you remember the dimensions of interest here, first is the CREZ energy in gigawatt-hours. So for foundation lines, you see that the foundation lines because they carry energy from many CREZ carry a very large amount of power, so 53,000 gigawatt-hours of renewable energy flowing on foundation lines.

Foundation lines have a high environmental score. Again, adding the 14 line segments here together, they have a lot of environmental concern. And one of the reasons is that, if getting back to the map, we have a major set of lines going up the middle of the state, so long lines with some new right-of-way, so relatively high

environment concern with the foundation groups, and then a cost for the foundation group.

The cost by the way were compared using standardized costs, so what we did was agree on a methodology for costing the components of all the projects, and then we used one set of cost figures for line mile for termination cost, the substation cost so that the costs are comparable. Regardless of who service territory they're in or who might have originally proposed them, the costs are all comparable. That doesn't mean that they are -- they're certainly not project specific. That's something we'll have wait until a later stage. But we have here again looking at the foundation lines, the delivery lines, the amount of energy, one major factor in evaluating these groups, the environmental score, and the cost.

Going on the collector group, there are 12 different sets of collector groups here across the state necessary to access all of the CREZ. Just to walk through this a little bit, Tehachapi for example, the Tehachapi group if you look at just the CREZ energy that's carried on the segments in the Tehachapi group, so there are 11 line segments in the Tehachapi transmission project. They carry about 31,000 gigawatt-hours of renewable energy. Tehachapi is a bit of a special case because many of these

line segments in fact performed the functions of all three transmission groups. They function as foundation lines because several of the Tehachapi segments in fact form another leg in path 26 going north and south up and down the state. There are also segments of Tehachapi that function as delivery lines that are aggregating a lot of energy from the Tehachapi region and delivering it mainly to the Southern California load center, and then there are pure collector lines in Tehachapi.

If you follow Tehachapi then over to the environmental score, you'll see that it has a relatively good or low environmental score and considerably below the median environmental score of all these transmission groups. Again, maybe because of many relatively short lines, and then you can look at the cost of the Tehachapi lines.

One word about this ranking here, the purpose of the ranking is to provide information to decision makers about the relative priority of these lines as we think about what should we do first to ensure that we are going to have enough in the structure to meet our state policy goals in 2020. But that does not mean that any of these transmission groups could not be a valuable and useful project.

Take Carrizo, for example, which actually

carries the least amount of renewable energy, but the Carrizo group of lines has the best environmental score by a long way and also has the least cost, so the Carrizo project may be a very good project from a particular point of view. It certainly provided access to two CREZ and there's no reason not to do that. You just have to keep in mind that it's providing relatively little renewable energy. It does not mean it is not a good project, so that important to keep in mind in evaluating all of these rankings.

energy, environment score, and cost and display it on a bubble chart, we get something like this. So again, this is in the same format as the bubble chart for the CREZ ranking that I showed earlier, so relative environmental concern again on the x-axis with higher values to the rights, and cost on the y-axis, and the size of the bubble proportional to the combined energy in each of the groups.

So these are the -- The groups now, these are not CREZ, these are groups of transmission segments that are now evaluated in terms of the energy so the energy carried on these group segments with environmental concern and cost.

Going on at this point, I just have a few more slides and then we can stop, Commissioner, and take

questions.

We have four recommendations in the draft report. Again, let me emphasize this is a draft report. The first is that ISO and the publically-owned utilities study any of the foundation and delivery lines that they're not already studying as soon as possible to determine which are needed to meet state goals in 2020. That's our first recommendation.

The second is to avoid duplicative transmission facilities to the extent that joint investor-owned utility and publically-owned utility projects can help do that.

We should promote those joint projects including and that means specifically removing barriers to development and operation of joint projects. So for example, that might mean that there would be two tariffs on one transmission line, a California ISO tariff and a publically-owned utility tariff in effect on the same physical wire to facilitate the ability of the publically-owned utility and the investor-owned utilities using the same physical infrastructure.

The third recommendation is that customers buying energy from California CREZ pay only a single transmission charge. So for example, if PG&E wants to access geothermal energy from the Imperial Valley, it should have to pay only one transmission charge even if

it's going across Imperial Irrigation District System, Los Angeles Department of Water and Power System, and the California ISO System. Or, if SMUD wants to access energy from the Mojave Desert, it should have to pay only one transmission charge, again, for purposes of facilitating and supporting development of transmission infrastructure necessary to access renewables. If we're meeting statewide goals, we have to think from a broad public interest point of view rather than a transmission owner point of view in doing this.

And the fourth recommendation is for the Energy Commission to move quickly to designate new corridors beyond those now established as right-of-way or established by the BLM or other federal agencies and to do so in a way that's coordinated with the other agencies, particularly as the Bureau of Land Management establishes, for example, solar energy zones. That these corridors be coordinated with those other processes but this work needs to begin as soon as possible. Those are the four recommendations in our draft report.

And then the draft report itself was posted for public comment on June  $3^{\rm rd}$ . There are three public meetings to solicit comment in Victorville later this week, in Redding and Sacramento next week. The comment period ends June  $26^{\rm th}$ , so we would encourage all parties

that can provide suggestions for improving this plan, making it better, making it more inclusive, making it more feasible, coming up with results that move in the direction of being able to approve these facilities to give us those reports so that we can integrate them into the Phase 2A draft final report, which will be sent to the steering committee around July 4<sup>th</sup>. The steering committee will review it on July 8<sup>th</sup>, and we will post a RETI Phase 2A final report in mid July.

The last slide just to conclude the next work for RETI, the first thing is to coordinate more closely with ISO and publically-owned utility planning processes to make sure that the results that RETI produces is useful and helps to advance those projects that are already being studies and helps to support the study, the detailed power flow and reduction cost simulations of proposed projects that are not now being studied by the ISO and the POUs.

Major work beyond Phase 2A of RETI is to reduce the number of line segments and prioritize them. If you'll recall the guidance that we were given that the steering committee established for this conceptual plan was to have it accommodate only the amount of renewable energy needed in 2020.

The plan that I went through this morning can accommodate much more than that 60,000 gigawatt-hours. So

one of the things we have to do -- that the planning workgroup has to do is to reduce that number of line segments from 100 to a much smaller number and to prioritize those so that we'll have a better sense of which ones should be built first, which ones are most cost effective and provide the most value. We have a process in mind to do that. It will take more work and discussion. It cannot be done for the Phase 2A report.

The third is to reduce again the transfer capacity of the plan, as I mentioned, to the 33 percent of the renewable target while recognizing that we are identifying transmission assets that have a very long life and we have evolving policy goals. Several of the RETI stakeholders have made it a real point to remind the RETI steering committee that 2020, as a transmission planning target, is short term. And while we're meeting the state policy goal in 2020, we should do so with an eye on the longer-term future that we're planning.

And finally, we have to reconsider out of state resources. There are indications that there could be more cost-effective resources from Nevada, Oregon, Baja, and British Columbian than were found to be cost effective in our Phase 1 analysis, so it was new information. We will reconsider that. That, however, directly affects planning for transmission to access the CREZ in California. Right

now with the planning target that we have used of importing 15,000 gigawatt-hours of out of state energy, that means that we would utilize roughly a third of the identified generation potential of the California CREZ. So if we just use -- If we import 15,000 gigawatt-hours from out of state, we'll only use a third of the generation potential in the California CREZ. were to increase the amount of renewable energy that we were importing from out of state, we would then decrease the amount of California generation in the CREZ, below 33 percent. It could go to 25 percent depending on how, and so that becomes then a policy decision and an important one that I want to alert all of the decision makers to. It doesn't make sense to import so much renewable energy from out of state when we have such great in state generating potential.

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

What is the appropriate mix of out of state and in state? There are certainly different considerations from different load centers or some load centers.

Importing from out of state may make much more sense. But from a state policy point of view, this is going to be an important decision in how we then finalize this conceptual plan.

And with that, I will stop and be glad to take any questions.

COMMISSIONER BYRON: Mr. Olsen, thank you very much. I think we have about ten or fifteen minutes for questions. I'll make a couple of comments and turn it over to my colleagues here today.

First of all, thank you for taking the time of go through all this. I think it may be more detail than most people probably really want to know, but I found it very helpful. It demonstrates this is complicated. There are many limitations involved in this kind of analysis.

I hope everyone is satisfied about the openness and the consensus building aspect of the process. Twentynine stakeholders. We continue to grow. Of course, I note 29 CREZs. I guess everybody got a CREZ.

And I'd also like to point out that there's significant interest in the results from this work. We know that it's really based upon the Governor's Executive Order that we're moving forward and his interest in accelerating renewable development.

This Commission is very interested in the results from the report as it informs our corridor designation process. The PUC is interested in these results. The ISO is depending upon it to some extent for solving the queue congestion issue. I don't want to confuse issues, the queue backlog. And of course, we know that there's also interest on this on a regional basis.

The Western Governor's Association I believe is meeting yesterday and today, and one of the things they will do will be to approve their draft report on the Western Renewable Energy Zones.

So extremely important results, and we're all depending upon this. I'll stop there for a moment and ask if any of my fellow Commissioners have any questions or comments.

CHAIRMAN DOUGLAS: One question. You said that you have a process in mind or there is a process under consideration for reducing the number of line segments and prioritizing line segments in the future. And it would be helpful to me if you could expand on that a bit.

MR. OLSEN: Well, this is our fourth session by the conceptual planning workgroup, but if we were to extend the shift factor analysis that I explained, what we would do is remove the lowest scoring line segments and then recalculate the shift factors. So and we would continue to do that until we end up with the minimum number of lines that would provide access to the 60,000 gigawatt-hours of energy. But we would do that through sequential analysis of each of those segments, so calculating the lowest score and removing those lines.

We know that there are in several CREZ there are redundant or duplicative lines, and that's something we

want to pay special attention to. The potentially redundant lines may or may not be redundant depending on assumptions about generation development in a particular CREZ. So this is going to take a lot of careful thought as we eliminate potentially duplicative lines, but we would use basically the shift factor analysis.

CHAIRMAN DOUGLAS: Let me make sure I understand or let me -- I guess I'll phrase the question another way. I can see that you can do more analysis of the information that you've already got to drop some of the lower scoring lines and that makes some sense.

At the same time over the next couple of years, I would expect that we would get more new information into the process. For example, as you note, some of these transmission lines might have multiple benefits beyond simply accessing renewable. At the same time, I think we're going to be refining our ideas about which CREZs are able to be permitted in the most expeditious or accelerated format and that may affect the priorities for which transmission lines ought to be accelerated.

So is the process that's being discussed flexible enough to take into account new information as well as the reevaluating and re-ranking lines based on existing information?

MR. OLSEN: Yes. I know that's something we're

going to talk about later today is the purpose of refining or the usefulness of refining a conceptual plan as we develop more information. For example, as the ISO and the publically-owned utilities perform power flow studies of these potential transmission connections, that would provide a lot of information about the usefulness and cost benefit of potential facilities.

And as we develop the desert renewable energy conservation plan, for example, that will affect certainly the geographic priorities. So, yet, RETI would take that both those sets of information into account to more carefully target the transmission facilities that we recommended.

CHAIRMAN DOUGLAS: Good. Thank you and thanks for all of your hard work in this.

COMMISSIONER BYRON: Commissioner Boyd?

VICE CHAIR BOYD: Well, I'm going to hold most of my comments to after I hear from the folks in the audience and their reaction to all the data that's presented. And my one concern or question was about our ability to move more actively in future and Commissioner Douglas raised that issue with you.

I'm a great student of process and systems

analysis and what have you, and I think you've done a

grand job here in the face of all the prodding that had to

take place over the years on the need to move in this arena, and therefore, I think I'm really anxious to hear what other folks have to say and see what you've accomplished there. Thank you.

COMMISSIONER BYRON: Well, let's go ahead and open it up if there's any questions then from attendees here this morning if you have a question or a comment if you wouldn't mind coming forward. We don't have a podium, but you can certainly come forward and sit briefly and identify yourself.

VICE CHAIR BOYD: I was about ready to say, Dave, totally intimidated everybody but me.

MR. OLSEN: Or put them to sleep.

COMMISSIONER BYRON: Yeah. As long as the green light is on, you're good.

MS. MILLS: I'm good. I don't have to hold down like my other meetings and I don't need cookies. Karen Mills. I'm with the California Farm Bureau Federation, and I appreciated the overview that Dave provided because I tried getting through the report and it was much more helpful to have somebody talk me through it.

I guess I'd just like to echo what Commissioner
Byron pointed out and as Dave pointed out also that in our
eagerness to embrace transmission infrastructure that we
not lose sight of those many caveats that Dave listed up

there about what this process can and can't do. And I think there's so much interest in trying to identify transmission projects, that we want this outcome of RETI sometimes to be more than it really can be.

And as the effort to move forward faster, smarter with transmission infrastructure, it's important that it not be lost sight that these projects do have impacts on real life property and property owners.

Certainly, that's our interest. I am involved very much in the past couple of years or so about the impacts that transmission infrastructure has on folks, businesses, homes, and livelihood.

And so the effort to move forward quickly obviously cannot supplant deliberative, focused planning as part of it and notice to land owners and engagement of them as I think that Dave and others know how important that is. Certainly, the theoretical aspects that RETI brings forward and pragmatic ones also, but they are perhaps juxtaposed with real life projects that are going on like the TANC transmission project, which obviously has generated a lot of interest by affected landowners and residences in the northern part of the state.

And I think one of the most important outcomes of this project that would be great to see would be if the transmission owner/entities could begin to cooperate in

identifying how they can work together to identify transmission lines and use them cooperatively.

2.1

I think of great concern to a lot of folks in the northern part of the state is looking at the TANC transmission project and knowing that PG&E also has a project that they would like to be built. And after having been to many meetings related to the TANC transmission project, I know that the only thing that would create more interest would be if there were another line proposed in much the same area.

So you know it's important to bring back the realities of what these projects entail and not to lose sight of the fact that even though we want to move forward quickly and identify projects for a lot of reasons, but there's still a need to carefully study them and the RETI process cannot displace all those other important processes that we have to take a look at and carefully.

COMMISSIONER BYRON: Yes. And we also hear from those that are involved in those processes not wanting more transmission planning processes.

MS. MILLS: Yes.

COMMISSIONER BYRON: And I realize that everybody's resources are stretched very thin. Those are very comments. Do you have anything else you want to add?

MR. OLSEN: No. That was it. Thank you. Thank

you very much, and I appreciate being able to have an overview of how the -- what the report says. Thank you.

COMMISSIONER BYRON: Thank you. And I would add that in addition to your concerns about making sure that we all understand, RETI cannot supplant the landownership interests nor can it replace the CEQA and NEPA requirements, the federal and state laws, environmental laws that have to be met as well.

Do we have someone else that wanted to comment? Please come forward and identify yourself.

MS. O'SHEA: Good morning. I'm Helen O'Shea. I work for the Natural Resources Defense Council, and we are one of the two environmental organizations that sit on the RETI stakeholder steering committee. My colleague Johanna Wald has been working on the process for quite a while now. I'm sure some of you know her.

I just wanted to echo a few comments and highlight one thing Dave said at the beginning of his presentation, which is incredibly important from our perspective, which is taking environmental concerns into account at the beginning of the transmission planning process. I think we've learned recently that when we try to tack them on at the end we can find ourselves facing some very challenging situations.

And I think if we can incorporate them at the

beginning, that hopefully will move us towards area of lesser conflict, which will move us towards faster permitting and siting, and I think that's what everyone here is ideally trying to get towards to support our clean energy goals, so that's incredibly important from our perspective.

Dave also mentioned that RETI is open to looking at more opportunities for public engagement and stakeholder engagement. I do feel very fortunate that my organization is directly taking part in the process and we are trying to coordinate with our colleagues in the environmental community. It's not a homogenous community, so it's a big job to try to bring everyone's concerns and perspectives to the table. So I would encourage everyone involved in RETI if we can look for even more ways to get folks engaged. That's incredibly important.

And I think I'll limit myself to one more comment right now. Coordinating the work of all the utilities, coordinating the planning is also incredibly important from our perspective with the end goal of reducing the number of lines we need to build. As Dave said and I think as Karen mentioned, if we can do everything possible to avoid redundant or excessive lines, that goes a long way towards giving people confidence that we're not over building, and that again leads you towards

more public support and hopefully moving forward with projects that are going to get us to RPS and at some point beyond. I think I'll cut myself off.

COMMISSIONER BYRON: No, you don't have to.

Very good comments. Thank you. And I think that merits mentioning, although Mr. Olsen mentioned it in his caveats to some extent, I added a third. Not all of these lines will be built. Of course, what they're trying to do here in the RETI process is to provide some prioritization based upon all the data that they can accumulate. But it is important that we maintain public confidence that this not seeing how much we can build.

As you know though, Ms. O'Shea, we do have constituents that feel there's no need to build any additional transmission lines, and I think the evidence is pretty clear that that's not the case. I was very impressed with the net short calculations that the RETI initiative did, and my staff has made similar calculations. We are going to need to develop large solar projects. We're going to need to build transmission to it. But your point is well taken about maintaining public confidence and the need for joint projects, which I think the previous commenter made as well.

Any other comments or questions. Mr. Olsen, do you want to add anything to that?

MR. OLSEN: I'd just like to give an example of the benefit of including environmental considerations at the beginning of the planning process. So our conceptual planning workgroup started by identifying potential transmission solutions to provide access to CREZ.

