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BEFORE THE

CALIFORNIA CUSTOMER CHOICE EN BANC

In the Matter of: )
) Docket No. 18-IEPR-01
2018 Integrated Energy Policy )
Report (2018 IEPR Update) )
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EN BANC HEARING

OF THE CALIFORNIA PUBLIC UTILITIES COMMISSION

AND THE

CALIFORNIA ENERGY COMMISSION

DRAFT GAP ANALYSIS/CHOICE ACTION PLAN

CALIFORNIA STATE CAPITOL

ROOM 4203

SACRAMENTO, CALIFORNIA

MONDAY, OCTOBER 29, 2018

10:01 A.M.

Reported by:
Susan Palmer, CER-124
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COMMISSION EN BANC ON THE DRAFT GAP ANALYSIS

Michael Picker, President, California Public Utilities Commission

Robert B. Weisenmiller, Chair, California Energy Commission

Andrew McAllister, Commissioner, California Energy Commission

David Hochschild, Commissioner, California Energy Commission

Karen Douglas, Commissioner, California Energy Commission

Martha Guzman-Aceves, Commissioner, California Public Utilities Commission

Clifford Rechtschaffen, Commissioner, California Public Utilities Commission

Liane M. Randolph, Commissioner, California Public Utilities Commission

Carla J. Peterman, Commissioner, California Public Utilities Commission

PRESENTERS

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Nidhi Thakar, Chief of Staff to CPUC President Picker

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Ralph Cavanagh, Senior Attorney, Natural Resources Defense Council

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LSE and CONSUMER RESPONSE PANELISTS

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Shalini Swaroop, Director of Regulatory and Legislative Policy, Marin Clean Energy

Mary Lynch, Director, Wholesale Market Development, Constellation Energy (an Exelon Company)

Matthew Freedman, Staff Attorney, The Utility Reform Network

STAKEHOLDER RESPONSE PANELISTS

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Matt Vespa, Staff Attorney, Earthjustice

Marc Joseph, Attorney, Adams, Broadwall, Joseph & Cardozo

Elise Hunter, Policy and Regulatory Affairs Director, Grid Alternatives

Jith Meganathan, Attorney, Law Offices of Jith Meganathan, P.C.

PUBLIC COMMENT

Melissa Brandt, Senior Director of Public Affairs and Deputy General Counsel, East Bay Community Energy
# AGENDA

<table>
<thead>
<tr>
<th>Purpose of the Day &amp; Safety Announcement</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diane Fellman, CPUC</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Welcome</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>President Michael Picker</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opening Remarks</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEC Chair Robert B. Weisenmiller</td>
<td>8</td>
</tr>
<tr>
<td>CPUC Commissioner Liane M. Randolph</td>
<td>-</td>
</tr>
<tr>
<td>CEC Commissioner David Hochschild</td>
<td>12</td>
</tr>
<tr>
<td>CPUC Commissioner Clifford Rechtschaffen</td>
<td>12</td>
</tr>
<tr>
<td>CPUC Commissioner Martha Guzman Aceves</td>
<td>8</td>
</tr>
<tr>
<td>CEC Commissioner Andrew McAllister</td>
<td>10</td>
</tr>
<tr>
<td>CPUC Commissioner Carla Peterman</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Response from the Hoc Advisory Committee</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction: Diane Fellman</td>
<td>13</td>
</tr>
<tr>
<td>Ralph Cavanagh, Senior Attorney, Natural</td>
<td>16</td>
</tr>
<tr>
<td>Resources Defense Council</td>
<td></td>
</tr>
<tr>
<td>Pat Wood III, Principal, Wood3 Resources</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LSE and Consumer Response</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderator: Diane Fellman</td>
<td>66</td>
</tr>
<tr>
<td>IOU: Caroline Choi, SCE</td>
<td>96</td>
</tr>
<tr>
<td>CCA: Shalini Swaroop, MCE</td>
<td>101</td>
</tr>
<tr>
<td>ESP: Mary Lynch, Constellation Energy</td>
<td>106</td>
</tr>
<tr>
<td>CONSUMER GROUP: Matt Freedman, TURN</td>
<td>110</td>
</tr>
</tbody>
</table>
AENDA (Cont.)

Stakeholder Response Panel

Customer: Emily Watt, Microsoft Corporation 156, 162
Environmental: Matt Vesp, Earthjustice 156
Labor: Marc Joseph, Adams, Broadwell, Joseph 166 & Cardozo
Consumer Protection (Rooftop Solar):
   Elise Hunter, Grid Alternatives 175
   Jith Meganathan, Law Offices of Jith Meganathan

Public Comment 193
Adjournment 198
Reporter's Certificate 199
Transcriber's Certificate 200
SACRAMENTO, CALIFORNIA, MONDAY, OCTOBER 19, 2018

CPUC PRESIDENT PICKER: Good morning. I want to thank you for joining us at this En Banc for the Customer Choice Panel.

Before we begin I'd like to take a moment to remember the victims of the shootings at Tree of Life Synagogue in Pittsburgh today. Please join me.

(Moment of silence)

CPUC PRESIDENT PICKER: Thank you.

So this is one of several different meetings where we have considered a whole series of challenges that California is wrestling with as we see a formally centralized or recentralized electricity industry that is once again beginning to disaggregate into a variety of different choices that customers or aggregators can make about how electricity is served to California.

These choices range from three different kinds of providers, the incumbent utilities, Direct Access providers, and the newly emerging Clean Community Aggregators established by local governments, to a range of technologies extending back in the past to
combine heat and power, but now with rooftop solar, battery storage, technologies available for the Small Generator Incentive Program, and of course the old staple of energy efficiency where people can actually have a hand in meeting their electrical needs without -- or with the aid of a central entity.

As we continue to see these different patterns of people's choice of electricity service and electricity use emerge, of course it puts a lot of stress on a process that is heavily dependent on centralized decision making.

So we've heard from people talking about the challenges. We have looked at what people -- what's been happening in other states. Here, we bring together a significant amount of staff work and comment from a variety of different parties as to what the gaps are that we'll face from as we move from a centralized process to a decentralized process.

So with me are some of my fellow Public Utilities Commission members. Cliff Rechtschaffen will join us shortly. Bob Weisenmiller and members of the California Energy Commission, we've been partners in dealing with these issues, so I'm going to turn
it over both to my colleagues from the CPUC but also from the CEC to make some introductory remarks before we move into our panels.

So, Bob.

CEC CHAIR WEISENMILLER: Good morning. As President Picker indicated, this is part of a series of workshops we've had. I appreciate the staff paper that's been put out to help frame the issues. I think basically the notion is to identify where the gaps are. Staff has laid out their identification of gaps in some approaches, and this is our chance to hear back from you on other potential approaches. So, again, thanks for your participation today.

CPUC PRESIDENT PICKER: So Commissioners.

CPUC COMMISSIONER GUZMAN ACEVES: Thank you. I wanted to highlight a couple of the things that are in the Gap Analysis and Action Plan. I just come from a place where I don't fundamentally believe that markets and competition solve everything. I think what I've seen in the past year and a half is some considerable abuse within the elderly, the non-English-speaking, and the poor customers in our different territories where the marketing of competition has really led to abuse for these
customers and ultimately higher bills.

And I want to really see that some of these Gap Analysis recommendations and Action Plans really do prioritize consumer protections, which I am particularly excited about.

And, finally, I think it provides an overall framework for this continued dialogue, so I look forward to hearing from all of you in how we can fill these gaps.

CPUC COMMISSIONER PETERMAN: Good morning. Good to see all of you today. It seemed just like yesterday that we were all here together around Halloween time. And I want to thank everyone for their continued efforts on these issues over the last year and throughout the last few years.

I'll just add to my colleagues' -- first of all, I'm Commissioner Peterman, the California Utilities Commission. Let me just add to my colleagues' comments that I greatly appreciate the diligence, the deliberateness, the discipline with which staff has approached this issue and this analysis. There are a lot of different issues entangled here and I think a challenge for the Commission has been to figure out where do we start. And by starting with putting down experiences from other states and
countries, identifying how those experiences align with what we're doing, I think is a very pragmatic approach.

There is a lot of good work within this Gap Analysis, a lot of particular highlighting of what further needs analysis, and so we'd I'd like to better understand is get feedback from stakeholders: Do you agree with the areas that need further analysis, on what time line do we need to do this work, are there certain efforts that should be prioritized over others or are precursors for making good decisions as we go forward.

We know customers are interested in choice and we have responsibilities as regulators, as a state to make sure we set up a framework in which that choice can be exercised in a sustainable manner, and so I look forward to the discussion today about how to move that agenda along. Thank you.

CEC COMMISSIONER MCALLISTER: Good morning, everybody. I'm Andrew McAllister, Commissioner at the Energy Commission. I want to also just give kudos staff and Diane and crew for putting together a really clear report. I agree that sort of presenting these issues in a clear and sort of fact-finding and factual way, in a rigorous
structure like this report does, I think is really helpful, as we separate the issues where appropriate and link them up where needed.

You know we're in this distributed-energy world and we have to de-carbonize. And, you know, in particular, there are lots of great issues in here that we will work through during the course of the day and subsequently.

You know distributed means highly disaggregated decision making across the state, and so I'm really interested in the kinds of policy imperatives that we can -- the policy directions we can take to enhance that. So part of this choice discussion really gets to how do we inform markets to allow that to happen and then shore up where needed. I agree with Commissioner Guzman Aceves on that point.

And, in particular, a few of the things that are here that I'm particularly interested in are demand response and efficiency, and making those all they can be. Certainly in the CCA context that's, I think, an open question about how we do that. Rate transparency and the ratemaking process I think becomes even more critical, and then data access to allow markets to function and allow policymakers to
understand what's going on in a much more granular and temporal way.

So all that in the context of de-carbonization, and I think those are the sort of mix of high-level key themes that we have to struggle with going forward, and I think this is a good sort of platform to have those discussions, so thanks.

CEC COMMISSIONER HOCHSCHILD:  Good morning.  I just want to say thank you to President Picker and Chair Weisenmiller, Diane, Nidhi, and the staff and stakeholders here.

And just as a point of privilege, to note that Commissioner Peterman announced she's stepping down after a number of years both at the Public Utilities Commission and at the Energy Commission, I just wanted to give a round of applause for her service to the State.

(Applause)

CPUC PRESIDENT PICKER:  Commissioner Rechtschaffen, do you have anything you want to observe at this point?

CPUC COMMISSIONER RECHTSCHAFFEN:  No.  I forfeited my ability to talk by coming late.

(Laughter)

CPUC PRESIDENT PICKER:  So I want to just thank,
and I will probably thank them again, the staff, core staff who really helped to make this work: Diane Fellman, who has remained the manager of this program through the last six months; Nidhi Thakar, and Rohimah Moly from my staff; and then a number of people throughout the Energy Division of the California Utilities Commission. I don't know exactly who has been supplying us with financers that we have been getting from the California Energy Commission, but I will thank Chair Weisenmiller on behalf of the folks here today.

Our first panel is a group of stalwart -- excuse me. Oh, you're going to do the safety briefing? Okay, great.

MS. FELLMAN: Excuse me. This is Diane Fellman. And thank you so much, Commissioners, for your opening remarks and your appreciation. I want to underscore that today is for the -- dedicated to the response by the stakeholders to the Gap Analysis and for the Commissioners to have an opportunity for direct conversation with the stakeholders.

A couple of administrative matters. First of all, we are not going to do lengthy presentations except for me. I guess that's an author's
privilege, and hopefully it's very short. I will
do an overview of the Gap Analysis. Then we have
our Ad Hoc Committee followed by representatives
from all LSEs, and then a representative of
stakeholders including customer interests.

Each presenter will -- we have provided their
bios for you in writing. They're also posted
online for those who are watching, so we will not
have lengthy introductions either.

I also want to say that based on the advice of
our Legal Division and ALJ Division, that
participants in the public comments can make
statements regarding specific proceedings.
However, this is not a place for advocacy. If
specific proceedings are mentioned, it is
considered an ex parte contact legally, however it
is not required to be reported because this is a
publicly-noticed meeting and all Commissioners are
here at the same time.

Finally, I want to state that we will be taking
public comments at the end of the day, and if you
are interested there is a table in the back with
our Public Adviser to sign up. And those will
start after the panels.

I will now do the safety briefing which is: If
there is an emergency, -- and we only too recently have seen one, -- there are doors marked "Exit," please follow the Exit signs out and gather on the Capitol Lawn.

I will now turn it over to President Picker.

Thank you for changing your name cards. And I -- you were starting to introduce the Ad Hoc Panel, so, --

CPUC PRESIDENT PICKER: I was.

MS. FELLMAN: -- Ralph and Pat, can you please step up.

CPUC PRESIDENT PICKER: So three individuals who have had a long history of working within regulated and deregulated markets in the U.S. have been our advisers throughout this process, Ralph Cavanagh, Patrick -- Pat Woods, and Melanie Kenderdine. Melanie Kenderdine was with the Secretary of Energy and is currently a consultant. Mr. Wood was the chair of the Texas Commission when they deregulated the electricity markets, and then moved on to sit on FERC and watch the failure of California's deregulated markets. And then Ralph Cavanagh is the architect of our deregulation, as I'm sure he'll explain to you in great detail right now.

So any thoughts on our Gap Analysis?
MS. FELLMAN: Ralph.

MR. CAVANAGH: Commissioners, I'm Ralph Cavanagh from the National Resources Defense Council, although for today's purposes I'm principally here as your historical memory.

I think we should acknowledge at the outset that the deregulation process of which Chairman Picker has just generously granted me full authorship, largely occurred in this room. This is the place where the Joint Committee of the Assembly and Senate met in what is now in some quarters called the death march to develop a restructuring plan for the California electricity sector.

Today we will aim to do better. The original restructuring plan, of which I emphatically was not the principal author, emerged with no gap analysis, because to every question about -- of concern -- about the uncertainties of the future that was described by the legislation in 1996, there was always one answer, which appears in several California PUC decisions, which is that the genius of the marketplace will suffice.

The genius of the marketplace was insufficient. And for all of you as we look forward, and the Gap Analysis repeatedly underscores this, the question
is how are we not -- that we're going to dispense with the genius of the marketplace, which has certainly a contribution to make, but how we will make sure that its generally short-term results and conclusions are supplemented by one tool in particular that reverberates through the Gap Analysis and through California's recent history, which is long-term competitive resource procurement, which we have needed to ensure resource adequacy, meet environmental goals, ensure affordability. It surfaces repeatedly as a tool which we have conducted, for the most part, through our electricity sector and overwhelmingly through the largest investor-owned utilities in California.

We have -- we are moving now to what some call a fragmented, what others call a decentralized structure of procurement. And an overriding question, I submit, for all of you, Commissioner Peterman asked for some priorities, is to determine how -- under what framework that can continue to occur. Pages 46 to 51 of the Gap Analysis focus on this with particularity. And, essentially, there are two options put forward, one of which is that you could handle the decentralization, fragmentation, and concerns associated with its
ability to handle long-term procurement by
establishing a centralized procurement entity,
which would undertake those long-term commitments
and spread the costs across the entire system.
That is certainly an option. But there will be, I
submit to you all of you, greater enthusiasm among
almost everyone involved in the process for the
second option, which is to see if we can find ways
of encouraging partnership-based, voluntary, joint
procurement among multiple entities, Community
Choice Aggregators, Direct Access providers,
Investor Owned Utilities.

Much of the architecture for the decentralized --
for the de-carbonized California economy is going
to acquire the ability to undertake that
coordination not as an alternative to the small-
scale, disbursed, decentralized decisions that
Chairman Picker was calling out but as an important
supplement.

It isn't small-scale distributed resources versus
large-scale, integrated procurement. It's both.
It's coordination. It's partnerships. It's moving
out of the generally adversarial mode that has
classified the relationship of many of these
institutions in the recent past. And I submit to
you all of you that a core challenge of today is to press all of the participants, including emphatically me, on what we can do to encourage more of that as quickly as possible. This is in part an institutional challenge because we don't really have a structure in place that encourages that kind of cooperation and partnership.

Now we have the analytical underpinnings, the combination of the Integrated Energy Policy Report of the California Energy Commission, the Integrated Resource Planning Process of the California PUC. We have the means to identify the most promising options for coordinated procurement to help us with decentralization, affordability, reliability; but we've got to do more to encourage people to take advantage of those analytical findings. We've got to figure out ways to have people working effectively together. Some parties have begun to address this. Marin Clean Energy has in its comments, for example, a vision of regular meetings, an annual En Banc, a way of bringing people together to talk about partnership opportunities, but I think we're going to have to do a lot more.

This feels to me like a creative moment like that
that, for instance, produced the Electric Power Research Institute, now almost 50 years ago, a coordinated voluntary effort within the electricity sector; or the Northwest Energy Efficiency Alliance of two decades ago, again disparate parties coming together to figure out how to do joint procurement, to work together, to invest together. This is a bigger challenge than either of those, but it is not beyond our capacity. Press the parties following Pat and me on what their thoughts are about how to do more of that more quickly, how you can encourage it, and how we can -- because without it, what I think the Gap Analysis shows very clearly, what I am here to underscore, is that we will be right back where we were 22 years ago in this room when there was a magical answer to avoid having to worry about this kind of thing that turned out not to work. Let's not do that again.

MR. WOOD: So as Chairman -- President Picker mentioned, I took office at FERC in kind of the throes of the California Energy Crisis and it was my job to kind of clean up the mess from the federal angle and work with the State. And it's ironic to be in the room named for John Burton because he was one of the first legislators I met,
and he was a breath of fresh -- well, a breath of air.

(Applause)

MR. WOOD: It was — he was a helluva legislator and really set the tone. Between him and Hertzberg, it was a two -- it was kind of an interesting pair of people to get to work with. But, you know, the market design here, while obviously very collaborative, kind of missed a fundamental point and it was what kind of — if you are going to trust a market, which that did and which we have done across the county now since -- in many other contexts, if you're going to trust the market you've got to think like an investor would think that in that market.

As regulators we have done that for a hundred years, thinking like the investors in the stocks of PG&E and Edison and Sempra. What do they think, what did they need, and then balance that against the impact on customers. And so that balancing act just takes on a different wrinkle, but we're all good at that, so we just have to think what is it that an investor in generation or in energy efficiency or renewable energy, all of the above, need in the context of going forward, and that was
missing with the CalPX and the Cal ISO separate entity plans and all the details that FERC and others have written reports on, but that resulted in an under supply of generation which led to -- you know, that market design really did create an opportunity for manipulation to happen, which we were -- it was sad to find so much of that out here, led to misallocation of natural gas coming into the state, just a panoply of things that I will be happy to move on from, but again the markets don't work if you don't trust them and if you don't actually set them up so that they're transparent and self-enforcing.