And after we had an initial set of potential lines, the RETI environmental workgroup then reviewed all those lines. We actually had a joint meeting of the environmental workgroup and the conceptual planning workgroup. And the environmental workgroup, which includes many representatives of the desert communities, the environmental workgroup is not limited to steering committee members. It has -- It's open to all, and we've benefitted from having the participation of a lot of local groups.

And as we talked about, each of these connections to dessert CREZ -- CREZ in the dessert area, some of the environmentalists who knew those areas were able to point out that it would be very, very difficult to actually have lines permitted crossing some of these sensitive areas. And as a result, the conceptual planning workgroup eliminated potential connections from consideration and found alternative routings, alternative ways to get access to those CREZ that did not cross sensitive lands. If we wouldn't have had that involvement

at the beginning, we would have gone ahead and evaluated a set of lines that probably couldn't have been permitted, and it would have wasted everyone's time.

COMMISSIONER BYRON: Very valuable.

MR. OLSEN: That's an illustration of the value of including this kind of environmental intelligence at the beginning of planning process.

COMMISSIONER BYRON: That's very valuable. And then, of course, we know those rerouting cost more, which costs are passed on to the consumers, so there's tradeoffs at every turn here.

Are there any more questions or, Commissioner Boyd, did you indicate you wanted to make some more comments at this time?

VICE CHAIR BOYD: Not at this time, no.

COMMISSIONER BYRON: Well, I think we're in pretty good shape on time. I know we went a little bit long with that session, but I think it was very valuable. Thank you, Mr. Olsen.

MS. GRAU: Commissioners, just so you know where we are on the schedule, our next item is a panel discussion. We actually have that going until noon, and then we also have a continuation. Assuming the lunch break is from noon to one, we have another hour to go with the panel discussion as needed.

1	So just to let you know if we do start to run
2	past 12 o'clock, I believe everyone can stay through to
3	two o'clock. I haven't heard anyone say they have to
4	leave before then. So if we're making a lot of progress
5	and you want to keep going, you're welcome to do that, but
б	I also want to let you know that we have the opportunity
7	to come back after lunch.
8	And with that if you would be open to a break of
9	five or ten minutes, we would like to set up the place
10	cards and get our panelists up there, so would that work,
11	say until
12	COMMISSIONER BYRON: Yes.
13	MS. GRAU: come back at 11?
14	COMMISSIONER BYRON: Let's take a ten-minute
15	break.
16	MS. GRAU: So by this clock.
17	COMMISSIONER BYRON: Eleven o'clock.
18	MS. GRAU: Thank you.
19	(Off the record.)
20	COMMISSIONER BYRON: If you'll all be seated,
21	we'll go ahead and restart. We're a little bit behind.
22	Mr. Najarian is going to moderate a very interesting panel
23	discussion, and I am very much looking forward to this,
24	but we do have some constraints on time that we want to be
25	sensitive to. I understand we may be losing some folks,

and we certainly want to take advantage of your being here.

We appreciate very much your participation. So we may press on through 12:30 or even 1:00 as long as that works for those of you that are still here. We will take a lunch break, but it may be a little bit later. I apologize. But again, we're really looking for the participation of our panelists here today so, Ms. Grau, to you or to Mr. Najarian?

MS. GRAU: Yes, just to me very briefly. And so what I want to do is just talk about some of ground rules here. Our moderator is Chuck Najarian. He's our transmission systems specialist with the Energy Commission's Strategic Transmission Planning office. And we have ten panelists seated around the table, and Chuck will moderate the session. I just wanted to also note that after that session has taken place, we have the invited stakeholders; Bob Stuart of BrightSource Energy, Faramarz Nabavi of the California Winder Energy Association, and Helen O'Shea from the Natural Resource Defense Council. And so we'd like to ask all the panelists to remain seated and then each of those three individually can come up to this podium where I am and make their remarks to the stakeholders and Commissioners.

CALIFORNIA REPORTING LLC

(415)457-4417

And so with that, I will turn it over to Chuck.

And by the way for the audience, the centerpieces for this discussion are attached to the agenda. They are two strawman documents. The first figure is the shorter term by 2020 process and the second figure is the longer-term process for the coordinated (inaudible), so that's the basis for the panel discussion this morning. Thank you.

MR. NAJARIAN: Good morning. Today's we're going to be building on the panel discussion we had at our May  $4^{\rm th}$  hearing that actually introduced the transmission planning process questions and issues that we're currently grappling with.

We're very grateful that most of the panel is from May 4<sup>th</sup>. Actually, we had you return to continue the conversation. We failed to scare them off. We're also grateful that we have several new panelists to join the fray today.

As I indicated in May, these are some of the best transmission policy and planning people in the business and I'd like to introduce them at this time. We have Patricia Arons of Southern California Edison, Tony Braun of California Municipal Utilities Association, Karen Edson, California ISO, Nancy Ryan, CPUC, Juan Carlos Sandoval, IID, Jim Shetler from SMUD. We also have in terms of new panelists Jon Eric Thalman from Pacific Gas and Electric. He's here from Kevin Dasso who is on

vacation. Then we've added Dave Olsen from CEERT to our 1 2 panel. As the RETI coordinator, he has a special 3 perspective on RETI and its implications to transmission 4 planning. Grace Anderson from the California Energy 5 Commission, she is our expert in terms of Western State 6 Transmission System, and she brings a special perspective 7 about that. And also Mo Bashir of LADWP has joined us 8 today. Thank you. 9 Okay. As Judy indicated the purpose of the panel today is to discuss several strawman proposals that 10 staff developed. They are designed to stimulate 11 12 conversation about alternative transmission planning approaches in California. They do not imply that we've 13 solved all the transmission planning issues that face 14 California today, and it does not imply that we have a 15 16 fixed position with regards to a transmission planning 17 process. We are looking for constructive conservation 18 today, and we want to make progress in this area, so let's 19 go ahead and call up the first diagram, figure one, on the 20 screen, please. 21 MS. KOROSEC: We're having a slight technical 22 difficulty. 23 MR. NAJARIAN: Thank you. The strawman 24

proposals have certain assumptions that they carry.

25

we assume that transmission planning in California needs improvement. We assume that the land use and environmental considerations are as important as electrical considerations. We also assume that state goals and objectives must be part of the solution to transmission planning in California, and that we assume that improvements to planning will significantly benefit transmission permitting. We assume that Nancy Ryan agrees with that last assumption.

So let's refer to this first transmission process flowchart that's on the screen. This is a chart that looks to 2020, the 33 percent goal. This particular strawman chart is built on and informed by the RETI stakeholder process. It envisions that RETI in some form will continue in updating cycles over time, and it assumes that REIT participation is critical in terms of facilitating transmission planning in California.

The second box refers to the fact that it emphasizes transmission planning role in California of the California electric utilities and the California ISO. It envisions development at a generally IOU, investor-owned utility, and POU, publically-owned utility, sub-regional plan for California. We're aware that this effort is already underway with the formation of the California Joint Transmission Planning Group comprised of electric

utilities and the California ISO.

We're going to be hearing probably a lot more about this as the panel discussion unfolds today from some of our panelists. Referring to box three, the strawman leverages the Strategic Transmission Investment Plan to facilitate stakeholder participation and confirm RETI integration and consideration of state goals and objectives in the statewide plan. It implies that RETI stakeholders will be part of the proceedings.

Box four envisions that the ISO and the publically-owned utilities Balancing Authorities will be influenced by the Strategic Transmission Investment Plan recommendations regarding a sub-regional plan. For example, it envisions that the California ISO annual transmission planning process will be influenced by recommendations from the Strategic Transmission Investment Plan.

It also recognizes that there are advantages to targeting transmission corridor designation at this stage to preserve long-term transmission corridors. You're going to be hearing more about transmission corridor designation this afternoon.

And finally, this strawman understands that permitting processes will ultimately benefit from an enhanced and effect statewide transmission planning

||process.

So let's switch to figure two, the longer-term planning process strawman. Up front, there's a relationship between this strawman and the previous strawman. In this strawman, the assumption is that it is influenced by the outcome of the previous process, that it starts from there and works out to as long as 2040 time frame.

It envisions that the Strategic Investment Plan is the actual vehicle for preparation of what it calls a 30-year abstract plan. It's trying to separate itself from a conceptual plan, which by definition has more detail. It also envisions that the abstract plan would then link back into the next RETI transmission conceptual planning process and ultimately feed into corridor designation on a longer-term basis.

And as I alluded to earlier, it also envisions that RETI proceeds over time in some form in an updating cycle, in this case every two years. Before we get into the actual questions and exchanges with the panel, I'm going to ask if there's any comment or question from the dais.

MR. NAJARIAN: All right.

1 COMMISSIONER BYRON: Commissioner Boyd, did you have a comment or question? 2 3 VICE CHAIR BOYD: No. 4 CHAIRMAN DOUGLAS: No. 5 VICE CHAIR BOYD: Move on. 6 COMMISSIONER BYRON: Sorry. 7 MR. NAJARIAN: All right. Thank you. The first 8 question we're going to be focusing on the first figure, 9 the 2020 time frame chart initially. And the first question had to with that but also I think we could talk 10 about the longer-term process as well. 11 12 And it's really something that I'd like to direct to all the panelists, and I am interested in very 13 short response to this. Staff is interested in knowing 14 what the initial reactions to these charts are. Is there 15 16 any promise in what we put forth? Are they confusing? 17 Are they scary? We're just interested in knowing what your initial reaction to the chart is and you know looking 18 at 30 seconds max. So, Juan Carlos, I'll start at this 19 end of the table. What is your overall reaction to the 20 21 strawman proposals? MR. SANDOVAL: I could see what is the intent of 22 CEC in trying to incorporate (inaudible) RETI process into 23 the overall planning process. I think you could see that 24

and include the benefits of the open stakeholder process,

25

and eventually providing for transmission corridor designation of whatever plan is moving on.

of it.

MR. NAJARIAN: Okay. Thank you. Patricia?

MS. ARONS: My first reaction was a little bit of confusion about what the existing planning process is that were involved would really look like and how information flows. I think I too can understand the intent in terms of how RETI wanting to link into the existing processes to end up with real projects coming out

I am somewhat concerned about the order of steps two and three. I think my first reaction there would be to reverse those. I wouldn't want to if I were the CEC be waiting for various products to be feeding into a strategic investment plan coming out of a joint transmission plan.

And the reason why I say that is when we develop transmission plans, I mean, we started working on Tehachapi in '96 or '97. It's a very long-term time frame. It takes a lot of coordinated work and interaction with stakeholders to really firm up what your plans really look like. So you take concepts and you begin to work on them, and it's actually a longer process than this two year cycle that seems to be what they're (inaudible) here, so I think that I wouldn't want to see any CEC processes

held up by that.

But as far as all the pieces, I think I need more time to really think about, you know, how we interact with the Western Electricity Coordinating Council, the activities that we're involved with there, and how we bring all the pieces together. I think just a simple -- I think it would be fairly simply to reverse steps two and three and have a little bit more of a coherent series of steps involved.

MR. NAJARIAN: Okay.

MS. ARONS: The other comment I would make is I don't think that RETI necessarily has to be a two-year cycle. The greatest value out of it is the land use assumptions and the economics of CREZs, and I don't really think that they tend to move all that often. I think a two-year cycle is probably too frequently, and maybe a four or five-year cycle would work for that in my mind.

MR. NAJARIAN: Okay. Thank you. Jon Eric, just initial reaction to the strawman proposals?

MR. THALMAN: We're pleased to see the inclusion of what looks to be what we're working on with the California Joint Planning, and still wet from the process with the RETI studies. We're cautious about its process in the future. We acknowledge the value there. And as we look at the arrows and lines here, we're anxious to

understand more how that might work in future.

I agree with Pat on that maybe we need to look at timing and cycles and what the values are to the different steps.

MR. NAJARIAN: Okay. Thank you. Grace?

MS. ANDERSON: I will give you a very really quite positive response. Those aspects of these charts from a western perspective I think that are most important would be the box two, figure one, which is the challenge to prepare a California sub-regional transmission plan that would go hand-in-hand with what we heard today about the California Joint Transmission Planning Group. Other portions of the west have organized themselves in this way, and that is the most effective way to communicate your policies and your assumptions to the regional analyses. For example, on which your line segment shift factor analysis is based.

And it also will position you well should the federal government require an interconnection-wide transmission plan. This would be what would be rolled up into that plan, and it will also be important if the FERC goes down the path of adopting an interconnection-wide transmission plan, so I'd encourage you to move forward and go down this path.

MR. NAJARIAN: Thank you. Nancy, initial

reactions from the CPUC?

MS. RYAN: I'll just focus on the RETI piece and echo the remarks that I've already heard so that I can expand upon them. I think that the RETI process is immensely valuable but it's also very expensive in terms of the time and effort of all the stakeholders that are involved. I agree with I think we really have to ask the question what is the right cycle to conduct this on.

And I would agree with Pat's remarks that I think that the types of information and more important consensus that could come out of the RETI process probably don't need to be updated every two years. We really need to revisit these questions in a time frame in which the land use and probably more importantly the project economics are likely to change, so that's worthy of further discussion.

I mentioned that I thought that the RETI process was also really valuable, and I think in part I think we'll really see the benefits of it. Not so much -- Well, we'll see the benefits in the permitting process, and I really think that's where -- that's the pudding that the proof will exist. Does it indeed help speed up the permitting process, and I am very optimistic that it will.

So that asks the question of is kind of is there a way for the RETI process to sustain itself over time in

a way and perhaps be institutionalized but do so in a way that really preserves what I believe is its most important aspect, which is this bringing together of stakeholders and the sort of distinction between RETI and the agencies that sponsor it. I think that was -- Somebody made a remark earlier today about how important, I think Commissioner Byron did, about how it was not an agency process, although there was agency involvement but that it's above all of us here and a stakeholder process, and I think it will really only realize its value if it continues operates in that form.

MR. NAJARIAN: Thank you. Karen Edson?

MS. EDSON: Good morning, Commissioners. I want to start it's going to start being a little redundant I think at this point, but let me just reiterate the value that we see in the RETI work especially (inaudible) the land use constraints on transmission development.

Bringing that in early in the planning process is absolutely critical to avoid those mistakes that we've all seen in past years, so I really want to commend the RETI effort for the work that it's done.

Second, I think that when I look at the charts and the process my concern is that it doesn't -- you have to reflect the kind of integration with the existing processes that are in place. As you know, we, and all of

the balancing authorities here, conduct planning in an open transparent mechanism with stakeholder involvement under FERC order 890. It's not to say that there isn't a role to the California strategic plan. I think there absolutely is, but this will need I think some attention to make sure that we have properly brought these together. Pat's idea of maybe flipping two and three may be one of the steps that would accomplish that.

The last thing I want to note is just to acknowledge that in the case transmission a ten-year horizon is really a developed horizon. It's the longer term where I think the strategic issues really come to bear, where these land use considerations, where the conceptual work really has the most important role to play. I think if you're going to begin to map out how long it takes a plan to develop these serial projects that cross so many jurisdictions including balancing areas and land use authorities, then it's clear that ten years is not a long-term plan.

And my final point is simply that it's absolutely critical we're absolutely on board with minimizing the number of lines and the possible redundancy of these lines, which is why we're working so closely with the municipal utilities and the investor-owned utilities to come together and really begin to plan for system needs

1 as opposed to the interested individual balancing areas. 2 Thank you. 3 MR. NAJARIAN: Thank you, Karen. Mo, DWP's 4 initial reaction to the strawmen? 5 MR. BASHIR: I guess I don't really have to much 6 to add to what was already said, but I think the cycle 7 issue is number one I guess for me because I do recall 8 what was said before because I don't think the two-year 9 cycle is appropriate for this kind of work. The focus I think going forward really is going 10 to be in the California Transmission Group work, which has 11 12 been occurring, because that's really where we're going to take the projects or the conceptual plans into what could 13 happen with the projects and makes them happen. I think 14 that's really where the effort is going to be. 15 16 But other than that, I think the same issues and 17 same comments, which were said before. MR. NAJARIAN: Thank you, Mo. 18 MR. SHETLER: Well, I almost wanted to say 19 ditto, but you asked for my initial reaction. When I 20 first saw the horror of another process we had to 21 participate in, I've lost track of how many planning 22 processes there are out there right now. 23 In looking at the chart, I think, number one, we 24

clearly understand the desire and the need to make sure

25

the RETI process, which I will agree have been a valuable addition to looking at how we access renewables and how that's imbedded going forward, I will share the same thought that I'm not sure every two years makes sense. I don't know what that cycle is and planning that every two years. I appreciate the fact that you tried to imbed the Joint Transmission Planning Group in this. We're very serious about trying to pull together the planning for the State of California and in a way that will meet the needs of all of the entities at the table. We want to do that in an open process. Order 890 requires that we do.

Beyond that, I think we're still digesting the details of this, but we want to make sure that whatever this is dovetails well with the other processes that are out there. We don't want to duplicate planning efforts that are already underway out there, so we want to figure out how would that integrate here.

MR. NAJARIAN: Thank you, Jim. Tony, does CMUA have anything to add to what we've already heard?

MR. BRAUN: Not a lot. I mean to the extent that the straw proposal reflects a desire to continue to make improvements on transparency, that's certainly something we support. To the extent the straw proposal emphasizes the need to get environmental and land use factors into the planning process in the initials stages,

that's obviously something we also support.

2.1

As far as some of the nitty-gritty details of what boxes are where, I think that's something that probably needs a little more discussion and time to digest.

MR. NAJARIAN: Thank you, Tony. Dave Olsen?

MR. OLSEN: I'd certainly agree with Nancy that

RETI is an extensive process, and extensive in terms of

the huge amount of time that's been required to date to

put together a conceptual plan that, as I indicated, could

be done a lot more quickly and more efficiently by

experts. To the value again, it's the value of the

stakeholder participation early.