And so when you think about the issues that Ralph -- and I agree with Ralph on that, I think moving from a centralize procurement model which has worked good, that was the response, and Governor Davis in the waning hours of the Clinton Administration did line up supplies for -- under contracts with suppliers to get through the Energy Crisis. And then a new team came onboard, we kind of changed the market, put a price cap in and let kind of everybody settle down. It's been almost 20 years. And that mindset of having the long-term contracts has now been codified in law. I wish it
hadn't been. I think the world needs more flexibility than to say 65 percent of the things need to be ten years or longer, but you've got that in your law and you've got to work around that.

I think that the new power system additions that will be needed, can be done, certainly consistent with your de-carbonization goals. I think the feedback I've gotten orally from people, advocates for more open market, have told me that the paper was a little dark on the thought that you could implement de-carbonization by means of a market. That could not be farther from the truth.

If you tell people what the rules are -- this has been true in every market I've been, both power, gas, telecom, railroad -- oh, transportation even back in that day -- when you tell people what the rules are and then you sit back and you enforce those rules equally on everybody, you will get the outcomes you desire. So if you say you want to get 80 percent renewable energy by this date and you set a path to get there, let the market participants do that in the most cost-effective way. I'm not so sure that lining that up with large contracts for big amounts of renewable energy for 20 years at the very front end of that is cost-
effective. I think that's probably part of the reason the rates here are higher than they are elsewhere or higher than they used to be, is you bought the early contracts, you paid the -- you knew, the Tesla Model S price when everybody was waiting for the Tesla Model 3.

So I mean that's kind of what has gone on, but that's -- moving on, level playing field, that's one of the trite words you hate to hear. I hated to hear it too, but when you're thinking about the interplay of provide a last resort, of CCAs, of Direct Access, of what role the IOUs play going forward, whatever you do, and I'm not even opposed to the IOUs, as we did in Texas, allowing them to continue to serve retail customers, with a competitive affiliate, but they have to take terms, rates -- terms and conditions from the wires company just the same as everybody else. So whether you have a kind of market like we've got now that's kind of semi-disaggregated or not, as long as all the players on the customer-facing side are subject to the same customer-protection rules, whether you're SCE that's been around forever or you're a new entity that's in here and you have passed the certificate requirements that the team
here at the Commission has approved are sufficient
to meet, you know, customer service standards in
the state, then let those laws apply evenly to
everybody, big and small. I think that has been,
in my experience, the most effective way to send
out a great big welcome mat, to say that you're
going to procure power the same way as they can
procure power. We're going to put the same
obligation of this many renewable energy credits,
we're going to track them the same way, we're going
to ensure compliance with the de-carbonization
goals more broadly as does everybody else. So that
one -- it's not a one-size-fits-all, but it is --
it is a level playing field concept that I'm trying
to put out here.

You do want to get large, financially sound
players in the state, and they will come. They
came to my states. They have come to the states in
the east where the markets have been open. And,
finally, if you move to a larger Direct Access
model, I think since we last talked that the
Hertzberg bill did pass and kind of opened it up a
little bit and set the studies forth for you to do
more, to look at more, if that's inevitable and I
think honestly it is, then trying to graft some of
what Ralph said about how to meet the goals through a collaborative process, because those big, large, sophisticated people -- we'll hear from some of them today -- are good at understanding how to play and work with others. I've seen that elsewhere and it will work here as well.

And if you say we want to have this kind of portfolio going forward, those people will roll up their sleeves in the same room in the same way that they did not do last time this room was open. I don't know why that didn't happen the last time other than the fact that the incentives were not there, but if you make the incentives crystal clear, which is obvious from reading the original book and the gap analysis, that the incentives have been locked in by legislation and by all the regulatory action from both Commissions, it's very clear to anybody that wants to invest in the state what the rules are, but make it to where they can actually succeed, make it to where they can serve customers profitably and at good rates to the customer. And that can be done. There is a lot of -- fortunately, for all of us, with the lower cost of natural gas, the lower cost of wind and solar energy, the advances in storage, the advances in
Smart Metering that enable a lot more give-and-take, there is a lot of money on the table that can be shared between people that are investing and customers that are consuming. So I think it's a real ripe moment for us to think about that.

As a final thought, it hit me driving here today, and I stay with friend who lives here and he had an electric vehicle, how many electric vehicles there are here. And I looked at some carb data that looked at the emissions across the California economy and how much of those relate to transportation. And I had a brief comment with President Picker a moment ago and, you know, he said people live pretty far from where they work. You know those kind of changes, when you think about getting from 80 percent to a 100 percent on renewables, you don't want to make it so expensive to consume electricity that we can't use electricity to solve the bigger problem. So that third leg of the stool with environment, reliability, is cost, and so if you -- again, my experience has been with a good market structure, you can get significant reductions in cost, as we've seen in my home state when you trust a market. So no difference from him on outcomes, I
just think the methods of getting there might be a little bit more different.

CPUC PRESIDENT PICKER: So let me just start with a couple questions.

And so, Mr. Cavanagh, I'm a belt-and-suspenders guy.

MR. CAVANAGH: Yup.

CPUC PRESIDENT PICKER: What happens if we don't get the early successes we need from cooperative actions between the entities? What do we -- how do we ensure that the resources are there, that we need to actually make sure that the grid stays to 60 cycles?

MR. CAVANAGH: Yup. So to underscore my entire agreement with that, what I hope you will do today is put a whole lot of constructive pressure on everybody who follows us: First, what are you going to do to deliver these results through cooperative procurement, because I think you're going to hear from people, 'We can do that, we want to do that,' but, yes, there better be a backstop. The backstop, I think, and this is -- this appears actually in the statement that I was allowed to insert at the beginning of the Green Book, none of you -- by the way, Melanie Kenderdine's statement
also needs careful attention, and she wrote that after a visit doing rural electrification work in parts of the world that don't have affordable and reliable electricity. And her equity emphasis I think also underscores your question.

So you're the backstop, you have authority to direct centralized procurement and to distribute the costs among all customers and to ensure that everyone using the grid pays their fair share. And you need to be credibly standing ready to use that authority. And then there will be pressure on all of us to show that you don't need to because we'll come up with something equally or more effective. But without that pressure, I worry that we will be back to 1996 where, remember, in this room all sorts of assurances were given about how people were going to rally together, the genius of the marketplace was going to create a better world, and that death march ended in tears.

CPUC PRESIDENT PICKER: Well, I think we already see some of the places where our joint authorities are a little bit weak. And I'll just point to the increasing number of parties who have sought waivers for their locally-constrained reliability area, resource adequacy requirements. And so it
does -- it concerns me that we're already at that point where we're not seeing people make the effort that they need to make. They're appealing to outside help and they're actually doing those things that are easy, pleasurable, and for which they get reward from their communities or their customers.

I think -- I'm worried that we're sort of already up against that, so I'm not so sure that I'm ready to abandon these protections as opposed to allowing people to maybe come up with some cooperative agreements and see whether or not they can actually make them work.

MR. CAVALANAGH: And I don't want you to retreat one iota from that skepticism. By the way, -- and, Pat, you should weigh in too -- but I should just say to the Commissioners I had no difficulty clearing my schedule for today because unaccountably the Texas PUC has not yet taken me up on my invitation to provide the same useful consulting services there that Commissioner Wood is graciously offering us here today.

MR. WOOD: The way to get -- there are two things that are tough. It's tough here to solve problems with infrastructure in a timely manner. So the
time line is longer here than it is back home, for example. So if you had a load pocket that was under served because you're shutting down a gas plant because of once-through cooling or what-have-you, it will take a while if you haven't done something in advance.

This is not the answer you want to hear, but money talks. And if people pay the price for the local issue and the local people that need to solve that problem locally, whether that be through wires infrastructure, which is a regulated issue, which comes clearly before you, or through a generation or a storage or an energy-efficiency solution, which are more competitive, that price signal needs to be sent. And so letting that be sent now rather than giving the waivers, I mean I don't know any of the specifics here, so I'm probably shooting somebody I love in the foot, you know you've got to pay the price for the under investment and it's got to be felt directly.

CPUC PRESIDENT PICKER: Questions or comments from others.

CPUC COMMISSIONER RECHTSCHAFFEN: Pat, just if you could elaborate, you said something to the effect make it so that customers can succeed, or I
just wanted to know other than greater flexibility
what specific recommendations you have to bring
that into effect?

MR. WOOD: Customers succeed on the overall --

CPUC COMMISSIONER RECHTSCHAFFEN: Well, I don't
know if you meant customers or investors, or that --
you had an overall --

MR. WOOD: The balance.

CPUC COMMISSIONER RECHTSCHAFFEN: -- guidance to
us. Make it so -- make it so --

MR. WOOD: Well, customers succeed by getting --

CPUC COMMISSIONER RECHTSCHAFFEN: I don't know if
it's customers. Maybe it was investors, but --

MR. WOOD: Well, I think let's take both real
quickly, I won't belabor it, but certainly customer
success is the price of service, quality of
service, and I think diversity of service. Some
people might want to have a fully green portfolio.
I mean this is, again, in a Direct Access
environment. You're going to have the grid power
be largely renewable portfolio anyway, so that
differentiator probably won't matter 20 years from
now, but today it does. People in my state, I get
a hundred percent green power. It actually is the
same price as a hundred percent grid power, which
is about 17 percent renewable overall.

So you know those kinds of things -- customer success can be defined by the customer. That's why really I have enjoyed us as the anointed regulators getting out of the way and letting people create their own deals. Smaller commercial and medium-sized commercial customers obviously want a lot more creativity, the ability to do multi-site billing. We heard that from one of the, I think, Walmart witness at our hearing back in May, the ability to do, you know, onsite solar but to spill over the excess, not worry about net metering but spill it over and be able to consume it at a facility across the state, what-have-you. Those kind of billing issues generally are all fundamentally about cost and cost management.

And I just think that the cost issue is one that we haven't -- it isn't a dominant screamer outer in the -- in the Gap Analysis or in the Green Book, but it should be. I think that, again as I mentioned, because the electricity, if we're going to electrify our economy, let's keep it reasonably cost to do everything else. How does the investor succeed the other side of the deal? Predictability, knowing that these are what the
rules are going to be, and then assistance in getting the permits necessary to invest in this market. I mean, again, I'm not saying you're giving assistance, it's -- a lot of time at the CEC we got to know your -- I want to say ancestors -- your predecessors very well. It seems like a lifetime ago. But they -- you know, the permitting issues there are formidable, but you guys are fully equipped to get that through. And under Governor Davis, to his credit, they really did expedite and get the needed permits here to get to the some of the new power plants. I'm thinking of the one that Calpine Metcalf plant, for example, got done in really kind of what I call Texas time. It was very fast, done very quickly there, and I think that was helpful for the state.

But, you know, that -- just being the mindset of what does it take for me to make California an attractive place to do business and to invest. And I know that sometimes hard for people in the government, it was hard for me to do that, but I have -- you've got to force yourself to think, because if you're going to depend on anything other than the State to solve the problem, you've got to think like they do. And so whatever that takes,
whether that's, you know, figuring out how the new methods of financing are going to be effective here, understanding what predictability of the contract means. It was tough for me to vote to maintain contracts when I was at FERC. I mean in my heart I was like, God, those are high-priced contracts that Governor Davis signed, but you know that for the long-term health of contracts in the United States, that they had to be affirmed. And so those type of things that we've got, sometimes tough love answers to make to support investor decisions are a mindset that has not really been strong here, and I think it should be stronger.

MR. CAVANAGH: But two quick points in response. Those high-priced contracts that Commissioner Wood was compelled to uphold were made necessary by a fundamental failure of resource portfolio management in the earlier years, which is what I was referring to as the principal failing of the infamous death march.

CPUC PRESIDENT PICKER: Right.

MR. CAVANAGH: And when I talk about the importance of resource portfolio management of long-term contracts, I'm not suggesting that all of the procurement should be that way. But if none of
it is, if we have no balance in the portfolio, then, well, the best illustration of what happens is those contracts he had to approve.

On the matter of customer success, many of the customers who need to succeed have trouble affording electricity. And one of the important elements of the Gap Analysis is the treatment of the public goods charter that we use to help those customers solve that problem. I do want to emphasize, I hope all the Commissioners take a close look at that because the importance of making sure we can continue to recover those costs, to make sure that all customers using the grid are making their equitable and fair contribution may require some rate structure changes, not toward higher-fixed charges but, as the report suggests, toward the concept of a minimum bill where everyone who is connected to the system is making a contribution used in part for those public benefits charges.

MR. WOOD: I did want to add one thought on the role of the ISO. I know there has been a long history that I lived right through the front chapter of. I think that their unique position in your market and in the west is one that's probably
under-utilized. I haven't talked to Steve Berberich or Yakout or anybody about this particular issue, but I do think that's a great ally to simplify, streamline, and create that kind of investor clarity I'm talking about, is figure out a way, and I know there's jurisdictional concerns, I don't have great fixes, but there probably are some out there, where the resource adequacy, the de-carbonization goals can all be met through a transparent method that, again, applies equally to everybody in the procurement. There, the Cal ISO has cousins all across the country who do that for a living. And so this is not reinventing -- the wheel was invented in this room, but there are other wheels that have been invented on this particular issue elsewhere in the country that I would say are good models. And if it involves, you know, putting carbon adders on there, I'm not sure exactly where New York is going. We talked about that last time as maybe being a leader, that that's a state, like you, is a single-state ISO, that they were contemplating putting a carbon adder in their procurement to streamline and make it more market-based. And so that -- basically let the best low carbon resource win, not
the ones that were going to spec out by technology.
So that's a good ally for you, and I recommend that
you bring them in from the outhouse -- I mean I
know they're actually constructive partners and
have been, but I just have always felt like since
the crisis they have been a little bit hard to
embrace fully. And I do think -- you know, I do
think that's an excellent structure that could be
utilized for your more broad purposes here with the
decarbonization and resource adequacy.

CPUC COMMISSIONER RANDOLPH: I have a question.
Talking about kind of encouraging people to work
cooperatively with kind of some sort of -- you used
the word backstop, some sort of hammer, I guess one
of the questions I have that I would love your
input on this, kind of goes a little bit to what
Pat was just saying, is if the different entities
out there all have different sort of financial
pressures and different frameworks, right, you
know, your generators are going to have different
perspectives as they're deciding how to bid into
the market knowing that they have the ISO backstop
procurement process; your IOUs are going to have
different perspectives knowing that they have the
ERRA process that they're going to have to deal
with, your CCAs are going to have a different perspective as they have to talk to their local officials about what they're doing and what they're procuring, how do you, you know, develop a structure that aligns those as you're thinking about kind of encouraging people to work cooperatively and what would the hammer be, given all those different perspectives?

MR. CAVANAGH: Well, Commissioner, the hammer is pretty clear. It would remain your ability as a backstop matter, if everything starts to follow apart, to direct some centralized procurement, and assign the costs to everybody. So you've got that power, there's no question about it.

Now you don't want to have to use it as a blunt instrument, so how do you motivate people? First, listen carefully. Put that question to people who will be following me to the podium, because I'm hoping they have had a chance to think about it now. And I'm hoping you will get some -- I'm hoping that they will be saying something along the lines of the following: Look, we have a shared interest in affordable de-carbonization, we're all committed to it, and we know that.

Some of the instruments for getting us there are
going to be lower cost to our customers if we can acquire them together. If we can do long-term PPAs together. Generators have a very strong interest in that model working. Now what they are looking for are long-term certainty about revenue streams.

This is the best way I can think of to deliver that without putting us in a situation where there's so much fragmentation that everybody's costs are going up, reliability is degrading. Everybody loses in that scenario.

So one of the reasons -- my purpose whenever I appear before you is in part just to cheer you up a little -- one of the reasons why this ought to work is that there is a shared interest in making it work and there is tremendous shared exposure to the risks of being back in the post 1996 world. But it will be critical for all of you to indicate strongly that you think this is the direction in which we need to go and that you are not prepared to sit back and wait for the genius of the marketplace, and I don't think Pat was telling you to do that.

MR. WOOD: Yeah. I think the best incentive is what, you know, my friend Allison Silverstein used to call it, you can do a carrot or a stick or a
stick painted orange. And so the stick painted orange looks like a pretty big fine. So if CCA number two doesn't procure consistent with what's necessary to meet the statewide goals, then their penalty is higher than the cost of compliance. That's always the case. The traffic fine is a whole lot more expensive than the cost of you being late to that appointment.

So that incentive clearly, I mean it's crass but it works, I mean you send signals to retailers that don't have enough renewable component in Texas, they've still got to comply with the REC, that were kind of beyond the RPS. They've still got it. They don't have it, they get a fine, and that fine is higher than the cost of buying the RECs would have been, so of course nobody does that. So the same thing here with renewables.

To take a cousin of what he was talking about, to kind of tell you how in a Direct Access environment we've seen renewable procurement because, again, we're way beyond what our state's targets were set back ten years ago. I mean we're closing in on 42 percent of total capacity in the state now being wind or solar, which it was zero when I was on the PUC in 2001.
So it's moved quite a bit fast but it's because a windfarm, yes, it could do a contract with the City of Austin, which is still vertically integrated, or San Antonio. Those are our little islands of vertical integration in a deregulated sea. And those were good jumpstart contracts, akin to the ones that the state here has done with large solar farms and windfarms in Tehachapi, et cetera. So that's kind of there.

What's going on now as people get comfortable with the rules being stable and the investment climate being good is they're doing direct deals with end-use customers. So a windfarm that does a 150-megawatt investment will go out and sell slices of its system, and maybe this is not exactly the same cooperative thing, but it's akin to what he's -- it's that same mindset, is: I've got an investment. You, Walmart, want a slice of that system. You, Ft. Hood, want a slice of that system. You, Garland Independent School District, want a slice of that system. You, TXU Energy, -- which is a large retailer to serve mass market load in the -- you want -- so those little slices give people their greenness. They get their RECs, they get their bragging rights for being clean and
green, and they get a long-term price stability in that market. So that's kind of what's going on.

The solar markets do it. The solar investors that are coming into West Texas now, it's not that the energy markets in Texas are compensatory, they're not. They're very low price. We do not have a capacity market. But people are signing these direct bilateral contracts. And I think that to me is a point I didn't emphasize, that we looked at the California market in 1996 -- or in 2000 and said that's what was wrong, was that there was not an incentive for a buyer and a seller to engage directly with each other and do the self-help. And then in the aggregate that would add up. If it doesn't, then the backstop that Ralph put in there, I think, is regrettable but necessary, that you have the heavy hammer sitting there or the carrot-painted sticks sitting there -- the carrot painted orange -- the stick painted orange -- sorry, I even messed up my own deal -- to have --

MR. CAVANAGH: Only in Texas do they have to paint their carrots so.

(Laughter)

MR. WOOD: Texas A&M invented the maroon carrot, and we're very proud of that.
So, anyway, I do think that there are a lot of models. And I know that the most important issue that underlies it, and you see that throughout reading the full Gap Analysis, we do save the best for last because it is talking about these two issues, the de-carbonization and the resource adequacy toward the end, because it should start, as it does, with the customer protections. Those are, I think, well drafted -- I think you're on good tract get to closure on those.