As a stakeholder effort, all of the transmission owner and provider members of the steering committee are represented on this panel, so the issue of whether or not the stakeholders feel that there is enough value generated by this process and to continue to devote the substantial amount of work is really up to the organizations represented here in terms of transmission planning.

And so as the coordinator, I can only turn back to the other participants here for their indications of or the perception that there's going to be enough value provided to justify the substantial commitment of staff and resources.

MR. NAJARIAN: Thank you, Dave. Okay. At this time, I'd like to get into some specific questions I'll be directing to individual panelists and then I'll try to elicit discussion on the response.

And so moving on to question number one, can the RETI collaborative model be maintained over time to produce biennial plans addressing a ten-year horizon.

Because we've already touched on this with several initial responses, so I'm going to ask Dave to get into that in a little more detail.

MR. OLSEN: Chuck, I'm sorry?

MR. NAJARIAN: In terms of the first question, can the RETI collaborative model be maintained over time to produce plans. Now we suggested that in the strawman that that could be done on a two-year cycle. We've heard already from some panelists that that could be an issue.

And as you know, RETI is looking at ten-year horizon now, so the question really has to do with can this effort be maintained? Is two years the correct cycle? I mean I think you could even get into what form it might be in in the future. I know that we envision as an update cycle and not necessarily something where we're starting the effort over, so there is a difference there. Anyway, I'll turn it over to you.

MR. OLSEN: Well, the first thing is we're going

to have to understand the value of this initial conceptual plan. Does it really assist the ISO and POUs to identify potential transmission facilities for study, so is there some value added? Have we either eliminated potential connections from consideration and that's a value or identified other potential connections that are not priorities for any of the existing transmission providers to study? Is there any indication that this will in fact expedite siting for permitting?

I think we don't know yet, and we haven't completed -- at this point, we have completed even this initial plan, and we don't have a sense of how well this going to coordinate with the existing processes. For example, will this help the ISO in its giver process, confirm clusters, or confirm areas for study?

So until we have sense of that real value, I don't think we're a position to say. I do share the sense that two years may too frequent as an update. Although if we were to have an initial plan that is then vetted or considered by the ISO and the POUs and there is some sense that there is value added there, it would be relatively -- it would be much less expensive and time consuming to do an update of that and to come back.

And for example, as the desert renewable energy conservation plan areas are identified to merge to the

RETI CREZ information with the DRECP results, that could be done relatively quickly and that could valuable in providing stakeholder input to migrate whatever planning the ISO and POUs are doing to accommodate DRECP results. That could be done much more quickly if we're agreed that this initial plan is provided with an adequate basis so that stakeholders believe that the results are useful.

But I think at this point we need to work this through a little bit further before we'll be able to conclude anything.

MR. NAJARIAN: Okay. A quick follow up to that, assuming that the scope of work for RETI in any subsequent phases would be reduced, do you think it's correct to say that DRECP work, the desert plan work, would allow RETI to focus on conceptual transmission planning going forward or do think that there would be work effort, scope of work involved in CREZ facilitation in the future?

MR. OLSEN: I think both actually. That again remains to be worked but how are the DRECP zones, the desert generation development zones going to build on RETI CREZ. We don't know that, so that remains to be worked out.

What we do have is large group of mobilized stakeholders who have become knowledgeable as well as concerned about these zones, and that stands to benefit

the DRECP process, so I think there is some continuing involvement on the part of the CREZ work as the desert plan is refined and could add a lot of value.

And certainly as the desert zones are defined, we may have to adjust some of the conceptual planning work, and that remains to be seen again, and it could be that the ISO and POU and the joint transmission planning work has already taken that into account. Our report can't easily take that into account.

MR. NAJARIAN: Okay. Thank you, Dave. Any reaction to what we've heard from Dave? All right. Let's move on to question number two.

COMMISSIONER BYRON: If I may, Mr. Najarian, just for a moment. Now I looked back at your presentation, Mr. Olsen, about all the changes that took place between the Phase 1 and Phase 2 and all the additional information that became available, you know, the land ownership parcelization, BLM's one percent development, and other environmental concerns.

I think back, based upon what I know of mapping data and accuracy improvements, there were additional stakeholders that came into play. The site visits that really helped everyone understand better the impact that of the CREZs that were being looked at, and public input, what I characterize as the reeducation of the public that

would need to be taking place periodically.

And as a Commissioner, I'm very interested in the public's perception and input of all of this process, notwithstanding all of your expectations and abilities to do all this transmission planning. So I'll put out there as a question, why not do this every two years? You're certainly all benefitting from it.

MR. NAJARIAN: Jim?

MR. SHETLER: I'm going to maybe add on to Dave's comment and I'll try to answer your question. I do think we need to get through a cycle, and by a cycle I mean I think we do need to take the input from RETI and accurately marry that up with the pieces that are done as part of the RETI process, which are the (inaudible) issues and the reliability issues, and the other issues that we have look from the transmission planning standpoint.

And what we may find out is when we marry those up we may end up with a very different transmission plan at least in some areas. And I think it would be helpful to understand that and that would inform how best we should go forward in the future. So I do think we need a complete cycle under our belt to understand that better.

As far as the public input, there's never enough no matter how far down the road you go, and certainly we're interested in having that. We also are interested

in dealing with that through our transmission planning group and how we can make sure we have that public input as well.

COMMISSIONER BYRON: Thank you. I'll take any other comments back. Please, Ms. Arons.

MS. ARONS: The concern I would have is that you're creating a constant set of assumption changes.

That if they were to alter your transmission --

COMMISSIONER BYRON: A constant set of assumption changes?

MS. ARONS: Well, it's like a tempest in the teapot. Your assumptions have to land on the ground at some point in time in order to build the rocket that you're launch to the moon. So if you're creating the environment where your assumptions are continually changing, you can't make decisions.

Transmission investments are very long-term decisions, and there is a sense in which you have to build a robust transmission grid to respond to changing conditions. But in the planning process, you really need to put your assumptions on the ground and begin to do the technical scoping work. But if you're forever changing land use and moving from here to there and to A to B, you get caught up in an inability -- it's an analysis paralysis is where you end up.

So I think a five-year cycle is good enough for my world to give me five years of planning time to scope things, cost things out, and begin to develop the project with other utilities that may eventually need to have their say.

So I would suggest a longer cycle, not a shorter cycle. It will just create too much -- too many problems in terms of do we have the perfect set of assumptions moving forward to make a decision. And I think we'll find that in that kind of environment we're not going to have a perfect set of assumptions because your next plan is going to change everything again, so I would be very concerned about.

I don't believe those plans are going change that much in terms of land-use decisions. I think these things change slowly over time, and I think it's appropriate to think about a four-year or five-year cycle.

COMMISSIONER BYRON: So land use issues not changing much over time. Are you thinking within that ten-year plan horizon or beyond the ten-year planning horizon.

MS. ARONS: Well, I think it's where a large part where population is going to grow. And if our growth rate in California is, you know, less than two percent per year, we're dealing with trying to find routes through

environmentally sensitive areas, trying to avoid population areas, trying to get power into the population areas. Having a perfect set of assumptions where nothing needs to be mitigated is not a possible future.

In fact, the first time you started putting the math together for RETI, what we found out was all of California was blacked out. There was no place to put transmission. And I think through opening up and reconsidering some of that information, we needed to understand that what we were striving for was the best possible decision but not a perfect decision.

So I think that going toward a two-year cycle is thinking that there is a perfect set of assumptions there. I think there's a good enough world where we can make decisions to move forward on something.

MR. NAJARIAN: All right. Thank you. I'd like to move on to the next question. I'm going to really combine the next two questions, and then I'm going to ask that Karen Edson reply to those.

So question number two: Is the development of regional coordinated transmission planning readily achievable and in what time frame, and then moving from there, will IOUs and POUs effectively integrate RETI plans in that process.

MS. EDSON: Thank you, Chuck. Let me start with

your second question first and that answer is absolutely yes. At the California ISO, we are already considering what's come out of the RETI process in our Order 890 process. It's informing scenario work that we're doing. The timing was such that it couldn't be pulled in other ways, but it absolutely will inform that and as well has been discussed in the context of the joint transmission group as a critical input to the work that will be happening there.

And I say that really to reinforce the value of this work. I think we all recognize that having a much better understanding of the land use constraints and the relative potential and economic costs of the various renewable energy zones is really in all of our interests to have that part of our process.

And before I forget, I'm going to make a little side note here having to do with those renewable energy zones. As you probably know, the California ISO has special tariff provisions, which allows us to implement financing of interconnections in renewable energy zones that have been certified by the California Energy Commission and the California Public Utilities Commission. So having these zones identified through the RETI process and potentially certified by both the Energy Commission and the CPUC is also something of great

value.

Will we succeed in developing a statewide plan?

I absolutely think we will. We're working hard and in good faith to do that. The actually timing of the results is a little tougher to predict.

We're dealing with some of the tougher issues now, but we know that we have some immediate plans that need to be taken into account to make sure we're avoiding the kind of redundancy that RETI is assigned to address. So I think there will be positive results before the end of this year. Whether they'll be a completely comprehensive California in that timeline, I'm not sure. I'm looking to the other entities that are part of that process.

MR. NAJARIAN: Okay. Thank you, Karen. Jim, I was wondering if you had any reaction to that. I know you're a major player in that sub-regional planning group, and we also are aware that that sub-regional group has been kicking around planning in a process jointly for quite some time. So you know part of the question is what we could be seeing in terms of a time frame for a product out of the group?

MR. SHETLER: Well, I will echo Karen's comment that the time frame may be a little bit hard to predict right this minute. As far as how long we've been kicking

this around, we've had a lot of interesting discussion over the last six or eight months, but I think the serious discussions of actually trying to pull this together and have I'll say a sub-regional planning group has really started over the last 60 days or so.

We are making progress. My guess is we're probably talking a year if I were to throw a number out there to try to get through our process and then work through the details of putting together a plan. It would be my first cut just off the top of my head on time frame. But there are others around the table that may have a more educated guess that I do on that.

COMMISSIONER BYRON: If I may just for a moment, this is the CJTPG. Remind me again what the acronym is.

MR. SHETLER: I've forgotten. California Joint Transmission Planning Group.

COMMISSIONER BYRON: Thank you, Mr. Shetler.

And I did have an opportunity to meet with a number of the members of that joint planning group last week, and I want you to know you have my whole support for your efforts going forward.

MR. NAJARIAN: Mo?

MR. BASHIR: I guess the same. It's probably a good time to talk about this group. I guess we've been leading efforts to get it to a point where we can really

talk about it, what the name is. I guess the name of CJTPG anymore, but it's I guess CTPG without the J, so it's California Transmission Planning Group. I think we can work around the naming. That took a few hours I could say just to come up with the right name, but that's really the name we're going to go with going forward.

But we have restructured a few things around it, and I think it's just for the benefit of everybody right now. Maybe I can just go through some of this stuff because I may come back and forth later on, so I want to make just an understanding that everybody knows where we're going forward.

So that is the name we have is California

Transmission Planning Group. Of course, the purpose going forward is to provide a forum for conducting and doing transmission planning and coordinating in transmission activities to meet the needs of California consistent with FERC Order 890, so that's really the general plan going forward, and thus the purpose we aspiring for us.

As part of the process, we are identifying issues, which this group needs to address. In addition to the renewables, we have many other issues with reliability being one. But also we do have the AB 32 issues. We have considerations with the, you know, once through cooling considerations and how is the reliability of the system,

and many, many issues, which is really part of daily life in transmission planning in California.

So we would be really foolish not to think along, you know, in cooperating and encompassing all those pieces as part of doing our transmission planning process, so that is the general concept.

But as far as doing it, we're going to be following the 890 rules, transparency, openness, and doing, you know, all the nine principles as part of the 890 planning principles that's part of our other work.

Presently, we have identified the kind of membership and requirement because we did think the way -- to do this thing is really to have transmission providers with transmission planning responsibility (inaudible) because they're going to be contributing the resources of people and going to lead the effort and extensive discussions and process.

So as part of the process, we have identified the California ISO, Imperial Irrigation District, LADWP, Pacific Gas and Electric, Southern California Edison, Southern California Public Power Authority, San Diego Gas and Electric, Sacramento Municipal Utility District, Transmission Agency of Northern California, Turlock Irrigation District, and Western will be part of this group, and we'll be meeting. Right now we have had a few

meetings already and trying to roll out all the issues.

2.1

We have set up committee structures. We have an executive committee. We have the steering committee, and we also have other study groups, which we are planning to work out as part of the process. So I just wanted to give you a feeling of how this thing is structure. We haven't really had a good -- well, come up with a timeline of when and where and what the process is to come up with a final deliver on this. But we do anticipate (inaudible) reports as well as all types of reports, drafts, and at the end of the day, we'll have a joint California-wide transmission plan.

Our aspiration is to have this on an annual basis. We'll produce a transmission -- a California-wide transmission plan on an annual basis. Our timeline may move from July -- from July 1st to June. That's what we are aspiring. Six months of preparation and the last six months of pulling reports and finalizing the reports. That's kind of the general concept. We'll probably have more information (inaudible).

COMMISSIONER BYRON: Very good. Thank you.

MR. NAJARIAN: Thank you, Mo.

VICE CHAIR BOYD: May I make a comment I guess here? First, you know let me commend the group for the creation of the, whatever you want to call it, California

Joint Transmission Planning Group or just the California Transmission Planning Group. And I heard more than once it's predicated upon the FERC Order 890. I think FERC Order 890 has been around longer than I have, so I'm glad to see that it has prompted something.

2.1

The trouble is I've been sitting up here seven and a half years, you know, waiting for this day and, therefore, I commend you for arriving at this point where we have joint planning. If I sound a little cynical, I am. I bear deep scars from the electricity crisis during which we talked about what are the things we need to do in California. And one of the earliest things, besides just get more iron on the ground and generation, was the transmission issue. And we engaged in some joint planning, and one of the tribes broke ranks and scuttled it. And we've been struggling through IEPRs, through the joint transmission plan requirements, and through this rather marvelous RETI process, which has been long and I don't want to say cumbersome, but I think it's been (inaudible) to bring us where we are today.

So I don't know whether I have a question here is what finally brought you to create the California Joint Transmission Planning Group, strike the Joint if you so desire, and I don't if anybody can answer this, but I'm glad to see it has occurred. I'm disappointed it's taken

so long to get to this point.

I may be wrong but I kind of think this agency with its planning efforts and with its threats in seven years worth of IEPRs and whatever, and now etcetera, etcetera. Either you do it or we'll do it for you. I don't think we ever wanted to do it. Nonetheless, we have finally reached a point where joint planning is apparently taking place. And a lot of concerned people about who we expressed earlier concerns about multiple lines and why can't, you know, folks get together and plan a single line.

It sounds like you're finally going to get there and the State of California is going to get there through this process and I can retire a happy person. I am disappointed, you know, it has taken us so long.

And I'm very glad that Commissioner Byron became the transmission Commissioner after the previous Commissioner retired. I certainly wouldn't want to touch it because of the frustration. I'm willing to be on the Agri Committee, so don't let me pour any cold water on this event.

Just let me point out it has taken us a long, long time to get here, far too long, and we do have to move. I mean we're way behind schedule. We're really struggling to get to the 20 percent. Lord knows how we're

going to get to 33 percent RPS. I don't want to ever be in the position, you know, of being plunged into semidarkness again.

So the debate about whether two years is too much or five years is too much, it's interesting. In this world of the every accelerating pace of everything, we almost have to a real time plan.

So you all decide whether two years or five years is the time horizon. I found -- Two years assumed the perfect assumptions. I found that in reality two years assumes assumptions are going change constantly so you better take another quick look at things. But you settle on two versus five, but I do urge this process to move rapidly because the world is not waiting for us. Enough said.

And I don't know if there's really a question there or whether you should even try to answer it if you found one in it.

MR. NAJARIAN: I think that the next question we have will hopefully get at some of your remarks. I'm going to ask John to respond to this question. Would using the Strategic Transmission Investment Plan process to confirm utility coordination of the like that Commissioner Boyd just addressed and to confirm RETI integration be effective. So that is using the Energy

Commission's process to do that, do you see a value in that?

MR. THALMAN: I think there's definitely a value.

COMMISSIONER BYRON: Is your microphone on?

MR. THALMAN: Yes, I believe so. I think

definitely there's a value. The question, Commissioner

Boyd, was what's taken so long. I think it's because we

see there's a value here, and we have to come together.

My credit to I think ISO and SMUD is really what's brought

us together in this joint person discussions that have

happened a handful of months ago that made the (inaudible).

Is this something we need to do? What should we do? Is this the course we're going to take because we have to do this? And so in that environment, we feel very positive that an investment plan like what you proposed here would be helpful.

I think most people have acknowledged the fact that the stakeholder involvement that RETI has been able to accomplish has value. We'll find that value out more as Nancy mentioned when we get to the permitting process, but I don't think that's going to take a while to get to and hopefully not too long.

Let's see, and there's a second half of the

question. What has been provided so far has provided a context as we've begun initial meetings in the California Joint Group as a starting point. There's been some great coordinations happen as we've come together in RETI and in talking about different projects and how they would relate. And I think that has also led to our good progress in coming together in the California Joint Planning Group where we recognize the need to work together on these projects.

So the development of an investment plan I think lays the environment for more detailed talks and get us over that hump where before you wouldn't have that general plan out there so.

MR. NAJARIAN: All right. Thank you, John. I'm going to ask, you know, Dave Olsen is fairly familiar with the Energy Commission's processes and procedures. I'm going to ask Dave to react to that question as well.