Interestingly, there is a lot you can learn from your experience in the telecom industry. I know you're not doing as much with telecom these days at the Commission, but in our day we learned so much from telecom that we really imported that experience to gas and to electric. And I think y'all can certainly leverage that as well.

CPUC PRESIDENT PICKER: Let me see if my colleagues from the CEC have a question.

CEC CHAIR WEISENMILLER: Yeah. Actually just following up, so I wanted to hear from both of you on your priorities on consumer protection.

MR. WOOD: The data issue is where the book starts. And I think -- you know, again, just first principles is the data belongs to the customer.
You want to enable retailers and suppliers and energy efficiency, everybody to be able to have access to that as simply as possible. So the one quick path, y'all I think you're on track, California has probably led the country on these customer protections.

And I'd be curious to hear from people later today if like those are too onerous against the ability of a new entrant, particularly, to come in and play, but again I want to balance that, because I like being in control of my data but also want people -- if I'm ready to be out there and be shopped or be a shopper, I want people to give me a lot of information, tell me what I can do, what I need to do.

The state-run website, obviously it's not what a conservative, small-government guy wanted to do, but it still is and 20 years later the real touch point for competitive information in Texas with the site we set up to kind of jumpstart the market, because it's viewed as that Good Housekeeping seal of approval, each retailer gets to put their best three offers on there. And that's PowerToChoose.org is where people go to get, you know, reasonable-priced electricity offerings
through that site.

Customer education, very important. We didn't talk a lot about that in the Gap Analysis because we're kind of not there yet. You don't have Direct Access here, you've got the CCA, and so you want to make sure that the food labeling, which I think is before your Commission, is clear and accurate. It's getting a little busy. I did click on a food label and while it's accurate and thorough, sometimes you don't need to know magnesium and sodium and all that, you just kind of need to know fat, carbs, and protein. So just that give-and-take is one that y'all are well equipped to balance, but the food labeling is important in the current market as well as any sort of more disaggregated market that you have.

The Provider of Last Resort, I mean in Texas it really -- it's only been used five times when retailers went out of business or went bankrupt or couldn't meet the collateral, whatever. So that's not probably the model I would think here. You could probably have a more robust Provider of Last Resort.

Having the IOUs do that role, well, I don't think honestly, and don't cheer for me being pro IOU, but
I don't think that's fair to them anymore. If they're slowly getting out of this business -- and that's the transition you're obviously trying to manage through the Gap Analysis -- is as they move, as customers move to CCAs, maybe they shouldn't fall back to the IOU. That's a great opportunity to bid out large kind of regions of the state to new providers, to be Providers of Last Resort. They could offer a rate and it might be at a premium to the market but not double, some premium to the market where people could stay comfortably for a time until they have time to negotiate a better rate, but that might be a way to jumpstart - - if it's legal. That's my only problem, is that I don't know that that looks like backdoor Direct Access in violation of the CAP, I think it probably is. But there is an opening that was given in the Hertzberg bill to allow y'all to look at that differently, you know, in the near future. But to maybe get the IOU out of being that person that they go back to when they don't want to be served by Marin County, they want to go back to another provider.

So the Provider of Last Resort could actually be an opportunity to bring large constellation types -
- I know Mary is on the calendar -- on the agenda for later -- bring people like that into the state and give them basically a book of customers to work from. That's a nice way to start the business, to get people in there and putting on an obligation on them therefore then to serve that customers consistent with all the customer protection requirements that are applicable to IOUs and everybody else.

So POLR, food label, customer data, I think those are my big ones out of -- any other ones out in the customer protection section, Ralph?

MR. CAVANAGH: For me at least, California's suite of low-income services belongs on that list also. And I hope that one of the things that emerges from this initiative is a strong affirmation of the continuing importance to find ways to provide those services both in terms of bill support and targeted efficiency services. That's been a major focus of the Legislature in recent years, a lot of you have worked on it. It remains important. And just conveying confidence that we can continue to pay for that and equitably assign the costs will be very important.

For me, the task of dealing with aggregated
customer data and harnessing it for demand response
and energy efficiency remains -- Commissioner
McAllister has devoted an entire lifetime to this
effort, he's not done yet, as he would be the first
to say, and I join him in underscoring that.

On the Provider of Last Resort, please look again
at Melanie Kenderdine's separate statement in the
Green Book. And I am hoping very much that Matt
Freedman, who will be following me, will have a lot
to say about that.

CEC CHAIR WEISENMILLER: So, Ralph, what's your
vision of the future of the energy -- Utility
Energy Efficiency Programs as we go through this
transformation?

MR. CAVANAGH: I don't think that -- the reason
that -- I'm glad that surfaced. It didn't surface
before, I think, because it's not central to the
issue of competitive procurement of integration and
generation services.

We have chosen a different model in California on
energy efficiency. We don't treat it as another
biddable resource head to head with generation. We
recognize that there are special market barriers
and acquisition issues that need to be confronted
head-on through initiatives that today at least
continue to be administered by the Investor Owned Utilities, in large measure, also of course in coordination with, and this is critical, the Energy Efficiency Standards administered by the Energy Commission and the integrated combination of efficiency incentives and standards is going to continue to have to be at the core of what California does.

My own view on the efficiency side, and Commissioner Peterman, it sounds like sadly, will not be in charge of that for a great deal longer, but what I think she has tried to do, and this I believe in very strongly, is to find ways -- I've talked about the importance of coordinated statewide procurement, she has applied that principle in the context of energy efficiency, in terms of how can we aggregate the collective market power of California's electricity customers to drive better solutions through programs that are coordinated and then also reach into the Efficiency Standards. So that remains very important in a world of increasing fragmentation and generation procurement. I think we've learned a lot of good lessons about how to do this. We've now got a California technology forum, a jury of experts to
help us streamline the measurement and verification process. I urge all of you Commissioners to do all you can to support that voluntary, coordinated effort, which is another illustration of the kind of thing I'm talking about, to help us do this better.

But Commissioner Weisenmiller is right to remind us that the fastest, cheapest, and cleanest de-carbonization solution is always going to be energy efficiency and it better be in the forefront of our thinking going forward.

CPUC COMMISSIONER PETERMAN: And just a bit of a follow-up on that, and, Ralph, thank you for highlighting the work we're doing in energy efficiency, because I think there are some lessons learned from that process, including the challenge of wanting to be more hands-off as a regulator and in the process of developing that structure, finding the need to be more hands-on than ever. And so I think that we are struggling with, even in that space, about to what extent to do we ever re-intervene if there is not sufficient agreement or consensus.

I had a follow-up for Pat but, Commissioner McAllister, if you had an Energy Efficiency follow-
up, let me defer to you first.

CEC COMMISSIONER MCALLISTER: So thank you for that, Commissioner Peterman.

So thanks, Ralph. I actually was going to ask a question. One of the prospects for procurement of aggregated demand side resources, and you just answered that. But I want to actually get Pat's view on this as well and do a follow-up for you both.

So in the context of Integrated Resource Planning, okay, in California today, where we are analytically very sophisticated and we have Smart Meters and we have a lot of innovation happening across the economy that's dealing with, you know, very granular data in real-time, is that causing you, Ralph, to rethink some of this in terms of having a bolted-on efficiency resource in terms of having something that ideally would be comparable analytically to traditional supply resources and, therefore, be implementable within an IRP context?

MR. CAVANAGH: So I would like to have both, Commissioner McAllister. I don't want to give up the strengths of what we've got, because I think we've learned a lot about how to do efficiency outside the context of traditional competitive
generation procurement, but absolutely, aggregated

demand response can bid into and should be bidding

into short-term markets, in particular. And there

may well be ways we can harness other of the

wholesale markets to create an additional revenue

stream for energy efficiency.

What I don't want is a situation where what we

basically say is, well, the short-term -- people in

Texas have been heard to say -- although not this

one -- all we need is an accurate short-term spot

market electricity price and we will get all the

energy efficiency that's cost-effective. The

genius of the marketplace will provide -- exact --

that was one of the core foundational principles of

the 1996 restructuring law. And that, I think, we

now know, based on abundant experience, just flat

doesn't work. That doesn't mean, though, that you

don't take advantage of opportunities to supplement

the financial incentive for energy efficiency,

cost-effective energy efficiency through all of

those vehicles.

And, yes, there is going to have to be increasing

interest and emphasis upon flexible demand-side

resources as part of what it means to be a cost-

effective demand-side resource, but that's not all
we're going to want to do. People sometimes talk as if all the low-cost energy-efficiency resources have been exhausted through decades of effort in California. And all I have to remind all of you is the recent evidence that the average California household has more than 45 devices that are drawing electricity when they are switched off, as something that we continue to have -- as one of many illustrations of what even Texas needs to be thinking about as it ponders its energy efficiency future.

MR. WOOD: Now we would not be where you'd look for energy efficiency leadership. That's clearly --

(Laughter)

MR. WOOD: -- that's clearly your state. And, you know, again it's a tussle for me because you know I have been a regulator for ten years, and I finally look up, the baby sick was at night, and I was looking up at the ceiling of a house we had moved into four months before and realized that there were 36 can lights that were all 150-watt incandescent lightbulbs. This was like in '06. So they had other alternatives at the time. Even I didn't think. I went the next day, it was like,
you know, cold turkey, quit smoking, just stop. Go there, take them all out, replace them with CFLs, and now of course the LEDs are even better. Whatever it cost me it was paid for in, I think, it was 72 days. I figured at that kind of rate.

Those kind of things are just not intuitive, and so markets do fail. And so we've got to view that really EE, and that's really -- I think Ralph --

MR. CAVANAGH: That's going on his tombstone.