MR. OLSEN: I do think that the Commission

Strategic Transmission Investment Plan could help to -well, certainly it could confirm the coordination and
ensure that the RETI stakeholder results are appropriately
considered.

I know from working with each of the transmission owners, the transmission owners do take the Order 890 planning arm that's in the stakeholder

involvement requirements in that order very seriously and have filed their plans to comply with the requirements of the order with FERC. That said, RETI provides an additional dimension of stakeholder involvement probably beyond anything that any of the transmission owners now anticipates incorporating into its planning just because of the breadth of it and the diversity of the different stakeholder perspectives that are brought together in the RETI collaborative.

So I think there is some additional value certainly in terms of land use considerations and identification of generation develop zones that could be a very useful and effective or a good compliment to what's now considered in your 890 compliance. So I think there's also a broader concern here is that and I'll just speak from the example of what we've gone through in the RETI process the last six months in coming up with this initial conceptual plan.

So you'll note, as I mentioned, the guidance from the steering committee -- from the RETI steering committee was to plan without regard to ownership or operation. And that is I think the intent of this Joint Transmission Planning Group as well. It's to plan without regard to the ownership or operation of the facilities.

In the case of RETI work, the spirit was willing

but the flesh was weak, so there's a lot of good intent to do that planning from the statewide perspective. But when we got closer to have to actually recommend specific facilities and rank them, what tended to dominate was the proposed projects of different transmission owners. So and almost all of the transmission owners had identified projects, many with great thought, and over many years, and they want to see those projects move forward.

And those individual projects tended to trump any kind of consideration of statewide coordinated, optimized, minimized transmission kind of perspective for understandable reasons. And what we tried to do in RETI is to have the statewide perspective dominate over individual transmission owners for those projects, but that's a very difficult discussion. And I would imagine it's going to be a difficult discussion for the Joint Transmission Group as well.

This is where having broader stakeholder perspectives who can come in and say from a consumer point of view, from a county point of view, from a state and federal agency point of view, well, wait a minute, we don't need all of these transmission lines, so which ones should be priorities from a statewide point of view. It could assist I think.

What I'm suggesting is that having a stakeholder

kind of perspective the way that RETI does bring can actually help with the resolution of the conflict between some of the individual transmission owner plans and the development of a truly coordinated optimized statewide plan, which is not as I noticed a before or cannot be probably merely the sum of all the individual transmission owner plans.

I think that some kind of public agency process, for example, is it could be provided by the Strategic Transmission Investment Plan could be a venue to review and allow this broader set of stakeholder interest to help improve and optimize the result that's produced by the Joint Transmission Planning Group.

MR. NAJARIAN: Okay. Thank you, Dave. Any reaction to what Dave just said?

MS. EDSON: I just want to add two points. One is at the ISO we have the luxury of not owning transmission, so at least we don't have to worry about whether or not we have projects that we own that we care a lot about. And it's not the case with others, but I think it's important to understand that there are reasons that people want to have their own ownership.

The second point I want to make is just to underscore one of the principles that we've agreed to in the Joint Transmission Planning Group and that is that we

aren't going to start with owned projects. We're not going to start with operational agreements. We're going to do the planning based on these needs and we let those kinds of considerations come out at the end of the process where you identify the needs that you're meeting with the system, this renewable integration need, the once through cooling needs, greenhouse gas objectives, etcetera.

You plan your system with those constraints in mind including, of course, reliability, and then look at what comes out of that, and understand where the common interests are and agree on those ownership interests and operational interests on a case-by-case basis.

MR. NAJARIAN: Thank you, Karen.

MR. BASHIR: I just want to add to what Karen just said. I think the process is set up really to work out the technical portion first and get into those issues of ownership at a later stage when we really are going -- finalizing and find out the interrelationship.

But I'm very optimistic because I think going back in the early years, we did build transmission on a joint basis. I mean we had a lot of success stories to tell, and we built the transmission that was already -- was done as a joint project, as a planning process leading to construction and ownership and development of transmission.

So I don't think, even though we have this issue (inaudible), I think there was really some issues we were trying to get out of the way before we got into this transmission planning group, which I think was standing in the way, but now I think we have a clear view on how to address those issues. So I'm very optimistic that I think the process is going to help us and lead us to a successful transmission involvement.

MR. NAJARIAN: Tony.

MR. BRAUN: Thanks, Chuck. I mean as far as the state is concerned, which is think was one of the bases of the question, you know, SB 1565 is a model of simplicity. It barely over ten lines long and so I think that it probably bears a lot of discussion of what role the state process would have in the context of all the discussions we're having here.

What is clear in 1565, however, is that it anticipates a comprehensive plan taking into account a host of factors whether it be reliability, serving increased load requirements, relieving congestion as well as the state energy goals of the energy efficiency removals and demand response programs.

So we look forward to sorting out as we carefully consider the planning processes that we might get to ultimately and where the STIP fits in, but we do

view it as a comprehensive effort that takes into account a host of relevant factors and goals that we're all seeking to attain.

2.1

MR. OLSEN: Thank you, Tony. In fact, let's carry on with that thought in the next question, Tony. Do you envision that the POUs and the ISO would integrate STIP recommendations? I know we're speculating on what those recommendations might do to help improve and optimize the result that is produced by the joint transmission planning group.

MR. NAJARIAN: Okay, thank you, Dave. Any reaction to what Dave just said?

MS. EDSON: I just want to add two points. One is that the ISO. We have the luxury of not owning transmission so at least, we don't have to worry about it. We (inaudible) whether or not we have projects that we've done that we care a lot about and it's not the case with others but I think it is important to understand that there are different reasons that people want to have their own ownership.

The second point I want to make is just to underscore one of the principles that we've agreed to in the joint transmission planning group and that is that we aren't going to start our own projects. We're not going to start operational agreements. We're going to do the

planning based on these meetings and we'll let those kinds of considerations come out at the end of this process where you identify the needs that you're needing with assistance, and this renewable and integration needs, the once through cooling needs, greenhouse gas objectives, etcetera.

You plan your system with those constraints in mind and including reports reliability and then, look at what comes out of that, understand where the common interests are and agree on the, those ownership interests and operational interests on a case by case basis.

MR. NAJARIAN: Thank you, Karen.

MR. BASHIR: I just want to add to what Karen just said. I think the process is set up to really work out the technical portion first and then get into those issues of ownership at a later stage when you really are going, finalizing any technical issue but I'm very optimistic because I think going back to the early years, we did go to transmission on the joint basis.

When we had to, we had a lot of success stories to tell and building the transmission was already, I mean, was done a joint project. That was a planning process leading to construction and the ownership and development of transmission. So, I don't think, even if we have this issue we saw, I think there was really some issues we were

trying to get out of the way before we got into this transmission planning goal which I think was, is 30 months away but now, I think we have a clear view on how to address those issues.

So I'm very optimistic that I think the process is going to help us and lead us to a successful transmission development.

MR. NAZARIAN: Tony?

MR. BRAUN: Thanks, Chuck. As far as the State is concerned which I think is one of the bases of the question, you know, SE1565 is a model of simplicity. It's barely over ten lines long and so I think that probably bears a lot on the discussion on exactly what role the STIP process would have in the context of all the discussions we're having here.

What is clear in 1565, however, is that it anticipates a comprehensive plan taking into account a host of factors, whether the reliability and a certain increased load will harm and will lead to congestion as well as the State energy goals of energy efficiency, renewables, demand response programs.

So we look forward to sorting out as we carefully consider the planning processes that we're going to get to, ultimately, where the STIP is in but we do view it as a comprehensive effort that takes into account most

of the prevalent factors and goals that we're all seeking to attain.

2.1

MR. NAJARIAN: Okay, thank you, Tony. In fact, let's carry on with that thought in the next question, Tony. Do you envision that the POUs and ISOs, and the ISO would integrate STIP recommendations? I know we're speculating on what those recommendations might be other than what the scope and content might be of the strategic transmission plan at this stage as you just pointed out but do you envision a role for that process within your clients' transmission planning proceedings?

MR. BRAUN: The State is required under State law so I think it started then as a starting point that it's in statute and therefore, anything that's in there must be factored in. I mean, as far as anything more detailed than that, it's unclear what the precise relationship is between the STIP and the natural siting and permitting authorities and planning authorities and obligations of entities under California law, including many of the folks around the State.

Certainly, I think it's safe to say that the STIP recommendations would be factored into anyone's consideration of a plan.

MR. NAJARIAN: Thank you. Any other comment on that point? Okay. The next question has to do with

timing. Several panelists have brought up the question of timing of RETI vis-à-vis the other planning processes and procedures. Why don't we talk a little bit more about the meshing of all these processes? In the next question, I'm going to have Patricia take this off.

Can, you know, we talked about RETI. People have mentioned two years up to five years. I believe Patricia was with, you were looking at and we're looking at annual transmission planning processes that are going to be continuing over time both at the ISO IOUs and POUs and transmission permitting will spin off of those processes over time. So, do you think there's a way where all these can be meshed at some point? Do you have any ideas at this stage on how we could proceed?

MS. ARONS: I'm a very clear thinker. My first thought is that you have to develop a point of view of what RETI is, what its value is but you have to understand the assumption I keep going back to is that the assumption of RETI is that every CREZ will be connected and every CREZ will be utilized to some degree in delivering renewable power.

That is not the reality that we face as a utility. It's a great long true view that says maybe over the course of 20 or 30 years, those will ultimately be accessed as CREZs and that might be the ultimate

transmission plan that we build.

What I'm (inaudible) today is my generator interconnection queue and my reliability needs of short term. So there has to be a reconciliation process that takes place between the theory of generation and accessing CREZs over the long term versus what we're grappling with today. And I think that that may be some of the struggles that we had in terms of getting our projects into the RETI process.

It's been kind of a, things are happening in two different timetables. So I think that RETI, the greatest value is land use. The idea of, that you have a potential transmissions that you might ultimately want to build that could advise you today on the appropriate size of facilities to build, we might be placing a generator interconnection request. This is satisfied with a 230KV line but when you go to RETI and you look at what the potential is for the CREZ area and what's in the Statewide plan, it may be appropriate to instead of building a 230 project, build a 500KV project.

That, to me, is the big value of RETI. It advises our decisions in the short term so that we can build out RETI as time goes by with an ultimate plan. It may not be in the ultimate that we're going to be accessing every CREZ in California. It may be that we're

capped on the amount of wind that we can integrate and therefore, we have to rely more heavily on out of state resources or something will happen that will tip the balance on these assumptions that could ultimately yield to a different plan at the end of the day.

That's going to be the strategic part of our thinking. It hasn't yet happened. We need to be thinking about the future in terms of what can change our transmission decisions. And, you know, we're, what are the important things that we have to do today because we are obligated to interconnect generation today? How we do that is under our control and the decisions that we make that we all buy into, I think is critical. So we have to have a discussion, I think, that everybody agrees with on the values and how to use this information and what we do next with it.

MR. NAJARIAN: Okay, thank you. Let's focus a little bit more on what we articulated in the ten year chart, the 33 percent chart in terms of corridor designation and that the chart envisions a corridor designation plays a critical role both with the short term chart and the long term chart. And I'd like to get some reaction from people to this process.

Now, it's a new process. I know there are some questions about the value but I think, generally, people

see great potential here, particularly in preserving corridors of a long term. So, let me first, let me first Nancy a side question on this about direct linkage on the corridor designation to transmission permit and whether or not you see that as an important step in the permitting process or not?

MS. RYAN: Probably not. Actually, provided persons that asked that question is perceived as tenable unit (inaudible) question, I'll answer it that way. I would just say that I think that if you have a designated core for coming into the permitting process, you want to put a little about, applicant wants to put a line in the designated core, when they committed the permitting process, I think they come into it on better footing in terms of that they are chasing an entirely new route. That's about all I can say.

MR. NAJARIAN: Good. Dave, do you have any reaction to that in terms of the, of how corridor designation fits in this process? I know there are some questions about timing, you know, the joint transmission planning group, when that takes off, how all these processes ultimately mesh but aside from that, we do have corridor designation. So does that help, you know, cut through some of these timing problems?

MR. OLSEN: Well, I think we all know from our

experience in trying to permit different facilities and, certainly, the discussion of RETI indicates that any corridor designation process is so controversial and so difficult that we need to start now to identify and reserve corridors in addition to the ones that are already identified in reserve. And they're probably not in California.

RETI, for example, has made every effort to utilize existing right-of-way, existing corridors but we also know that we are going to need additional corridors. And we have a stakeholder process with RETI that, I think, is fair and balanced, once representing, again, a broad range of different stakeholder interest that can provide, I believe, a lot of value in making sure that whatever corridors are identified can be designated in a way that recognizes all the different interests to the extent possible.

It takes them into appropriate consideration and comes out with recommendations for corridors that have the best chance of having enough support to actually be designated and approved. And that work should begin now because any of the projects that we're talking about that are not an existing right-of-way other than they have to have this kind of help or review approved if we have any chance of meeting our 2020 goals.

MR. NAJARIAN: Okay, thank you. All right, well, let's then focus on the second chart which is what we call the ultra-long term planning process.

It's designation is an important part that we envision in that strawman and the first question is, would an ultra-long term statewide abstract transmission planning process building on the ten year RETI plans and looking 20 years beyond RETI's horizon be desirable and constructive? I'm going to ask Juan Carlos to take a shot at that question.

MR. SANDOVAL: Definitely, you know, the effort already done in RETI in Phase 2A is (inaudible) contains a lot of facilities to be on the ten year and should be probably on the 20, 30 year horizon. And it is my belief that the California transmission planning group is going to undertake the further evaluation of these facilities and incorporate, you know, the other aspects or other goals the stakeholders might (inaudible) -- emission reductions -- (inaudible) and once that is to be completed, we can ask (inaudible) a final product (inaudible) build for further evaluation for transmission purposes. That's all.

But definitely, I think it will be desirable. It isn't working for (inaudible), I don't think that has been done yet but that would be the way if you want this

long term.

MR. NAJARIAN: Okay, thank you. You know, let's go to the next question, the last question. We can switch back and forth here a little bit but I'd like Grace to take a shot at this next question.

You know, by definition, once you get out on ten years, you're faced with a lot of uncertainty. I mean, there's a lot of uncertainty in ten years let alone 20 or 30. So, by definition, you have a little bit of different process here and I know when staff was looking at this timeframe, it was struggling with it, just had to attack it. And so this question is what would be the objective, including sculpting content of an ultra-long term abstract plan?

And I'll ask Grace to try to kick this off and then, I'll ask others to join in. Grace?

MS. ANDERSON: Thank you for asking. It's a bit of a surprise, I'd say. I've addressed this question. It is a question that's being asked in the larger United States also so it's timely.

One of the most important objectives, I think, of looking longer than ten years which we very much support is that you can try to posit a range of sort of big picture futures that no one can know what is going to happen but if you're looking longer out, gives you an

opportunity to see where are the commonalities that come out of your analysis so different longer term futures?

And that can guide you toward the most robust options for investment that you might see, you know, in the next 10 to 15 years.

So, it also, you know, allows you to have more low-growth farther into the future and that might give you a little more policy space to expand your horizons of where you think your resources might come from. And since I was asked to wear a Western hat for this panel, I'd be remiss if I didn't say, you know, the west is blessed with an amazing array of renewable resources and anyone in the East group would do anything to have that opportunity.

And the REZ report, the Phase I REZ report was adopted this morning by the Governor and they, contains the only identification of -- it's called mapping concentrated high quality resources to meet demand in the western area connection distant markets. It has a transmission tower on the front page.

So, out there in the West, they're very focused on, you know, each State having its resources and how to get them to distant loads and that's kind of I'll go to California or coastal states. So, I want to echo that it's a little bit of an artificial distinction of what you would look at in, you know, in your ten year plan versus

your ultra-long term, you know, process.

Really, your near term planning can be informed by REZ now that you have their document and in its next phase, it will create conceptual transmission lines and those are going to be available. And just because 33% percent, you know, is our floor, it doesn't mean we want to defer, you know, acquisition of the more remote resources to oppose 2020 or greater than 33% percent market.

And it's very good that we got the 15,000 GW hours and then had it added in Oregon and British Columbia and Baja resources in this. Just to encourage that now and in this longer term plan, you look to REZ and to your neighboring sub-regional planning group plans to give you the information that might help you characterize the transmission statements and the environmental concerns associated with not only the nearby out of state resources but the more distant opportunities.

MR. NAJARIAN: Thank you, Grace. Go ahead, Mo, and Jon next.

MR. BESHIR: I think I was more, I tried to focus on this ultra -- I guess I call it ultra planning or long goals term plan more than that. I thought this probably made sense to me more than the other one. I mean, the other one was, I guess, I look at it from the

California in terms of planning goals, the transmission planning focus, but this one really meant a lot on really how transmission is really --

2.1

In the early planning days, somebody said the transmission plan is a 30 year plan -- ten years to plan it; another ten years to construct it; and the third and the 30 years really to operate it. So you start the cycle again to operate the transmission mine. So it's really a 30 year plan, 30 year cycle and I think that's probably supported empirically in most cases, that's the way it's been happening. So 30 years is not really long, long from the transmission point of view.

So I think this is really a process which really could jump in and it would also work, as is being done, I think for properly sufficient to get us going for the next ten years on, if we can really do what RETI has identified for planning and from the transmission conceptual plan. If we can take that to the next ten years, to build those transmission, I think we'd be ahead, way ahead of the game, I can tell you that.

So, I think that really is the focus. This is really a good plan from what my perspective is.

MR. NAJARIAN: Thank you, Mo. Jon?

MR. THALMAN: Just wanted to chime in here that representing a utility that has and is currently building,

working on a large transmission projects that evaluation and developing products and evaluating constant analysis of the projects, the large projects that look at benefits far out in the future is a challenge and that the addition of another assessment that looked out that far would be welcome and would be an added data point or figure to help. There's benefits beyond.

The corridor designation is definitely an aide but just another study that looked out that far and addressed benefits looking into that part of analysis is still good and often, you feel like you're kind of a, it's a challenging question looking out that far because there are so many variables. At the same time, another look at it, another opinion would be kind of help.

MR. NAJARIAN: Okay, is scenario planning the approach once you get out that far? Jim?

MR. SHETLER: I think I said a piece of it, you've got to start looking at what are our goals and our thrusts, our Boards told us we've got to reduce our carbon footprint by 90% percent by 2050. Now, I'm fortunately not too worried about 2050. I know that my staff is and we need to start thinking about that. And then the question that what are the scenarios that help us get there? We have to look at those alternative scenarios.

The other thing I think we need to look at is,

you know, from my experience, at the time you think about and design permit, environmentally, due to studies and construct a transmission line, you're probably ten years out. And that means for 2020, we need to be homing in on what those transmission plans are and what we're going to build in the next 12 to 24 months. We can't spend the next five years trying to decide what those transmission alternatives ought to be in 2020.

So, I think by definition, we start to move forward. We need to start looking beyond 2020 and I agree; I think the longer term plan makes more sense from my perspective.

MR. NAJARIAN: Go ahead.

MS. RYAN: I just wanted to build on Jim's remark and say that I advocated for using scenario planning for the long term planning process the last time I was here and the main reason that I recommended that was just because I think there was so much uncertainty to be looking that far about technology, the builds and costs, the realization of economies of scale that, you know, you really do have some sort of means to push some structure on the uncertain futures and try to identify in particular what I think Grace referred to this commonalities when all of a sudden you've got this no regrets option whether it's the number one thing we think that far out in terms of

actions that you can take in the present is preserving options, preserving optionality. And that's a good tool for that but that seems to me to be the number one objective for long term planning in terms of actual actions that we would take today.

MR. NAJARIAN: Okay, thank you. Anyone else on that topic? Oh, one thing we wanted to do is to allow for some feedback from several selected stakeholders who are in the audience today. So I think what -- unless there are any other questions from the dais or any other comments? We can proceed on that basis, okay.

All right. Let's see. We have Bob Stuart from Bright Source here today and I'm going to ask Bob if he can go up to the podium over here and any comments and questions and the panel will react to it. Thank you.

MR. STUART: Great. It's an honor to be here.

Bob Stuart, Bright Source Energy. There are a lot of good comments here and, you know, I think the most recent one by Jim Shetler hits the point of urgency. He knows we've got to get this transmission planning process right but we need to also move forward. And speaking as a generation developer, we're here to see some wire in the air and, perhaps, in the ground.

And, so first of all, I commend that the strong end proposal was integrated public and private

transmission planning as we want to redo and it's great that everyone's here. Having said that, this process to implement all this seems it's already a lengthy process, time-consuming and expensive so how can these ideas we hear here in planning instead be expedited to reduce the length of the process and not extend the process?

MR. NAJARIAN: Okay, is anyone willing to respond to that question?

MS. EDSON: I think that's exactly the concern we're hearing from those --

COMMISSIONER BYRON: Ms. Edson, unfortunately, you need to speak into the microphone.

MS. EDSON: I get to speak with my (inaudible).

Pardon me. I do think the concern about drying the process out given the sense of urgency is, contributes to some reluctance to having additive transmission planning process.

As Jim, I think it was Jim who talked further about getting through a cycle, I think it's absolutely critical that we have the RETI information; we're pulling it into our processes as we speak. We need to get through this initial cut at things before we start piling on additional mechanisms. It's why I think all of us haven't have indicated that we really would like to think about this more carefully before coming back with detailed

comments on what the process options might be.

MR. STUART: Thank you, Karen. Just about a few more questions for everyone here. So everybody's here, all the interested parties that have anything to do with planning in California. I just want to know is there a commitment? What will it take for, to get this committee off the ground and all the IOUs and POUs along with the CalISO and all the regulatory bodies to commit to this integrated process? That's where the (inaudible) question. I just, I hope there is a commitment and I'm just asking what commitment there is.

MR. BESHIR: I think what the commitments in the planning process to get (inaudible) right now, we keep asking though is this commitment full commitment by all the players?

And as of now, I think everybody's really committed. We can see the kind of resource everybody is, the planning to put into the process and the kind of people are involved in the meetings and in the congruent activities so I think there is a full commitment.

If there is going to be any backstabber or anything of that nature, I cannot really say at this point but I think the kind of peer pressure and I think every day is a day we're trying to accomplish something and I think that is really incentive for everybody to commit to

the process. So we feel we have the commitment.

MR. STUART: Thank you, Mo. Patricia mentioned something which I also wanted to follow-up on in terms of the generation interconnection process. That's also something very, pretty interesting to us and how will this, the existing -- it's not clear to me how the generation interconnection process will be integrated into RETI and into the strawman proposal here since this is a short term process.

MS. ARONS: Well, I think what we need to do is we have proposed upgrades that are coming out of the generation interconnection process. Now, granted we're processing cluster studies with 77,000MW of interconnection requests in our area, 75 different projects, approximately, so that, as you can imagine, is drawing a lot of new transmission most of which is probably going to go away because we only have a peak load of 25,000MW so, you know, it would be a very long time before 77,000MW are used.

But what it has forced us to begin to do for proposed cluster studies is develop the transmission plans that could integrate 77,000MW. And we've been able to bring components of that plan that we've known about at the time. Still, in the middle of the processing part of it but where we've been able to bring some master plans

into the RETI, we're trying to do that so that we have a RETI process that reflects various components that we're seeing the need for in our generation interconnection process.

2.1

But I think as time goes by, additional cycles get under our belt, we'll be able to do more of that moving potential projects into the long term and vice versa. So the long term projects may come into the short term needs to get built. It really depends, in my mind, which generation projects move forward and which do not and that's something that only time is going to tell us.

MR. STUART: Okay, thank you, Patricia. Just one other comment I wanted, that reminded me of the comments that Dave Olsen made initially in terms of this plan has to really lay out and get, you know, make a very solid transmission plan without being over-concerned about whether the generation's going to show up because I think a lot of the plans, particularly foundation-wise, were there as at least regrets or no regrets regardless of renewable energy, they needed to get built.

I guess the other comment I wanted to make and this also goes to one of the recommendations of RETI is to be very focused on what out of state transmission needs to be done, interstate transmission. And there's already an existing transmission dais from Arizona and Nevada into

California that's already extremely constrained plus tens of hours of congestion in RETI and folding that into the renewal plans and being able to integrate resources outside of the state that will complement resources in the inside of the state is going to be very important.

I just want you to bear with me one last comment or question in terms of technology. The true smart grid out of there's lots of technologies out there today that are really maturing or are going to be fairly mature and I just want to know how will technology be integrated into the ongoing plans of, will there be flexibility transmission plans to integrate and update this technology comes in play?

MR. NAJARIAN: I know that Grace had a comment so let's start there.

MS. ANDERSON: Well, I was just going to and quickly try to address this question of urgency or commitment, where does that come from? And, perhaps, it will come, whether we want it to or not, from the federal government and everyone's aware that, you know, there's legislation.

No one knows whether that will pass. It's a pretty unpredictable atmosphere and time in Washington so, you know, something could pass but according to that, the first step is indicated to the western state

representatives.

They're building up their forte right now to require interconnection wide plans. We have the governors of the West in a letter to the Congress saying that they intend to approve an air conditioning light plan. And whether or not any of this is good news or whether it unfolds, it does provide one dimension that is encouragement to California to try to move forward into that integrated process, an integrated plan because they're more well-positioned to engage when the region and the federal government comes to call on us.

MR. NAJARIAN: Thank you, Grace. Karen?

MS. EDSON: I just wanted to, about one thing, I think the optionality that Nancy mentioned a few minutes ago is absolutely important. We're pushing very hard, as hard as we can, to make sure that the smart grid is smart that it communicates from the transmission level all the way down to the system and talk to one another and I think we absolutely have to position ourselves to be able to take advantage of the value that those technologies hold out there in addition to a known variety of technologies, not just transmission technologies.

So, I think that's a very important point. It's something that everyone around this table is, I think, committed.

MR. STUART: Thank you very much.

MR. NAJARIAN: Thank you, Bob.

COMMISSIONER BYRON: Mr. Najarian, if I may take a second? I'd like to acknowledge I think an important point Mr. Stuart made. I think a number of them but the one that I really wanted to focus on is the sense of urgency about all of this.

As we sit around and talk as regulators, as investor-owned utilities, publicly-owned utilities, etcetera, we're talking cycles and how this process, how many years it takes and Mr. Stuart, representing a developer and let's say all developers in general here, they have money on the line. This job to some extent, is based upon the amount to get this done when we get it done but we have to balance that with some sense of regulatory certainty. I know that this Commission, having been in developing activity myself in the past, I always wondered why it took the Energy Commission so long to site the (inaudible).

Now, working on this side of dais, I see that the thoroughness of the process really contributes to that regulatory certainty. I'm not trying to defend the Energy Commission's process here but we still are batting a thousand percent in terms of our challenges in the Supreme Court all over siting positions. And regulatory certainty

is worth something and I think that would be the first side of the urgency issue. We'd like this all to be done tomorrow but we know it does take a little bit of time to make sure that we cover all the bases, environmentally, legally and provide that certainty as well.

So, Mr. Stuart and all the other developers that are out there, that's really the goal that we're working on here.

MR. NAJARIAN: Thank you. I think we've got about 10-11 minutes before we start to lose our panel so let's continue. Helen, NRDC.

MS. O'SHEA: Hi, I'm Helen O'Shea with the National Resources Development Council. I have a couple of comments rather than questions for men, two specific questions that may be are better directed towards EC staff. I don't know if there's anyone present. You can speak to the details of the strawman proposal. I know the panelists are probably going to do that.

COMMISSIONER BYRON: Absolutely, ma'am. Absolutely.

MS. O'SHEA: My two comments, I'll try to keep them fairly short. One of my first thoughts upon looking at the strawman proposal was not the need to plan for a whole system, not just transmission and generation.

Obviously, there's planning efforts specific to each but

to think of the whole that works together and supports everything, our energy goals. So that's just one comment offered.

And the second one, transmission planning is incredibly technical and for stakeholders like myself who are still coming up to speed with the engineering prior to that, the language is almost a different language than we speak in other meetings. It's really helpful to have a framework for non-engineering stakeholders to participate.

And while the thought of more planning process within our framework can be daunting, I think it's really important to remember that that you don't provide a meaningful opportunity for those to engage. They may be able to come to a meeting but they can't really dig into a process. It's just something, I know when you're in a field, when you speak the language, it's hard to remember that some folks who really want to play a role may need a little extra help activate your role. So that would be my comment.

And then, the two questions, what I would just want to raise now, I may not be able to go into them in great detail but looking at the flowchart, the question that popped into my mind were where in the process is the environmental review going to take place and where are there going to be opportunities for stakeholder

engagement? It would be great to hear more from whoever appropriate answer that, get a little bit more detail about where and how that might take place.

2.1

MR. NAJARIAN: Okay, I'll correspond to that note quickly.

First of all, let's go to the first, Figure 1 chart. The RETI process is really, initiates what this strawman scribes and, as you know, that's a stakeholder process.

The other, I think, you know, we've heard about first requirements for the sub-regional planning. So, there is some opportunity there and there certainly would be opportunity through the CDC's strategic investment planning process. That's an open public forum. In fact, we see that in this strawman as potentially taking some pressure off of the sub-regional planning process itself, knowing that there's an opportunity for full vetting of that result through the strategic plan. And the process, you see the swooping arrow from RETI going into that. So there's opportunities there.

And then, you have annual planning. I know the ISO is a stakeholder annual planning process so there's opportunities there and then permits in which you have different parties to the proceedings. So, I think, real quickly in response -- we can provide more details later -

1	- that's how we see participation.
2	MS. O'SHEA: Okay, that definitely helps. We'll
3	probably land more questions later that we have to
4	clarify. And do you envision (inaudible) that's stapled
5	or input from RETI into this process that would be
6	(inaudible)?
7	MR. NAJARIAN: Yeah, in fact, we actually, yeah,
8	we do envision that. We see RETI as effectively being a
9	party to the strategic investment plan proceeding. We've
10	heard already from the participants on the sub-regional
11	planning that they intend to use RETI input to help them
12	drive their process. So, yeah, to respond to your
13	question, yes.
14	MS. O'SHEA: Okay, I think that's it.
15	MR. NAJARIAN: Thank you.
16	MS. O'SHEA: Thank you.
17	COMMISSIONER BYRON: And I'd like to acknowledge
18	briefly what Ms. O'Shea said that although we've got a lot
19	of transmission planning expertise at the table, forgive
20	me, down at the station
21	MS. O'SHEA: (inaudible) education and
22	transportation planning.
23	MR. NAJARIAN: They're transporting electrons
24	over.
	CONTINUED DIPORT. II /

25

COMMISSIONER BYRON: You've got a great deal of

transmission planning expertise at the table. Ms. O'Shea indicated that we're still missing the stakeholder involvement that she's interested in and I would note that's, in your case, the environment community but the public in general, I think, that's (inaudible) has to feel they have an input to all of this process.

MS. O'SHEA: It definitely applies beyond the environmental community.

COMMISSIONER BYRON: Thank you.

MR. NAJARIAN: Okay, Faramarz?

MR. NABAVI: So, I'd just like to thank you all and I have comments both, you know, positive and otherwise and I want to preface it by saying I think everyone in this process has done a herculean effort whether we're talking about environmental stakeholders getting up to speed on the technical issues, engineers getting up to speed on staple, their concerns and regulatory staff, you know, and RETI coordinators being able to make move this process forward.

So, here are my general remarks. First of all, the conceptual transmission planning effort has been very beneficial. We see in one of the (inaudible) comes being this California joint transmission planning workgroup, the recommendations they've also presented, these have been very valuable.

Regionally, RETI, every two years, we take away scarce resources from other processes that were coming on. However, a long term, an ultra long term abstract plan, may provide some benefits and maybe that's where this discussion should go.

2.1

Transmission costs are very small relative to generation. We should keep that in mind. But the most crucial thing is resulting the coordination between the transmission owners and operators and I think we see that commitment here today, sir.

First of all, CalWEA, the California Wind Energy Association, concurs with the recommendations of Phase 2A transmission planning workgroup has identified. Looking at which sets of lines are part of this (inaudible) approach that Dave mentioned, trying to find out how we can overcome barriers to do joint projects rather than duplicating facilities. And one aspect of this process that is obviously very crucial from the developers' perspective is having a single transmission charge if not having a dual (inaudible) pancaking.

And then, finally, thinking forward not just ten years but, as Patricia Arons mentioned, that we need to look at these investments with a long term perspective in mind. Doing a dance corridor designation is very helpful.

Okay, some of the issues that we have not

necessarily agreed with all of the details of the rightof-way process one of which is we think that uncertainty
process needs to be highlighted. We're working with RETI
coordinators to get that in the final case of our report.

The economic methodology needs to be updated. The assumptions in Phase 1B, they were accurate at the time they were made but as we know President Obama's made a significant commitment to renewables and we need to incorporate that in the present revision for Phase 2B.

And then, finally, with regard environmental methodology, wind industry has mentioned this and we are working with environment staple (inaudible) but we want to make sure that our premise represent accurately.

Other things in terms of next steps. We think that it is important to make sure that we have a credible plan and that does not mean that every sediment that's in Phase 2A is going to happen. We all know much of that won't happen but how we approach that is the question.

We think rather than saying we think x, y, and z transmission segments are the ones that are going to move forward, it makes sense based on the high level analysis that RETI has done to rather look at the timing. Which ones are the ones that are most likely to move forward quickly, have the least environmental concerns at the greatest economic justification rather than saying we are

prioritizing these? We are just recognizing these are going to be the ones that are most likely going to come to us first.

So that's that point. And I think another point that's important is to make sure that we're not trying to aim just for 33% percent. You know, if you're a major league baseball player, you're not aiming at the outfield. You're aiming much higher and then the ball will go where you want it to go and the same concept applies here for RPS. If we shoot just for 33% percent, given the risks that are involved, it's quite likely that we would come up short. And I know that the CPUC actually just released a report that talks about this.

Some of the discussion questions, they answered questions that Chuck brought up, we think that redoing the full RETI process is probably not necessary. There are aspects of it that could be updated, particularly in terms of the transmission side, and we're looking into that. The crucial factor though again is the work that the people at the table here are doing right now.

RETI plans are indicative and everybody has talked about this. I think everyone here is in agreement and these processes are being incorporated. What we do think though is that in terms of timing, the biennial concept probably is too ambitious given the resource

constraints not only of the transmission planners but especially the stakeholders who need to keep that in mind. If we have a process that's moving forward at one speed and other folks are looking forward to a different speed, we're going to have problems. So that's something that we need to keep in mind.

abstract plan. This could have some real benefits for us but we need to keep in mind that analysis has to be at a high level. We won't be able to do the whole RETI analysis even if we wanted to but the level of detail -- and I have to give tremendous credit to folks like Roger Johnson, Mark Hesters and James Reed from Energy Commission who have just spent countless hours working on this. We won't be able to do the sort of 500 front level analysis of transmission and generation sites. But it would be valuable to have a variety of scenarios, analyze them and to look at them in certain ways.