MR. WOOD: You know Ralph, he doesn't take a lot of credit for it, but Ralph and some of his colleagues from the smart guys that helped do the right things here helped us in our market in '96, '97 when we were asking the world what we should do, and this was identified as a market failure back then, and it always has been. Saving money from whatever my rate is, seven and a half cents bundled, so I don't have a hugely strong price incentive to turn the light off because it's only seven cents a kilowatt hour if I leave it on. So I mean when you move it up, as you do here, you kind of get that price incentive sent down, but it's not really costing me.

That's a problem, is when you have a product that's really inexpensive, people don't do "the
right thing," and that's a value-laden judgment.
And you folks have been honest to say this is a
value issue for us, it is not economic, we are
going to pay for it, and therefore you get this
virtuous cycle where it does become economic.

Let me just take one quick thing, and I know
you're asking the question, but with the
sophisticated type of demand response that's way
far from even when you came to Texas to tell us
what -- and Moskovitz and all them, about how to do
this, there's so much more that's enabled now with
the Smart Meters that you all have and we have as
well, many other states, that's enabling an app-
based issue, I can -- I turn -- you know, my wife
said yesterday can you turn off the air
conditioners, I don't have my phone. I'm like,
well, why are you talking to me, well, that didn't
even -- stupid.

We went to -- that kind of sophistication is
going to really change how we think about peak-day
adequacy. And when you have the ability not just
of the big three IOUs and the Cal ISO to turn the
knobs on or off, but when you have -- you know, how
many million are out here -- 40 or 50, the ability
of ten percent of those to just jigger, it's
unbelievable when you think about the potential.

I think the days of us worrying about peak summer reliability are soon to be kind of vestiges of the past because of the great silver bullet that demand response provides. So all the things he's talking about, y'all have pioneered here for, again as I mentioned last meeting, thank you for paying for the country's R&D, because it will benefit everybody in this country, that we have the ability to do the type of things that are enabled by this mindset. So this is where California is better, which I'll admit it, it's on the record.

CEC COMMISSIONER MCALLISTER: So I agree with everything you just said, the we have the technology, we have the power of -- you know, we have the analytical skillset to do this, so. But demand response is not growing in leaps and bounds, and so my question really is how do we operationalize this such that it does scale? And I think there is -- you know, there is a market that needs to be enabled somehow on this.

MR. WOOD: How you get that market the incentive to do that, I don't know. I mean I think you've got to ask the people in that market, I mean if they want a long-term contract with the utility or
the State or the CEC, you know that's kind of one model, but how do you actually get a sustainable model that works in the disaggregated, or even not disaggregated, in either market structure going forward? Is you've got to show them that there is a profit opportunity there. And I've seen companies, unfortunately a lot of good public companies that I respect and like, come and go, that have tried to do energy efficiency. Converge comes to mind. I don't have a good answer for you and I wish I did because it is needed and it is the silver bullet that regulators are always looking for, is how do we get demand to be, you know, sitting at the table, as well as supply.

CPUC PRESIDENT PICKER: So we're running short on time, but I'm going the give one more to Commissioner Peterman and --

MS. FELLMAN: Oh, excuse me. I have -- we flipped the agenda.

CPUC PRESIDENT PICKER: I know.

MS. FELLMAN: Let me go to the microphone. We flipped the agenda, and I am available to talk to each of you any time. So I would be willing to have this continue.

CPUC PRESIDENT PICKER: I understand. Thanks.
CPUC COMMISSIONER PETERMAN: Thank you, President Picker. Thank you, Diane. Thank you both for your comments.

Pat, in particular, I wanted to follow up on your comment about making sure we appreciate and understand the investor and financial market perspective on the work that we're moving forward with. And I do think it's noteworthy that the action plan is very customer oriented, and appropriately so. And the references to engaging with the financial community are primarily embedded in the reliability and resource procurement section. And I think it would be worth thinking about how do we engage with the financing community on all of the initiatives and, in particular, how do they think about -- or value or not value or disvalue -- customer protection elements in the work.

And so give that, I wanted you to speak from the perspective of two stakeholders that are not on the panels today, and that would be the investors or the general financial community and the federal regulator. And from both of those perspectives what, if anything, or most in the Gap Analysis gives -- would give them pause? You know what in
all of this will they be kind of watching to see
where we truly go? I just want to make sure that
we're appropriately engage those two sectors in our
conversation.

MR. WOOD: I think that on the consumer
protection issue -- or with all three baskets, I
think the investor issues -- you know my experience
just over many years of regulation is you'd have to
be pretty mean-spirited to not really get that a
commission is going to tell you what the consumer
protection rules are and you're going to be happy
about it. So there might have been a few that just
stormed out of the state after we did consumer
protection rules. Disconnects, which is an issue,
a chapter in our book here, is on disconnections.
That was kind of a dicey issue for us, as it would
be for you, but -- and it's one where do you come
to loggerheads with retailers. But, ultimately,
there are balanced solutions, and y'all's isn't
that different than ours, and I'd have to look at
the detail, but it's pretty close. I mean you've
got some forgiveness in a real tough period, but
you know there is a tough love thing where you
can't basically walk out on a bill.

Investors -- I think on the consumer protection
issues, that has, in my experience, been the main one that's come up, is what if -- what are the incentives for customers, high income or low, to pay the bill and to pay it on time, and what -- you know, and what can we do about that.

Discrimination issues with regard to FICO scores, with regard to -- well, that's pretty much incorporates credit history, so I'm just going to say credit history more broadly -- those are ones we had to get involved with as well that we got some pushback. I can imagine you would be interested in it, even probably more than we were, and get some pushback. But hitting the balance there and understanding what people need, different -- not too different from the utility, we had done for a hundred years with deposits and etc.

On the other two issues, the investors would be much more interested, obviously. And I should say FERC probably is not going to get involved in any retail customer issues. That's not under their bailiwick.

So let's take both constituencies with regard to RA and de-carbonization both. You know I tend to think of those together. What kind of hardware and software are we going to have for California's
future. So what does -- an investor needs, basically, a pathway for getting his or her money back. I invest, I make a return, I have stability and availability to make that return. I'm not going to be second-guessed, the rules aren't going to change -- of course you can't promise that because the next governor could appoint a different set of commissioners who make different policies, the Legislature could pass laws, but everybody can live in that environment -- even this one. It's challenging, but it's one they could live in if they recognize that there is stability, but the stability of just rules of road. I mean that's nothing you haven't probably heard before, Commissioner.

But on the de-carbonization, tell them the rules. I think -- I've looked at -- and I'm not sure if it's Denmark or Germany, but there are quite high targets there, higher than they are today, some of which you're setting a target that's higher than where you are today. And you want to get there in a relatively aggressive timeframe, get out of the way. Just set it, tell people how the steps will work, and then get out of the way. We did that with our original RPS, and, wow, we way over shot
that. So I think that kind of -- the fact that
people think they can trust that when these
commissions make decisions on resources going
forward, demand or supply, that they will honor
those and get out of the way.

The other part that I've thought about a bit over
the last week since we looked at the last draft is
are there going to be different standards that --
you've got a lot of legacy renewable contracts that
have to either be apportioned to the CCAs or kept
with the IOUs and bid out equally over everybody so
that your grid charge becomes even bigger. And so
if you're competing against that, it looks a lot
like Dynegy was in -- which was a company I used to
chair in Illinois, where we were in one competitive
state in a regulated ocean of MISO. So you got all
this kind of protected generation around you and
you're scrapping for every penny in the energy
market and then a very crummy capacity market that
they had there, to try to keep a power plant open
and keep people employed. So that was -- that
disparity between old generation and new generation
needs to somehow be harmonized, and I can talk at
length about that.

FERC cares about that as well, when you're
looking at capacity markets. I think -- you know, I would hope that we could get to the trust point where a FERC-administered capacity market tariff could be a really useful tool for y'all in California to achieve your de-carbonization and adequacy goals. I know that's -- I've thought long and hard about whether I should say that today, but I think I should. I think it's important in this environment to figure out there are ways to solve this. They're not hell-bent to push it on you. It's not a mandate that anybody has capacity markets, but when a state brings that to the federal regulator, they have always accepted it and worked with people as to work with PJM now on exactly how that ought to be shaped so that it's fair.

So sorry about the long answer, but...

CPUC COMMISSIONER PETERMAN: I appreciate it.

Thank you.

MR. CAVANAGH: I will give a very short answer which is simply to note that what 22 years of history since the last major work product out of this room, investors will not commit to major long-term infrastructure improvements, either generation or grid related, unless they have got a reliable
long-term revenue stream from creditworthy entities. They will not do it.

And the question that the Gap Analysis raises is how in an era of increasingly fragmented procurement do we get them that assurance in California and how do we avoid what happens when we don't have it, which we lived through in 2000 and 2001.

So I come back again: Press those who follow us on how they are going to deliver those revenue streams, those long-term commitments, as we move to a more decentralized structure. I hope you will get some good compelling answers.

CPUC PRESIDENT PICKER: So in the interests of fairness, questions from Commissioner Hochschild or Douglas?

Okay, great. Thank you. That was very helpful, very informational. We're going to ask you to stay for ever and ever, and hopefully in 20 years we won't be having this same conversation.

MS. FELLMAN: Let's thank our Ad Hoc Committee. They're all -- this is all volunteer, by the way.

(Applause)

CPUC PRESIDENT PICKER: So this is actually fairly important since we all read these Gap
Analyses and proposals, but I think that it's helpful to actually hear and ask questions, to be sure that we're all talking about the same thing at the same time.