And so, what are some of these potential scenarios? One thing that we need to keep in mind, again, thinking long term, the intergovernmental panel on climate change tells us that we're going to need to cut our greenhouse gas emissions by 80% percent and in order to achieve that 80% percent, we're going to have to overshoot that in electricity and transportation because there are

other sectors that won't be able to make it. So that means we have incurred an ambitious long term goal and given the lack of transportation -- I, myself, I took public transit to get here -- you know, we're going to need to increase the amount of electricity generation. And that's above and beyond the energy efficiency initiatives that we have.

So another point -- again, not to get too technical but just keep it at a high level -- we need to look at a variety of scenarios for technology costs and assumptions. I know a number of people in the floatable (inaudible) staple group contacted RETI withdrawing its assumptions but it's not just about affordable takes. It's also applicable to wind, to solar thermal, to geothermal, biomass. We should have a scanner instead of assumptions and look at them for each technology.

And then, finally, the quarter started this.

Again, it cannot be underestimated, the importance of looking at the outset, what are our showstoppers in terms of environmental issues and then try to set aside potential quarters that we're going to need so we're not going to be in a tough spot a few years down the road.

Okay, not to get too much detail in transmission costs but, again, there are some ways in which these analyses that were done initially that led to

overestimation of what it might be. And I think RETI has done a good job with trying to address that. So, just something to keep in mind again going forward.

And I talked about why we should not limit transmission and this is my last slide so, again, in terms of work meaning rate pancaking from a developer's perspective, can really kill a project.

Promoting co-ownership and co-location of (inaudible) is also beneficial. It reduces the up-front costs, potentially two generators, but above and beyond that, it has both economic and environmental benefits for stakeholders as a whole. One should be large enough to accommodate each party if we add joint POU and IOU lines and the capacity should be made available.

One more thing that I think should be mentioned is that when you have general projects, it inevitably leads to some beneficial outcomes on the site. So, if you have a regular framework for cooperation, when you're upgrading an existing line and having joint use rather than having duplication. And, ultimately, this is going to result in more costs and lower debt per capital outlays for both IOUs and POUs.

So that is my presentation and I thank you for hanging in there. I think everyone is eager to go home. So, thank you very much.

MR. NAJARIAN: Thank you. I think we're done. I just want to thank all the panelists. I think we've built an excellent record here today. I appreciate it very much.

COMMISSIONER BYRON: Yes, I do too. For those of you returning, we'll reconvene at two o'clock and for those of you that we're losing due to other commitments, thank you so much for being here this morning.

## [Off the record]

MS. GRAU: Are we waiting for Chairman Douglas?

MR. JOHNSON: No, I don't think so. I think we should go ahead and start.

MS. GRAU: Okay. Well, thank you all of you who came back after lunch and it was a very long morning but we do have one more major section and that is on the staff proposed transmission court ordered designation selection methodology and I would like to introduce Roger Johnson who is the lead for the Commission's transmission quarter designation program.

He has a Powerpoint presentation and we would notice seven questions in the agenda and he is offering anybody the opportunity to respond to those questions.

And, Roger, you are taking comments as you go through your presentation; is that correct? Or would you prefer to wait?

MR. JOHNSON: I prefer to wait.

MS. GRAU: Okay, so can you go through this

Powerpoint and then, we'll open it up to questions from

the dais in the room and then the folks on Webex. And

with that, Roger, you can come on up here.

MR. JOHNSON: Okay, thanks. Good afternoon. Good afternoon, Commissioners, and audience. Thank you very much for coming back and participating in this afternoon's discussion of the staff's proposed corridor designation methodology.

Unlike Dave Olsen, I forgot that the italicized draft in front of this but it is a draft proposal and we are, since we're offering, this is another strawman. There's another one today for people to consider and offer us their comments and recommendations on how we might be able to use this methodology to identify possible transmission corridors for designation.

This works out really well because Dave Olsen does an excellent job and this is what I'm talking about the RETI process that I'm going to be able to focus really quick on the background of RETI's interest in my segments have come from.

So Dave mentioned the RETI process this morning,

Phase 1 we talked about as far as defining the criteria,

assumptions and methodology. And then, the Phase 1B

report, we're identifying the CREZ and the ranking. The Phase 2 report which we just now put out the draft, had the CREZ refinement that Dave did a good job of explaining and also the conceptual transition plans of service.

2.1

And those who are in the service are, what we're looking at as far as word, which of these lines might be a good candidate for a corridor designation? And then the Phase 3 detailed transition plans as far as, is to follow.

As Dave mentioned this morning, the RETI Phase 2 draft report had a series of, had four recommendations and the fourth recommendations was for the Energy Commission to get busy.

Actually, I tell you, immediately (inaudible) should start designating corridors beyond those already established by the federal agencies or utility's rights-of-way to reserve and protect transmission access.

Corridor designation must be coordinated among state/federal agencies and support access to renewable energy areas, not only as it is identified by RETI but by the Bureau of Planning and (inaudible).

So, energy goals, they're going to be identified based upon the Secretary's order and the Desert Renewable Energy Conservation plan, the DRECP, but the Energy Commission and Fish and Game are tasked to identify as part of the Governor's executive order.

So, and as we heard this morning, RETI came out with 29 CREZs of five commercial energy potential then by throughout California and these areas have wind, solar, geothermal and biomass resources.

The transmission line segments that came out in the conceptual plan, there were renewable foundation lines which Dave did a good job of describing. Fourteen of those renewable delivery lines, 13 and then the collector lines which connect the CREZs to either the delivery or the foundation lines. There are 17 of those identified in the Phase 2A report.

So, just a quick recap of these renewable foundation lines -- it will increase the amount of energy that can go between New Orleans and Southern California so we needed toward delivering global energy from all the CREZs and their likelihood to be needed to be growing here (inaudible) just regardless of generation source.

And this is the same holds true for the delivery lines. The renewable delivery lines will move energy from foundation lines to major load centers and they're likely to be in regardless of energy source, generation source and then finding the collector lines, usually, a large number of lines that have been identified for carrying power from the CREZs to the delivery lines and foundation lines.

So here's a nice sketch of the segments that have been identified. As Dave mentioned, this map, you can't really discern when you've got multiple projects, multiple segments in the same right-of-way or corridor. We just discussed today a bunch. In fact, we created some new maps that were going to go on the website today that will give you a little more information about the segments. That will be available this afternoon or tomorrow which I think should be helpful.

And then, a Southern California map, you can see, again, the delivery lines foundation and the collector lines and those gray service spider veins are the CREZs that have been identified.

So, we're putting together this designation methodology. One of the assumptions we were considering was a corridor of designation for any RETI transmission segment included in 2009 Strategic Investment Transmission Plan. We'll be in conformance with that plan. For a corridor to be designated by the, for a corridor to be applied for and designated by the Commission, it needs to be in conformance with the most recent Strategic Investment Plan and our thought was that if we incorporate these various segments, there should be automatically, if you would, (inaudible) being in conformance.

Another assumption we had that corridor

designations should not be considered for transition segments with on-line service agents prior to 2015. Those segments, essentially, there's not enough time to, essentially go to the corridor designation and then take that to room permitting and then construction to meet a 2015 on-line date. And you'd be cutting it real close and as we all know, (inaudible) tend to slip, not get closer. So that was an assumption.

RETI transition line segment factors -- we looked at these different segments and looked to see what factors could be evaluated for essentially determining which one might be, which ones might be preferred for designation and when these corridors, when these designated -- excuse me -- the segments were evaluated, we used the (inaudible) principles to look at the different types of right-of-way.

Essentially, there's a preference for non-expanding the right-of-way, people using existing right-of-ways either by redeductoring the existing transition towers or replacing those towers but in the same right-of-way without expanding it.

And then, after those two types of evaluating, you have the expansion of the existing right-of-way where you need to make that somewhat larger to handle either a new line or a redeductoring or (inaudible) a rebuilding of

an existing line.

And then, there's a new right-of-way that's colocated near an existing right-of-way and when we use colocated, we use the, we look out for half a mile. It's considered co-located. So anything that's near an existing right-of-way up to half a mile is considered colocated and then finding there's a right-of-way that's a new right-of-way that's not co-located is now, essentially, in new territory. And that would be the fifth and least desirable type of new corridor.

We also looked at on-line service dates for this mission that we didn't consider any segments that had online dates earlier than 2015. We did look at the total energy potential and the commercial interest, the CREZs that are being accessed by the segment. The total energy was determined by RETI to be what they believe based upon the resource potential would be available there and the commercial interest, essentially something that has a number of applications, if you would, in that area.

And so, sometimes, when the commercial interest of it is larger than the total interest, it's because we have, in the past, multiple applications for a lot more megawatts than RETI believed would be developing that area.

The location of the CREZ being accessed was

considered as well as environmental concerns, the cost of the segment and other factors.

So we decided that there's these three different types of segments -- the collectors, the foundation, delivery. The collectors can only be evaluated by the factors we looked at, the right-of-way, the on-line date, the energy potential, the CREZ location and the economic, the environmental concern, the economic score and other factors.

The other factors we considered were could multiple segments use the same corridor? Or will federal corridors be connected with the corridor?

The foundation and delivery lines, because the energy potential was considered to be the same for each of those types of lines and each of those lines are supposed to have been able to access and provide access for all CREZs, those categories weren't considered in that type of evaluation for that segment type.

Okay, I got a correction. Oh, you're right.

The economic score, we changed that to be segment cost instead of economic score because we were able to find the cost for each segment in the appendix.

So, for the rights-of-way breakdown, we started out with 106 segments identified in the RETI report and 41 of those segments would be using existing right-of-ways so

those are excluded from this methodology since they already have their right-of-way and 65 segments require expanded or renewed right-of-way and those will be carried forward to further evaluations. So the type there, you can see that a total of 32 would expanded and 19 new colocated and 14 need a new right-of-way.

So when you look at the on-line service breakdown, those lines projected to be needed by 2015 on-line date. There's seven total. Four by 2016 and 11 lines for 2020. So that takes us to 22 lines that are being considered.

And then we the collector lines are sorted by right-of-way type, we identified the projects -- get my mouse -- the name of the project, we've changed that to an alpha designation just so that we don't get people excited about which projects potentially are the best right now. The collector group has been identified and I think in this group is that group of collector lines, all the lines are together in a group and these are the CREZs that were accessed by those collector lines and then the type of right-of-way required. So it's sorting by right-of-way required. The expanding of the right-of-way would be heard activity versus the newer co-located right-of-way. And then we kept out, just for information purposes, we took the energy, the total energy, the commercial energy,

environmental concern -- high, medium, and low -- and then the cost of the segment in millions of dollars.

All right. So then, you can sort the lines by their total energy potential and you get a different set of ordering. And then we can sort them by environmental concerns. We did another order with these particular segments. The medium was the lowest environment concern and high was higher.

The environmental concern value was created for each segment by a group of environmental experts that evaluated the segment and determined based upon looking at it a number of criteria, whether or not there was a high, medium or low environmental concern with the construction of that segment.

And then, finally, we sorted the lines by cost. We get another ordering. The times two indicates this is a transmission -- actually, these are two segments but it's the same line. One segment is essentially one half of the circuit and the other segment is another half of the circuit. And when RETI took these segments out there, it was understood that initially only one circuit would be used and then as the CREZ built out, the second circuit would be added.

This is where (inaudible) for environmental concern though. There was a thought that you should give

a, you know, a high concern or a medium concern to the first project because that's where you're actually creating land use impacts, if you would and it's affecting your environmental species and then the second project which is just a conductor to those types of power should get a low because it's essentially very minimal impact.

So then, there was concern that there was, you have, maybe the second half of the project scoring higher than the first half of the project and being recommended before we go to the first project. So we gave the same concern to both halves of the project and here, we show them times two to show that that cost, \$1.6 million, is actually double that for having a double circuit project.

So what do you do with all these scores and this data? Well, we just decided, let's just put together this data and basic, if you would, just a summary table where we, on the rights-of-way, there's either an expanded, a co-located, a new right-of-way or a co-located or a new right-of-way that's not co-located. And so, we gave those values of one, two or three.

Under potential energy, we'll go ahead and use the the number of the score, essentially, the best, the highest energy project was 8 and so we've got a score of 1 and then the second highest was B in this case and you've got a score of 2.

Environmental concern, there was three levels of concern -- low, medium, high -- so we just, for this effort, for this exercise, we just used 1 for low, 2 for medium and 3 for high. And the cost, we also allocated as the lowest cost of project had a score of 1 and the highest project in this particular set of projects got a 9.

So then, a simple adding up of the scores -- we don't get a 3.75. Let's see. Oh, the average of these scores, simple average, okay, is 3.75, 2.75 being the lowest and 5.25, the highest.

So this just gives you just a suggestion of an order of preference of these projects. The 2.75, that's awful close to three so we knew there are some other ways that we should be evaluating these segments.

So, like we mentioned before, another area would be renewable areas access for collector lines. The recommendation suggested that these lines also be into accessed by BLM and DREZP areas and so that would be, we would be having information. It should be later this summer. BLM will be identifying the areas for solar energy project and the DREZP should be coming out later this summer with some initial areas for a preferred development in the state for renewable energy.

So we have that information to help us

understand which of these segments would offer access to all three type of areas. Just a second please to check my notes. And another consideration for trying to evaluate which of these corridors would be preferred would be whether or not a segment would connect to a federal corridor. And then, also whether or not a segment would be available for more than one segment. Excuse me, whether or not a corridor would provide the ability to have more than one line that's not duplicative and provide a corridor, two lines, I'd say.

So with those types of additional factors, we're hoping to be able to identify the one, two or three preferred segments that should be considered per designation. That was for the collector lines.

For the foundation lines, because we weren't able to say anything about commercial interests or about accessing different corridors, excuse me, the different CREZs because they said, the report says that these foundation lines won't provide access to all CREZ and serve essentially the same number of, same kind of energy classified, those numbers are repeated here. Really, the only thing we could sort out was environmental concern and then we sort those on cost of these foundation lines, giving you an idea of what would be the preferred ones.

And then, finally, the same as the delivery

lines. In this case, we're going into two we look at -environmental concern, we're can sort on those and we can
also sort on cost.

And then, we put a note on here, if there is no clear favored project, then we could confer with the new joint transmission planning group and ask for their guidance on what they would recommend as far as a project for corridor designation.

So that's briefly this proposal on how we might take these 106 segments and put them through some sort of a methodology to come up with a recommendation. Then, I have a set of questions here that staff put together and if I could just go through the questions with you and then, if you care to comment on methodology for the questions, I ask if you could come up and provide your comments. These are on the hand-outs as well.

COMMISSIONER BYRON: Before you end, Mr.

Johnson, could we ask some clarifying questions here?

MR. JOHNSON: Yes, please.

COMMISSIONER BYRON: I got to see your presentation I think last night for the first time and -- on-line -- so I didn't very much have a chance to jot down some questions but now that you've gone through it, I'm stuck with a couple of things here that I'd like to see if I'm understanding it correctly.

So the criteria for the 2015 cut-off date is 1 because we can't get through this process any faster than 2 3 that? 4 MR. JOHNSON: That's correct. Or going through 5 a designation is going to take anywhere from six months to 6 a year to prepare an application for a designation. going to take a year to process that application and then, 7 8 it will take, because we went through the corridor 9 designation process, you might be able to get the permitting guide in six months to a year and then, it will 10 take two years for construction. So we ended up with 11 12 2015 and that's if everything goes without any problems. COMMISSIONER BYRON: Okay. 13 So those, any projects that are in discussion prior to that are 14 basically on their own and they won't benefit from this 15 16 process? MR. JOHNSON: That's correct. 17 They should go straight to permitting. 18 COMMISSIONER BYRON: Okay. I have to note that 19 all of the manipulation of the numbers, it kind of 20 troubles me. For instance, if I work you at slide 19 21 where you've gone ahead and averaged all these rankings, 22 essentially, they're rankings. Most of them are rankings. 23 It's kind of a net weighting. Everything has equal 24

weight, correct?

25

1 MR. JOHNSON: Correct. 2 COMMISSIONER BYRON: And it seems very 3 simplistic to me. Had you considered using the RETI 4 stakeholders, and asked them how to go about this rating 5 process, taking advantage of the 29 stakeholders that are 6 involved in that? 7 MR. JOHNSON: Well, that was what I was hoping 8 we would start in this discussion today. 9 COMMISSIONER BYRON: Okay. Why do you only have a limited number of lines? For instance, there's only two 10 delivery lines listed. 11 12 MR. JOHNSON: Those are the delivery lines, there's only two of them that are needed after 2015. 13 COMMISSIONER BYRON: Oh, I see. Okay, I think 14 I'll stop there and go ahead and I'll conduct the 15 16 questions unless there are any other questions or clarification that anyone has. Let's go ahead and 17 (inaudible) up to your list of questions. 18 MR. JOHNSON: Okay, thank you. Well, first, the 19 question that I would like to know, first off, what 20 changes should we make to improve this methodology for 21 selecting RETI transmission line segments for corridor 22 designation? And we've only had the report for about five 23

days and this is a brainstorming we had as far as

(inaudible). It's simplistic but it gives you a

24

25

suggestion of what a preferable project might look like.

And the second question is what's the earliest on-line date for a RETI transmission line segment we should assume? We've been 2015, do you think that we can do it any earlier than that? And is the on-line date slippage a factor that we should consider in our methodology? We sort of think that most of transition and generation, if you would, of dates, of on-line dates tend to slip and if we know that, should we somehow factor that into the methodology?

The fourth question is should transmission line segments identified by the RETI process that are included in the 2009 STIP be considered in conformance with the plan for purposes of the corridor designation needs determination?

And then, under what circumstances do you believe that designating a corridor at that time could shorten and improve the overall transmission line permitting process and outcome? Staff (inaudible) are the numbers that we believe that could save a year on a project that goes through a designation versus just go straight to developing an application going through a permitting process. Those are some of the issues that come up with permitting.

And then, if the Energy Commission identifies in

the 2009 Strategic Transmission and Investment Plan a certain RETI transmission line segment as a candidate for corridor designation, should the transmission line owner prepare and submit an application for a corridor designation?

If the answer is no, what would be the reasons for not applying a designation?

So those are essentially the questions we have and I'll entertain additional questions and any comments on methodology. So, if anybody would like to come up to the microphone?

MR. NABAVI: I'll take the question. They say people are poor at silence so I'll (inaudible) on this one. I'd like to thank Roger for putting this presentation together. This is really the first time someone has attempted to put this all together in this fashion and I think that what we should do is we should look at how we can integrate this with what California Joint Transmission Planning Group is looking at in terms of commercial interests.

So, that's not to say that we should only do commercial interests because I think there is a long term benefit to looking at some corridors where there may not be a high degree of commercial interests right now and that is what this methodology could present. But, in

1	addition to those lines that may be indicated by this
2	methodology, I think, you know, having that overlay with
3	the, let's say, the generator interconnections that
4	Patricia Arons was referring to in her presentation, I
5	think there would be a lot of value in how, in having that
6	synergy though.
7	MR. STUART: Roger, I'm wondering why you
8	couldn't speed up the process in terms of, if it needs to
9	
10	MR. JOHNSON: Could you state your name for the
11	record, please?
12	MR. STUART: Oh, I'm sorry. Bob Stuart,
13	Brightsource Energy.
14	MR. JOHNSON: Thank you.
15	MR. STUART: I'm wondering why instead of 2013,
16	you're assuming a two-year time to construct despite a
17	reasonable, not all the criteria where that all could be
18	moved up to 2013 say it meets all the criteria in terms of
19	the corridor designation if that's another 2009 plans,
20	what have you. Why does the project have to be
21	constructed if these permitters are about to construct,
22	shovel ready?
23	MR. JOHNSON: I'm sorry, Bob. I lost that
24	question. Could you
	1

25

MR. STUART: Okay, rephrase it. So going to

reiterate, you mentioned 2015 cut-off date. Why not a proposed 2013 saying if it's going through all of the needs designation, meets all of the criteria for the corridor line, and why settle with a two-year construction period? We saw the date. It didn't seem to go move ahead. It didn't seem like it has to wait for the construction period.

MR. JOHNSON: Well, meeting the criteria for a corridor designation only means that someone can prepare a corridor application and go through a 12-month corridor designation process. So that could be a year and a half right there to get a designation from the Energy Commission. And then, after you have a designation, then you go through permitting.

So you'd have to take your designation process and, hopefully, the permit you gave the POU or the IOU going through the CPC in with the CPUC, California Public Utilities Commission, could benefit from the program (inaudible) that was done for the corridor designation and reduce the permitting time for that segment. So that could be six months to a year there. So that's two and a half years and then two years for construction would be four and a half years so if you started 2010 as when you would start your application process for the designation, that's 2014 for four years. So that's why we were

thinking 2015 would probably be the earliest. 1 2 I see. Are there some MR. STUART: 3 opportunities for doing some of these in parallel? 4 MR. JOHNSON: Well, we could do multiple 5 corridors designations. Yes, there are opportunities. Ιt 6 just takes, you know, the other question is, one of the 7 questions I posed was should utilities prepare their 8 applications and if not, why not? The Commission can 9 designate corridor forward on some motion. It said, when would we do that? When will the Commission take the lead 10 versus the transmission owner, if you would, preparing 11 12 their own application? MR. STUART: So just a point of clarification 13 then, I heard the Commissioner say that those projects 14 that are not going to make the 2015, they're sitting 15 16 around at home in terms of their, the permitting process? 17 MR. JOHNSON: Every transmission line project has to go through permitting. 18 MR. STUART: I understand. 19 MR. JOHNSON: So when we say they're on their 20 own, that means they should just go straight to permitting 21 and not to take advantage of the corridor designation 22 because that's not going to give them any, if you would, 23 advantage on getting a permit in that short time frame 24

25

between now and 2015.

1 MR. STUART: Okay. That's what I was kind of 2 wondering why shouldn't in having the corridor designation 3 have some benefit in terms of speeding up the permitting 4 process? 5 MR. JOHNSON: Well, I think it could, maybe, you 6 know, depending on the need determination unit at the PUC. 7 MR. STUART: Okay, all right. 8 MR. JOHNSON: Thank you, Anne. MS. GILLETTE: Anne from the PUC. Just a couple 9 of nitty gritty questions, I guess, but thank you very 10 much, Mr. Roger. This is really, it had some good 11 12 thinking that has gone into this. Just a question on page 20. You have four lines listed. I was wondering if there 13 was any particular reason that these four are listed? 14 didn't see any correlation between the scores on page 19 15 16 or is this just an example of you just choose three or 17 four of the top lines? It's just an example. MR. JOHNSON: 18 MS. GILLETTE: 19 Okay. We just didn't have the time. 20 MR. JOHNSON: didn't have space on the slide to put more room for it so 21 we just left it as an example of the process. 22 MS. GILLETTE: Okay, and then, I would like to 23 think through the overall methodology more but it just 24 25 struck me on page 19, they're doing a simple average on

the four scores that have different ranges and so, the right-of-way goes up to only 1 to 2 but total energy has 1 to 9. So just averaging them would cause a lot more weight to come on the energy potential and the cost rather than on right-of-way than on environmental concern.

MR. JOHNSON: That's true.

MS. GILLETTE: That's something to think about.

MR. JOHNSON: We read into that when we were doing the environmental scoring of the transmission line segments. One of the scores dealt with length and so a 200 mile long line had a huge disadvantage over a 50 mile long line if you were just using simple averages. So there, we came up with the system of buckets where we took the projects and divided them up into quintiles, if you would, so we might go and do something here as well with those factors but not having more time and input on that, we just went with a simple average just to get you guys to react to it.

MS. GILLETTE: Okay. Okay, and then on your question, the second to the last question, if you identify in the STIP a certain RETI transmission as a candidate should -- oops, sorry, no. I'm sorry, the fourth question on slide 25. Do you have any thinking on, you mentioned that maybe the lines in the RETI conceptual plan would just be automatically adopted by the STIP? Is that kind

of what you're trying of thinking or would this methodology used in the STIP to vet the RETI lines or this would be used after the STIP to vet RETI lines that came through STIP? I guess I'm having trouble seeing the combination.

MR. JOHNSON: Right now, any corridor designation has to, any transmission line is coming to the Commission for a corridor designation has to be in conformance with the most recent Strategic Investment Transmission Plan.

MS. GILLETTE: Uh-huh.

MR. JOHNSON: And so by bringing in all RETI segments regardless of date, regardless of the suggestion that because RETI has produced those, proposed those as transmission segments for the purposes of renewable energy that that would, the fact that they were presented in a strategic plan would meet the requirement for being in conformance with the plan.

Now, a different project, if someone brought another project to the Commission that hadn't gone through RETI and was a different transmission project, there are other requirements of meeting, conforming with the STIP as far as meeting the goals and objectives of the Commission other than the State's energy policy.

So there are other criteria that these projects

1	in particular and the methodology were going to be used
2	for staff to recommend designation for certain projects.
3	Not that all of it would be recommended for designation,
4	just that if someone were to propose one, it would be
5	found to be in conformance with the corridor but then
6	Stanford use of methodology within the strategic plan to
7	propose the Commission designate, (inaudible) not
8	designate but identify certain segments that should go to
9	designation.
10	MS. GILLETTE: You said that designation, so
11	this would be done as part of the STIP? This evaluation
12	would be done. So the STIP would meet the recommendations
13	not only of which ones were eligible to apply but of which
14	ones would be considered a priority?
15	MR. JOHNSON: Which ones should be recommended
16	for priority designation, yes.
17	MS. GILLETTE: Okay.
18	MR. JOHNSON: So we would identify those
19	segments that we felt should, would benefit the most,
20	would benefit the most from designating for the future.
21	MS. GILLETTE: Okay, thank you.
22	MR. JOHNSON: We use the methodology to pick
23	those.
24	MS. GILLETTE: Right, thank you.
25	MR. JOHNSON: Any other questions or comments?

Okay.

MR. OLSEN: I'm Dave Olsen with RETI. Roger, thank you, again, for putting this together.

One thing I would note in the proposal to use line segments identified by RETI as candidates to be in conformance, seen in conformance with the STIP, please keep in mind that the draft plan that we have now is really preliminary and we are going to do some prioritization of the line segments we have identified which will narrow those down.

And so, I think it would make a lot of sense to wait until RETI has had an opportunity to significantly reduce the number of line segments and prioritize them and that would provide a better basis for consideration of any of these segments in STIP.

I would also would like to ask a clarifying question. Again, could you clarify the effect on a proposed transmission project of being in a designated corridor? Is the intention here to designate corridors which then would go through a full sequel review so that transmission projects in designated corridors would be in essence pre-approved?

MR. JOHNSON: No. The, I think your question is, what's the advantage of the project being identified and having a designated corridor than a (inaudible)

||project?

2 MR. OLSEN: Yes.

MR. JOHNSON: Our hope is that the issues that would go along with that designation will be taken care of during the designation process and there would be an agreement between the local agencies and the public that a, this is the appropriate corridor for a new transmission project and so when it comes time for permitting, those issues would have been addressed, hopefully, and the per implemented EIR that was used to designate that corridor would then be used by the permitting agency to tier off of it to essentially provide for an expedited permit.

MR. OLSEN: Uh-huh.

MR. JOHNSON: So that would be the advantage of using a corridor.

MR. OLSEN: So, and that's the basis for your estimate that this could take six to twelve months off the permitting time?

MR. JOHNSON: Correct.

MR. OLSEN: And, but the project would still have to apply for a CPCN? It would submit a CPCN application and go through that process in case of investor owned utilities at the PUC?

MR. JOHNSON: That's correct. They still have to go through the process but hopefully, it would be an

expedited process.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. OLSEN: One final comment. I think that in this morning's panel discussion, a couple of the panelists emphasized the value of preserving optionality for future development as being in the strategic interest of the State and I would certainly second that. That looks beyond potentially 2020 with the RETI timeframe and so, I would really encourage the Commission to look longer term at potential corridors or potentials for corridors that are not essentially in the RETI analysis now since we've only looked really to 2020. It's going to become increasingly difficult to preserve any kind of corridors as population develops and as we learn more about ecosystems and the need to preserve basic ecosystem functions. So it's in our interest to identify these corridors and maybe, if necessary, over a much longer term now. And I don't see that in this approach here. that's just something that I would suggest.

MR. JOHNSON: Okay, thank you, Dave. Pat?

MS. ARONS: Roger, I think this is a really great starting point for us to talk about how do we go about deciding what to designate as a corridor but let me ask a question of you.

If we believe that this plan sets out long term options and we wanted to look at this as kind of a

coherent plan that maybe it takes us some number of years to build out maybe an approach to think about is to move forward with the plan that creates designations for the major portion of these lines that we think can be designated and so divide up, carve up the work over a number of years.

Have you thought about how long it would take to take this plan as it stands right now through a corridor designation process as far as the CEC is concerned with its resources? If you don't take it piecemeal segment by segment but if you look at it as the whole, how many years do you think it would take us to get this through kind of a comprehensive set of designated corridors?

MR. JOHNSON: That's a good question. Since we believe that we're probably staffed until the end of two corridor designations simultaneously, to do more than that would go beyond our resources and with our current concern about resources for the State of California, that's a concern. But we never suggested or were thinking that it would be (inaudible) to designate corridors for the whole plan.

We felt that there's probably those key corridors that can provide the State with the best results, if you would, for energy and for multi-purpose.

That's why we were suggesting that we're going to wind us

down to one or two or maybe even three key projects to go forward with designation. So, I don't know if that answered your question.

MS. ARONS: I think it's something that we may need to think about in terms of a strategic view of, you know, what are the pressures that we're facing with growth, what are the pressures that we're facing environmentally and if we're trying to provide a path into the future that maybe takes us 20 or 30 years down the road, maybe we only do one or two at a time but it certainly puts us on a path having a comprehensive set of transmission options for the future.

MR. JOHNSON: Okay.

MS. ARONS: Just a suggested thought that maybe we think about this in terms of the work that we want to do as opposed to priority because like you, each of these is either moving directly into a permit process or becoming a long term option for the future and we can't tell whether that future is ten years out or eight years out or twenty years out. So we focus on the work to be done and how we want to go through or how we want to go down that path in terms of which one do we do first, which one goes second. Thank you.

MR. JOHNSON: Thank you, Ms. Arons.

COMMISSIONER BYRON: Before you leave, you sound

you're pretty familiar then with the legislation that created this corridor designation process, the SB 1059 and it passed I think two years ago. Does that sound right?

MS. ARONS: I'm not a lawyer.

2.1

COMMISSIONER BYRON: Three years ago. And we've wrestled, I've wrestled with this Commission in terms of what it's value is. Again, it looks like it's creating another process. What's your thought about the potential for any value from this corridor designation process?

MS. ARONS: I think it's huge. I think that to the extent that we lay out the system of potential areas where we might want to build transmission in the future. What you then do is incorporate those into cities and counties' general plans so that everybody out there in the world can build up to whatever ownership rights we're able to establish through acquisition right away.

The corridor designation alone is not enough. You've got to go and allow utilities to acquire right-of-way within the corridor and then, you can allow development up to the edge of right-of-way.

What you don't do is you don't set up a dynamic for the future. Ten years or twenty years, we're going to be doing a lot of condemnation. Condemnation is probably the worst outcome in any sort of permit process that you have to go through and you can get into a lot of legal

wrangling about the, you know, the validity of the work that was done to establish the permit and you don't want to go there.

You're better off telling the public, here's the path that we're on. We want to be able to build transmission. We will need to build transmission. These are State goals. We're allowing utilities or transmission developers to procure right-of-way. We're allowing them to collect on that investment through rates and, therefore, you can only build your homes, you know, your shopping centers, whatever, up to the edge and at least you're holding open a right-of-way.

And that, it becomes critical in the areas where you think development can occur next. So if we were, if we had our Johnny Carson turban on, you know, we could tell the future very well, the question would be where do we think growth is going to obliterate a transmission option because then, it becomes a condemnation exercise?

If you knew that for sure, then you could focus on just those areas but you don't know and transmission has to have corridors that all connect together. So I think the approach that we've got is very good but I think it needs to be viewed as very long term options for the State and a legitimate question to ask is how many transmission options does the State need to have in its

hip pocket to be sure that we'll be able to achieve our renewable goals?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

What we have right now in the RETI plan may be way too much. Maybe we don't need all those options but it does give you the ability, you know, as the future unfolds as we have projected in the RETI studies, these transmission lines will be built. But because the future is so uncertain, other transmission lines may be needed but so then you, you don't need everything that we've laid It wouldn't need a designated corridors for everything but there's got to be a happy medium. And so, in doing the planning, I think you're better off thinking about the uncertainties, pinpointing them and then establish an appetite for acquisition of right-of-way and putting that in rates versus the only other option that you have to this path is to build transmission early and you don't want to overbuild. We want to end up building something that's appropriate for the needs at the time as we see them at the time. And I think that's what makes corridor designation so attractive in my mind is by simply holding the property, not overbuilding transmission. You may be overinvesting in potential transmission right-ofway but that's something that can be sold off at a later date.

So I think as a manageable set of assets, what

you've got is something that gives you the option and it's an option cost that you're experienced in holding that property in rates and going through this exercise.

COMMISSIONER BYRON: As I learned last Friday when you and I both participated in that transmission efficiency workshop down in Southern California, you are a key transmission planner or the transmission planner in Southern California. Can we anticipate that Southern California soon will be applying for any corridor designations to this agency?

MS. ARONS: I believe so. I think one of the things that we have to have time to do is to go back into the office, digest all of this stuff and really begin to apply strategic thinking to the whole plan in terms of what are our thoughts about where growth will grow? What are our thoughts about land use issues and being able to secure right-of-way and putting people on notice and starting to go through that process?

Right now, we have a couple of big permitting processes that we're involved with so we're going to have to achieve, you know, some milestones there, free people up to be able to initiate applications but I think, definitely, these are, I think it's critical for the State. I think it's going to be valuable for the State in 10 or 20 years when my junior planners become, you know,

1	senior planners. They're going to be the ones that are
2	going to be building this stuff out, not me, but,
3	hopefully, I will have left them with something that is
4	roadmap into, you know, gives them the flexibility of
5	maintaining these procurement goals that the State has set
6	out for us.
7	COMMISSIONER BYRON: Thank you.
8	MR. JOHNSON: Any more questions or comments?
9	Thank you.
10	COMMISSIONER BYRON: Whoa. I'm sure we can
11	solicit a few more comments. I'm really pleased that the,
12	we do have some investor owned utilities that are still
13	here. I was hoping that PG&E might be willing to make
14	some comments or questions, either ask you some questions
15	or provide some comments. Any possibility of that?
16	MR. JOHNSON: Jon?
17	MR. THALMAN: Thank you for volunteering me.
18	COMMISSIONER BYRON: Yes, thanks for
19	volunteering.
20	MR. THALMAN: Sure. Usually, he's not this
21	quiet. Jon Eric Thalman, PG&E. Roger, the question that
22	comes to my mind while I was reading through your
23	questions is you posed a question should the Energy
24	Commission file for a corridor designation if utilities do
25	Inot? Maybe I'm more curious what scenario you might be

thinking of there and, if so, what would be the value of having a corridor designated without any interest from utilities?