MS. FELLMAN: Good morning. As I said earlier, I'm Diane Fellman. I am from the Commission's Policy and Planning Division. I want to start out by saying my thanks to both Nidhi Thakar and Rohimah Moly -- I don't know if you want to stand up, please. She's raising her hand -- who as the team became me, myself, and I, they were able to step in and provide all of the necessary support and thinking and thought process and production, and just everybody, and I couldn't have done it without the two of you.

I want to thank President Picker and Director Ed Randolph, who isn't here today, as our Steering Committee, because that was very important and a new way of doing things at the Commission where we work directly with one of the policy -- one of the division directors and the Policy Division worked directly with one of the Commissioners to help form our thinking and produce something that was outside of a specific proceeding.

For the Commissioners, all the Commissioners, I
want to let you know that for the Gap Analysis, which was under an extremely compressed timeframe, the Energy, ALJ, Safety, Consumer Affairs, and Legal Divisions all contributed, they all looked at the document and made very valuable and insightful contributions and took the time to review it through their division management.

I also want to thank many of you stakeholders who have met with me directly who have also provided comments because, as I said at the outset of this whole project, this is a stakeholder-driven process where we want to get input from you. This is a Draft Gap Analysis and Choice Action Plan. We will be producing a final. Written comments are going to be due on November 13th. I have a couple other stakeholder meetings already set up, but we're happy to meet with you in person as well.

So thank you very much to all who have made this a platform for discussion.

Today what we're going to talk about, and each of the Commissioners has a copy of this presentation in front of them, as well as for those of you online, it's been posted as of this morning, we're going to talk about -- we've talked about the project, so I don't think I have to go over the
Mission Statement again. And then we'll jump into the Gap Analysis and how we performed it, so everyone knows what the thinking was.

Again, this has been covered today. Why are we doing the Choice Project. And I want to underscore for purposes of where this is going to go next, because many people have asked what is the Commission going to do with this. And we need to address the fact that there is choice happening now. We have acknowledged that, we have recognized that, and we've moved forward on it. So our goal here is to have flexible policies that will accommodate multiple incomes without a designated end state.

And what's important there is that we are not making recommendations about the structure of the market. We're not going to say it has to be completely open or it remains bundled IOU. We're saying the market -- the other proceedings, that the Commission will figure that out. We just want to make sure that regardless of the outcome, the fundamental questions are answered, the core principles of California are met, and we are respecting the categories that we identified here.

Albert Einstein said that to solve a problem you
cannot use the same thought process that created
the problem, and this is something we've tried to
do here.

Again, this is what we are trying to do. And
here is our process. We first worked with the
Steering Committee to identify, taking the
fundamental questions in the original Choice paper,
we identified consumer-driven categories. And, as
Pat Wood mentioned earlier, this is our largest
grouping of categories, because we wanted to make
sure that no matter what the outcome of the market
structure, that there was adequate protection for
customers to: Number one, make their choices;
number two, be protected when they made those
choices; and, thirdly, that those who were not
participating in the choices also had protection.

With respect to the duty to serve, which was
another category, we wanted to make sure that the
lights were always on and that no matter what
happened in the market, customers would have
electricity.

Finally, with respect to our resource and
reliability category, we wanted to make sure as
they just talked about, the contracting was in
place, because we saw this as a major gap that
could occur as the market transformed. And we also
wanted to give a nod to the extensive work that's
been done at the Energy Commission with respect to
the Building and Appliance Efficiency Standards,
which have been so important, and customers can
choose to buy those, as well as the electrification
work that Commissioner Peterman has been leading in
the transportation sector.

So we looked at each of these categories. We
came up with issues that we thought needed to be
addressed. And then we determined, we assessed
whether or not there were existing Commission
proceedings that were addressing them underway
already. And we wanted to acknowledge that there
were many, many proceedings at the Commission that
were looking at these. We wanted to get above the
silos and then determine did we need to make -- did
we need to do additional analyses and, if so, could
it be done in the existing proceedings or was it
something new. And then, finally, were there
actions that needed to be taken now because the
gaps were so great.

This is how it came together. And the arrows
indicate the dynamics of how we moved to the center
to come up with our recommendations. And I want to
again acknowledge that stakeholder input was very important in this.

I'm going to pause there before I get into the actual issues to see if there are any questions on the process.

And thank you for your kind words this morning and the introduction, because it was a very -- a lot of time was spent on how to structure the analysis but also how to present a lot of information. As you can only imagine, those of you in the audience, we were trying to deal with every proceeding that the Commission is dealing with and every possible issue and to boil that down. It ended up being a bit longer than we thought, but to boil it down into a digestible form was probably our major challenge. The issues just came secondary. That was a joke.

Okay. Here are our issues. And I'll just -- you can see these. They're in the Gap Analysis. I don't think I have to read these, but I want to highlight some things that emerged as needing immediate action. And I'm going to lead with who is the Provider of Last Resort in the event that there is a failure of service.

I also want to point out we looked at the role of
the IOU in the future and as the IOUs transform into providing distribution services, what does that mean for their customers, what does it mean for procurement. We talked about contracting.

Pat Wood so aptly described the need to have price transparency and content disclosure. I actually just got my power content label in my bill, my PG&E bill, so I have it with me if anyone wants to look at it.

And that we also think it's very important, even though there are price comparisons mandated between an individual CCA and an IOU, there's nothing in California that has statewide--there is statewide access with statewide comparison that's easy to see how the prices break out, and so people can look at different offerings.

One thing that is very important however fell into existing proceedings is rate design. And the Commission has done an excellent job of addressing many issues in its rate-design proceedings. As we get more and more Load Serving Entities, what does that mean? Will the successes of the Commission's rate design in accomplishing California's policy goals continue when--through the CCAs, through the ESPs, or even when you have a number of behind-
the-meter installations.

Next, how do we enforce all of this through fragmentation and disaggregation. What does that mean? It's clearly within the Commission's authority to enforce, anything related to the Investor Owned Utilities. The Energy Commission has jurisdiction over the publicly owned utilities. There are certain areas where the Commission has authority with respect to CCAs and ESPs, in particular, certification. We talk about that in the Gap Analysis and raise it as a question.

We already mentioned the credit vehicles.

And, finally, last but not least, for Commissioner Guzman Aceves' concerns, how do we shield low-income customers from undue cost burdens and also make sure that they have the benefits of all these choices.

With respect to the takeaways, I have just outlined most of those.

Another thing that emerged is that we feel that the Commission, the State has done a very good job on certain programs, for example, RPS, Energy Efficiency. I think, Ralph, you mentioned this. How do we make sure there is uniformity across all LSEs. At the same time, once LSEs form, how do
they have nondiscriminatory access to funds, programs, incentives, and the grid. We talked about enforcement.

And again I want to conclude by saying that the market end state at this point in time we feel does not have to be defined and we do not have to tackle what it means to have the fully -- or have a competitive market in California.

We do have the Hertzberg Bill report. That will be coming out and that will address some of these issues. However, looking at the statements of you, President Picker, at the letter opening, the Choice Paper, we feel that we are shifting our policies and we need a comprehensive and meaningful plan to address what happens when those policy shifts occur with respect to the collateral policies around market competition and structure.

Finally, in conclusion, the next steps. I mentioned them at the beginning. November 13th, written public comments due, as I said at the start of our En Banc. The Public Adviser is here in the back of the room. We welcome public comments starting at the end of the panels.

This is a draft. We will be working with the Commissioners' offices, going back through the
divisions in the Public Utilities Commission and looking at stakeholder input to formulate the final and including the roadmap that will lead to the Choice Action Plan. And that should -- that will come out before the end of the year and then next year we look forward to implementation, so thank you.

I'm open, I'm available for questions. And I want to point out that in this -- my deck is a set of -- a matrix at the end and I came up with the acronym Raul to honor one of my colleagues, JR DeLaRosa. But that's Regulatory Additional Analysis Underway or Legislative. So we can -- you can see visually and quickly where we ended up on our recommendations. So we can -- if you have questions on a specific issue, I will answer those and pop that up on the screen. However, since everyone has access to the document, we felt it wasn't critical today to walk through each of these. So I'm happy to answer any questions.

CPUC PRESIDENT PICKER: So I have questions in relationship to a number of the specific Gap Analyses, but I'm going to try to make it broader and invite comment and question from my colleagues up here as well. But we talked about that big
orange stick that Commissioner Wood was talking about. And we did never quite settle on the question of where we really believed we needed additional enforcement authority to be able to create an even market or enticement for people to meet the goals of the State.

So my question is that for the regulated electric utilities, we do have Public Utilities Code 451, which has some fairly broad requirements that we hold them to. We can, for example, set prices and enforce those prices. We can cover a whole range of behaviors through other rules. But here we are actually prevented from having that in some respects. So, for example, the certification processes for CCAs, for example, does not really lend itself to long-term procurement. The Legislature has moved to require that, but they haven't given us much authority to really be able to take action. We have specific ability to take action around system RA requirements but less so in load-constrained areas.

I'm curious as to whether we see places where we need additional authorities. I've just kind of ticked off a couple. But then does that take the form of a broad standard, similar to 451, or do we
actually have that within each different kind of entity for each different requirement? And so that's part of the challenge that I'm trying to understand, is how do we begin to actually create that even playing field that we were talking about earlier.

CPUC COMMISSIONER PETERMAN: Is that a question?

MS. FELLMAN: With respect --

CPUC PRESIDENT PICKER: It's a question both for Diane, because we did talk about it a little bit, but it's also a question for all of you.