MR. JOHNSON: Well, I wasn't thinking it wasn't in the interest of (inaudible). I guess, I was thinking that if we came up with the top segment that would qualify for a designation, it would be the, you know, best thing for California, what if the utility didn't care to file an application? It didn't see the value of that? So would the Commission then on its own motion take that through designation and make it available in the future. That was the question.

MR. THALMAN: Okay, so then, the follow-up is and Pat touched on this some but if a utility just, from the utilities perspective, you might decide, we don't need to do that. The Energy Commission's done that and it's waiting for when we need it. Is that a, is that viewed as an advantage for the State because from a public standpoint, corridors have been designated and set-up? Because then, the potential, the potential here is that events change, variables change and ten, fifteen years from now, there's a need that, where a segment that was designated, a corridor designation previously now has some serious disadvantages but yet, it is designated that and to build on in a different area now than up to about --

because not only do you have to go through the full process. You've got to prove why this non-designated corridor is better than the one that was designated. And if that's the truth, then you're still going to have an uphill battle.

MR. JOHNSON: But we're required to essentially re-evaluate all designated corridors at least once every ten years.

MR. THALMAN: Okay.

MR. JOHNSON: To see if it should remain designated. We're hoping that we don't have to essentially carry the water and do this, you know. Since we're dealing with the State's situation, the way it is in our budget, whoever designates the corridor pays for all the process and it's fully reimbursable so it won't be inexpensive to, you know, essentially pay for all the cities and counties and anybody else that needs to participate for them to designate a process.

But, to answer your question, I think it would be an advantage to the State to have that corridor designated because we believe that it's important for their reliability of the State and to meet our energy goals and our, essentially, especially our renewable energy goals and I guess we want to see that designated and hope whatever, maybe, essentially expedite and improve

the permitting process when it happened.

MR. THALMAN: PG&E thinks this is a good idea and, just, you know, we like the idea of being able to designate corridors. We don't anticipate a case where the State would have to do that without utilities doing so. I was just curious, maybe what scenario you were thinking of.

MR. JOHNSON: I'm so glad to hear that.

COMMISSIONER BYRON: If I may? PG&E, I believe, participated in our May 4<sup>th</sup> workshop and we did hear from them on this as well. And I think we've got favorable support from PG&E in particular and I think some other investor owned utilities as well. We have staffing limitations. In fact, as Mr. Johnson indicated, those may become more severe as these sweeps begin to take place. And we've anticipated that the value in this since the legislation's passed. We've developed regulations around this but yet, we've not seen corridor designation.

You raised a good point. We have not seen applications for corridor designation. You raised a good point. It's kind of like why would you proceed at this point if we, myself, apply. Resources being what they were, if I'm doing my math correctly, we could do about two, you said, simultaneously? We could do about four, if someone else was doing the applying because there is -- I

don't need to speak for staff on this -- because there is
obviously time and effort involved in these applications.

We're not seeing a movement in the interest there yet.

I'm just wondering if publicly we're hearing one thing but privately, there's another restriction that's going on as
to why, why the investor owned are not moving forward with the applications at this point?

MR. JOHNSON: There aren't any that I'm aware of. I think it's more of and Pat alluded to this that we're still trying to figure out how all this fits into the project plans. When is the most appropriate time from the corporate, the company standpoint to go ahead and apply for corridor designation?

We see the advantage to it at the time. I mean, it's more an issue of time.

COMMISSIONER BYRON: Yeah. And I've always struggled with the limited advantages associated with it and like you say, timing and the length of time it takes. Things change. We know that Southern California has dropped its Palo Verdes (inaudible) to one, two, continuing through Arizona, something they worked down for an order of, I'll say decades. But things change. So there is an application resources here that used to be considered for these long term planning processes.

We really value the input of utilities on this

issue and welcome some more public or private input as to whether or not we're, we have the right tool here in front of us in the way of the corridor designation has been given to us by legislation.

2.1

So, thank you very much and I would solicit any other utilities that are present that would care to comment. I don't see any.

May I ask a question of Mr. Olsen? You're very kind when you came forward, Mr. Olsen. Is this the kind of process that RETI had in mind when you made your recommendation the other day? I'm sorry. But yeah, when the RETI Phase 2 report recommendation is CEC designate new corridors beyond those now established in coordination with others. Does the RETI process envision that this, do the RETI stakeholders understand the length of time that's involved in this corridor designation process?

MR. OLSEN: I don't know because we haven't talked about this specifically in the steering committee so I'm not sure that all of the members of the steering committee are aware of the length of time involved.

The feeling of the RETI steering committee is, as Pat Arons expressed, is to preserve the long term options for, that would make it possible to develop transmission projects in the future. So I think as the RETI stakeholders put this recommendation together in this

draft report, it was looking beyond not just the initial projects in the conceptual plan but we're looking longer term, thinking about the needs of the State, of beyond 2020.

COMMISSIONER BYRON: If we go with Mr. Johnson's notion that this process really applies to things beyond at least 2015, should we be concentrating on just delivery? Should we be thinking more in terms of the delivery lines, the higher value lines as opposed to foundation and collectors? Should we do the two delivery lines first?

MR. OLSEN: Well, certainly, the conceptual plan makes the case that there are at least regrets upgrades and they do carry, all those lines carry a lot of renewable energy. So that would certainly argue for giving priority to those lines.

But as I also pointed out, there are several others that also could be excellent projects that access considerable renewable energy and given that you are subject, of course, to staff, staffing constraints and the mechanics of being able to designate these corridors, there are several others.

But, again, I would encourage a longer term view. The projects that have been identified today, I think the proponents are prepared to apply and forward

permits for those projects now without necessarily having the benefits of corridor designation. But as we think about longer term goals, having corridors identified, that I mean, the benefit really comes from having corridors available for projects that have not been well defined at the moment. So, again, it's the idea of preserving the option of having rights-of-way available in the future.

COMMISSIONER BYRON: And you used a time frame

COMMISSIONER BYRON: And you used a time frame beyond 2020?

MR. OLSEN: Correct. Yes.

COMMISSIONER BYRON: Well, any other questions or comments for Roger? I'm reluctant to let Mr. Johnson go as you can see. Please? Ms. Mills, welcome back. We just like to (inaudible) the first commentor and you may be the last.

MS. MILLS: Okay, first and last. Great. I guess, I just, with respect to the corridor designation process, we were active in the legislation and then, later, as the Energy Commission adopted the regulations, because of our concern about the impact on the resources and the landowners that own those resources and many of the issues that we're facing with respect to renewable generation and transmission and delivery has a larger impact on resources.

And I guess, as I was listening to the

discussion about what the purpose of the corridors would be, and we think that it would be very important to have in mind exactly what the, what you were trying to stir with that transmission corridor designation and being sure that it was something that there really was a project for out there or we don't have enough land resources in the State to just identify a number of them just in the off-chance that there's going to be needed transmission down the road.

2.1

It needs to be very specific because many times, there are varying needs for the area based on what the genesis of what the transmission is whether it's from reliability or renewable generation or to connect with something else. So, I would think that you need to be fairly, have a fairly good idea about what basically needs to be stirred.

COMMISSIONER BYRON: Well, you sound like me.

You're holding out for space pace generation and wireless transmission.

MS. MILLS: I'm not quite that idealistic.

COMMISSIONER BYRON: But my point is that not, these aren't random undertakings. We are trying to look out a lot further than just 2020. I think you characterized it correctly. As I look at the maps and see the land use demand, there's not much opportunities left

1	now let alone maybe 30 years from now.
2	MS. MILLS: Right, and so there really isn't an
3	option to just carve out various, in the hopes that, in
4	hopes that there's going to be an ability to connect
5	places. I think that toward these types of designations,
6	there's going to have to be a fairly specific idea of what
7	the transmission is needed for based on what all these
8	lines, same as there were in the RETI report. I think
9	there's plenty out there. I think there's a lot of
10	transmissions planned for out there already.
11	COMMISSIONER BYRON: Well, those aren't planned,
12	of course. Those are potential.
13	MS. MILLS: Well, I know but there in the
14	planning process, if you will. So there is kind of a walk
15	out there already. Thank you.
16	COMMISSIONER BYRON: Thank you. Do we open it
17	up to Webex? Is that what you'd like to do?
18	MS. GRAU: I've just taken everybody off of
19	mute.
20	COMMISSIONER BYRON: If there's anyone on Webex
21	that has a question, now is the time. Please identify
22	yourself. We can hear them but no questions.
23	MS. GRAU: No.
24	COMMISSIONER BYRON: Okay. All right, Mr.
25	Johnson, you're off the hook.

1 MR. JOHNSON: Thank you, Commissioner. 2 MS. GRAU: Thank you, Roger. That ends the 3 formal part of the workshop. We do now have a general 4 public comment period if there is anyone first on the dais 5 then in the room, then on Webex would like to make a 6 comment about anything they've heard all day. So to start 7 with the Commissioners? Okay. 8 COMMISSIONER BOYD: I have some closing 9 comments. Okay. We'll wait. Okay. We'll get 10 MS. GRAU: to that then. Is there anyone in the room who would like 11 12 to make any general comment on anything from today? Okay, 13 and finally, I assume, there's no one on Webex who wants to make any general comment on anything today? Okay. 14 False alarm. All right, okay. Thank you very much then. 15 16 I'll turn it back to you for closing comments. COMMISSIONER BYRON: Mr. Boyd, would you like to 17 make any comments? 18 COMMISSIONER BOYD: Just a couple of comments 19 and it might fit in the last discussion more than in 20 closing but the last, Roger's issue brought up a lot of 21 interesting questions and all the questions about us 22 unilaterally designating corridors are an area of concern. 23 And I agree with you. I don't think anything in the 24

process that's been demonstrated here all day today, in

25

the processes, are in the least bit capricious. And I don't think prior to this time, we've had any discussion that I've been involved in about just what (inaudible) designating corridors because people don't step up. But as indicated in the last discussion, there are a lot of things right on the edge.

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

And the next comment's a tough thing to say in the middle of a recession but for the past, Lord knows how many years, the California line as being gobbled up, as I love to say, the last few years, in the middle of nowhere, anywhere left in California and there is a fear and concern about the future and there being land available to facilitate transmission and people having to go through the condemnation process which is painful, expensive, etcetera. So this is something that deserves a lot of, I guess, additional discussion as, you know, what is our future and how are we going to deal with it. And I guess, I predicate some of this concern on my experience in four decades in government with the incredibly poor land use planning this State, well, actually, the local government and the State have engaged in which leaves us continually with problems.

And I don't want to get into my feelings about Prop 13 but the dilemma of local governments financing themselves and their for developing every square inch of

land etcetera, etcetera, leaves us with quite a dilemma to So earlier in the day, there was some wrestle with. references to seeking the opportunity with all these people now coming together and realizing that they should be working together to solve even other problems. The collusion that you and I have talked about of once through cooling, air pollution rules, light emission offsets, climate change, AB32, the renewable goals, the goals we have for facilitating distributing generation, etcetera, Those really are to be all considered once in etcetera. making all these decisions but that's, that's seems bigger than we're capable of taking, what we're chewing and swallowing but we are moving in that direction and we just have to deal with some of these issues.

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

So I was very pleased with what I heard today and all those who were a little critical this morning, I was just plain grumpy about how many years it's taking to get to this point where we're at today which is really way behind the curve of what would have been the best thing to do but, okay, the glass is half full. Let's look forward. Let's make the best of the process but we are running out of time and so we are, you know, as a society, going to have to deal with this and we can't argue too too much longer about process or the exact process or let's wait a little longer in case, you know, the law, and a great

belief in technology, in case your wireless feature comes along. In any event, this has been very interesting and educational for me and I want to encourage everybody to keep up the good work and move it along as rapidly as we can lest we're totally locked out of simple solutions in the future. Thank you.

COMMISSIONER BYRON: Thank you, Commissioner.

I'd like to end on a positive note as well. I'm

optimistic. I'm very optimistic about some of the things

that I heard here today. I kudos to whatever the acronym

is, the California Joint Transmission Planning group. I

think this is a great step forward. When I learned about

it earlier this week, I was very pleased as these are

important constituents to a transmission planning process.

These are the folks that serve customers. They're

concerned about reliability. They want to meet the

growing demand going forward. That's extremely important

and for them to be talking about joint projects and the

other many benefits that come from improved communication

amongst all the transmission planners in the State, that's

very good.

I think we are missing some key stakeholders in that process. I don't know yet fully what it means to be a FERC 890 open and transparent process but if, indeed, it is, such that constituents, the public constituents can

participate and as Ms. O'Shea indicates, understand the vocabulary of what everybody's talking about, I think that can work very well.

I also noted that there is this June 18<sup>th</sup> workshop that will be taking place this week in Victorville and a few others that will follow. I applaud RETI's effort to get out and meet with local electives and public where they will be impacted by all this.

It's, you know, and when we say RETI, you know, we're talking about the stakeholders that are involved, the 29 stakeholders. That meeting will take place in the Victorville City Hall at ten o'clock. I plan to be there. And I also plan to remain in the afternoon when we, the Energy Commission is holding a desert renewable energy conservation plan workshop in accordance with the governor's executive order.

So, I can't, I'm trying to think, I always, I don't think there's anything that has a lead time for planning and approval and construction like transmission, siting this. And barring the space pace generation and wireless transmission, we must proceed with this process. The floor is 33% percent by 2020. We need to make sure we can have open for more. We're still seeing there's a tremendous downturn in demand due to the economic crisis that this state is in. We're still going to see load

growth return at the 1% to 1.2% percent kind of annual growth and that's what we call the energy efficiency all in. It's just increasing population more than anything else that's driving that.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

2.1

22

23

24

25

So, we do have land use constraints. We do have issues that we're going to have to deal with and I think the RETI results have proven to be very valuable. that everybody's using the results but there's a certain reluctance to proceed with additional effort there. And we're willing to talk about that some more. We're not interested in creating that, another transmission planning process or bureaucracy that gobbles up the limited resources that there are available to do these things. But I think the involvement in the environmental community and the public and other stakeholders that aren't necessarily represented here today is extremely important. In fact, I'd say that the environmental organization involved is key in order to give them something they'd be for instead of to always have to be put in the position of being against the transmission side.

I think my commitment that RETI, if it's going to continue in any way, has to add value to this process. As I said, we're not interested in creating additional bureaucracy and organizations. And I think, thus far, it has added value. There are a lot of folks using results.

And, if I could, as much as I am in favor of the joint transmission planning group and have my complete support, it's still essential to California energy policy to have a voice in transmission planning. There's many policies that we're trying to put forward here, not just reliability, not just serving customers' needs. There's environmental considerations, our goals for renewables and as Commissioner Boyd indicated, there are others around once through cooling and emission credits that have to be addressed as well. My hope is that the CTPG sees the value of the RETI in that process and will request it in future years.

I'll end with this. We are all motivated to move forward with renewables. I've been in the generation business for 35 years. This is the holy grail of what we want to do in our industry. Except for the issues like land use and impact on the environment and little things like perhaps, higher costs, everyone wants to move forward with renewables and we need to do it in such a way that provides some regulatory certainty for the development to be able to take place.

So, we move forward to your written comments.

I'm sure Jane will tell us when those are due. I'd like to, again, thank all of the folks that were here today.

Some already had to leave. I found this to be very

valuable and I'm sure that Commissioner Boyd and I will derive much good from this workshop today in terms of recommendations that we will make going forward in the integrated energy policy department.

Ms. Grau, comments are due?

MS. GRAU: Comments are due June 24<sup>th</sup>.

COMMISSIONER BYRON: And we welcome, we would ask if you could meet that deadline. There was a request to delay this workshop and, unfortunately, we could not comply with delaying it because we're on a difficult schedule, a tight schedule in order to complete this work for our legislator requirement where it's going to be (inaudible). Ms. Grau, you have something?

MS. GRAU: Yes, I'm just going to say what, we're working backward from November 4<sup>th</sup> adoption date for the 2009 Strategic Transmission Investment Plan so if you work backward from that, on September 3<sup>rd</sup> we have the joint IPER siting committee hearing on the committee draft document and then, in mid-October, after the written comment period for that, we would release the committee final leading them to the adoption on November 4<sup>th</sup>. So, we all have our work cut out for us this summer and, yes, we appreciate timely comments so that we can make this committee draft document the best it can be.

COMMISSIONER BYRON: Okay, my thanks for the

	staff for getting together a good workshop on short
2	notice. Thank you all for being here. We'll be
3	adjourned.
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	(Whereupon, at 3:22 p.m. the workshop adjourned
16	00
17	
18	
19	
20	
21	
22	
23	
24 25	
ا د⊿	II

1	CERTIFICATE OF REPORTER
2	
3	
4	I, MARY CLARK, a certified electronic reporter,
5	do hereby certify that I am a disinterested person herein;
6	that I recorded the foregoing California Energy Commission
7	Workshop, dated June 15, 2009; that it was thereafter
8	transcribed into typewriting.
9	I further certify that I am not of counsel or
10	attorney for any of the parties to said meeting, nor in
11	any way interested in the outcome of said meeting.
12	IN WITNESS WHEREOF, I have hereunto set my hand
13	this 9th day of June, 2009.
14	
15	
16	
17	
18	MARY CLARK, CERT*D-214
19	California Reporting LLC
20	
21	
22	
23	
24	