MS. FELLMAN: But I was actually going to turn it over and say that the way we have been looking at this, and I am not an expert nor was our team in each of your individual proceedings, so you have that insight into the areas that we looked at. And I would be very interested in hearing your response to President Picker's question as well, from the perspective of how you have been looking at the Commission's authority.

CPUC COMMISSIONER PETERMAN: We'd like to hear from you.

(Laughter)

MS. FELLMAN: So with -- we are working with both the ALJ -- we will go back and work with the ALJ
Division and Legal Divisions to go through each of the proceedings. They did make sure, and I want to underscore, that our recommendations are intended not to prejudge the outcome of any proceeding. And the area where we went off the chart a bit was in describing the potential future for the Investor Owned Utility. And we compiled all the kind of speculative projections into that Gap Analysis.

With respect to enforcement authority, what emerged, and it was surprising I will say for me to see this, is that the Commission does have broad authority. Certainly Public Utilities Code Section 451 and 453 do go to those specific concerns. However, the Commission in its interpretation, if you use, for example, what happened in the resource adequacy realm with Resolution E-4907, looking at how the CCAs and ESPs were going to file their resource adequacy requirements, the Commission did exert its authority there. It does have jurisdictional statutory direction, but it also interpreted it.

I feel it's important to emphasize, and, Ralph, you mentioned the Marin comments, and I will give a shout-out to MCE on this because they and PCE and some of the other CCAs and all the stakeholders in
this process have appreciated this collaborative
process that will allow -- certainly it doesn't
create enforcement authority, but my -- our
recommendation and my observation is that in
developing that authority for the Commission, it's
very important to bring the stakeholders in the
conversation, because I think, again my experience
working with the stakeholders, is that they are
eager to have this conversation because they need
to figure it out too. You know, at the beginning
there and certainly there are tensions that we
won't discuss today, however there is also a
willingness to say how do we make this work because
no one in the sector wins if someone
catastrophically fails.

CEC COMMISSIONER HOCHSCHILD: I just wanted to
chime in for a minute to President Picker's
question. I mean it strikes me it's analogous to
what's happening in transportation. Look at just
even the regulation of scooters, these electric
scooters in San Francisco and all these companies,
you know, put out a thousand scooters and then they
had to dial that back. And we're trying to avoid
the energy equivalent of that. But it is very,
very important that we keep the momentum going on
clean tech innovation.

You know the next governor of California will be a global governor, for lack of a better word, just because there is an absence of leadership on climate coming out of Washington, D.C. Everyone is watching here. And obviously all of us were at the Global Action Climate Summit and the attendance, the energy, the focus was incredible.

And I just want to point out, you know, the context here is we're at the waning months of the Brown dynasty, for lack of a better word, and this year has been, I think, one of the most remarkable years we've had on energy, beginning with the Governor setting the new State goal for five million zero emission vehicles. And EV sales went from 6,000 a month in January to 21,000 a month last month. Obviously Commissioner McAllister led our effort to mandate zero net electricity for new construction in May and SB100 getting passed, it's been a banner year. And we need to keep this momentum going.

In January we're going to hit one million -- by the end of January, one million solar roofs in California. We are a giant incubator for the clean energy technologies of the future. And there is
one question I would like to ask just the panelists going forward is, you know, regulation is always chasing technology, right, and I look right now at what's happening, innovation in the CCA community, and I think there is really exciting experimentation being done. That's really one of the questions that's sort of foremost in my mind, since we have 18 CCAs up and running and maybe as many as 80 in some stage of formation, what's the optimal regulatory architecture to accommodate that reasonably. And that's really -- I guess we have a section later this afternoon, but that's one of the main questions on my mind. How are we set up to best facilitate success in that sector in a way that's -- where we continue to innovate but don't tip over the apple cart, right, so that's really the main question on my mind.

MS. FELLMAN: And I would -- thank you. In the Gap Analysis, one of the things that is critical is not getting in the way of innovation, recognizing that we're always going to be catching up to technology rather than necessarily being ahead of it.

And I don't like the word level playing field either, so I prefer to think of it as open
architecture. So that we had talked about -- and I think at the beginning, President Picker, when you were looking at the distributed resources, it wasn't about should we have more energy efficiency or should we have more rooftop solar but it was, rather, what can the grid -- how can the grid accommodate these resources and what can be done to ensure that the resources are connecting at the right places. So this is the kind of policy foundation that the Choice Project is trying to provide.

We have asked each of the panelists to specifically address their concerns. And looking at -- with the LSE panel, we will look at how do each of them perceive this question of what does the regulatory structure look like going forward, because we know that one thing that is certain is that there is change. And we know that the existing regulations cannot continue to accommodate the shifts that are occurring.

CPUC COMMISSIONER GUZMAN ACEVES: One thing, just a reflection -- oh, excuse me.

CEC CHAIR WEISENMILLER: No, go ahead. Go ahead.

CPUC COMMISSIONER GUZMAN ACEVES: -- a reflection of what Pat Wood was sharing of the situation in
Texas. And I think in general when we look at our procurement mandates and processes, we really put the process requirements on the utilities, on the LSEs, and we don't really look at what are the developers doing, what's the supply side doing. We certainly don't have them piecemeal out their portfolio of options. And it's a bit of an inverse way to look at it. And, by the way, I'm confident that Commissioner Randolph is going to handle all this in that case, but we haven't really looked at the supply side. We've looked at what we can require of the purchasers, of the LSEs. And I think it's an interesting question in terms of what kind of frameworks or, you know, what kind of conversations we want to foster, putting a little more burden on those folks. I know they're here today to speak for themselves with all their ideas, but we don't -- we really kind of hearing about how constrained they are, how they don't have good contracts, and maybe it's really stepping back and looking at what Texas has done to say maybe your product is actually no longer as relevant as what we need and your product could still be good, be it gas or otherwise potentially, but it needs to be broken up in some way.
We're kind of forcing our -- we're in this world where we really want the CCAs and the utilities to work together, but maybe what Pat is raising is not the only paradigm to be looking at this under. We also come at this with strong legislative oversight in pushing for competitive solicitations, for least-cost projects, for green projects, and we heard a lot from Pat about bilateral contracts that are cheaper, potentially. So that's also kind of a violation of a principle that is theoretically more transparent to have these types of solicitations. And not that we don't authorize bilaterals, don't get me wrong, but they're often in the face of an RMR.

So, anyway, I thought that was very interesting and I certainly haven't thought about what role we can have and what sort of authority we would have in that realm. Certainly that's something we leave to the ISO for the most part, but if we're going to get into a room or a space where we're trying to foster these creative packages to deal particularly with the local reliability issues, I think we're going to have to some greater participation and innovation from the supply side as well.

MS. FELLMAN: Thank you. And I want to point out
that this is one of the areas where we spent -- you know, we have more than two pages on in the Gap Analysis. And it is very important to look at -- as many of you know, I spent a lot of years in the private sector looking at projects from the basis of how do you get them built, and over my 30 years of being in the private sector, when we first started, and, you know, like Jan Smutny-Jones is in the audience, Michael Alcantar, the idea of QF contracts was -- to the financing entities, to the banks, was just like: What? What are you going to do out there?

So we've had to educate the financial institutions and work with them to make sure that they feel comfortable, the collateral. And we talk about potential creative ways to do that, potential new credit financial instruments and credit vehicles to allow projects to go forward.

I would ask the panelists on the -- for the -- from the LSEs to talk about -- I assume that everyone wants to get the lowest priced contract so they can provide the lowest prices to their customers. So this is absolutely spot on in where we go next. And it may not be -- it's not necessarily a regulatory or legislative matter, but
it is an initiative that the State can take on to work with the banks, to work with the cities and counties that are forming LSEs -- CCAs, rather, and to come up with new forms of financing.

And I wanted to share that ten years ago my company -- my former company had the largest contract, solar contract for a utility-scale project, which was 21 megawatts, outside of Blythe. And I had to spend the first two months or three months of my time at that company talking to banks, telling them, yes, solar panels will work in large scale. So it's happened that fast, Commissioner, and hopefully we can get ahead of it now so that there's capital investment, because without that nothing will go forward.

CEC CHAIR WEISENMILLER: I was going to ask a different question which was having looked at the gaps, which are the staff most concerned about?

MS. FELLMAN: I'll go back. I will just do the overview. This list -- let's see, there's two -- is there 16? This list represents out of all the potential issues, the high priorities. And I can't say that one is of greater concern than the other with respect to its importance to the market going forward. However, we have made some
recommendations and some analytical observations that certain things are not being addressed now and need to be addressed.

So the -- I don't know if I'd call it the most imminent would be Provider of Last Resort; the topic we just mentioned, on financing; looking at the predatory sales tactics, because that's real and live now, and how does that extend across the market; and what is the role of the IOUs going forward to accommodate this shift from where they are today to where they will end up.

Nidhi, did you have anything you wanted to add to that?

CPUC COMMISSIONER PETERMAN: Thank you, Diane. I appreciate your response to that question because, as I relayed to before, I was trying to figure out some prioritization within the recommendations. And so related to that, do you anticipate providing more structural prioritization around future analysis?

I note that a lot of the recommendations identify the need for more analysis, it seems, could be conducted outside of the CPUC, and so I think it would be helpful, and maybe stakeholders can opine about this too, if there are already researchers or
organizations that are looking into some of these questions, how do we best in line with their work and make sure that we leverage it and bring it into our proceedings. And so just a thought about what needs to happen pre-proceeding versus what can happen within a proceeding. Some of these seem very germane to proceeding questions. I'm more concerned about what has to happen in advance.

And it also gets to the broader question around timing. Do you have any sense of how long -- pursuing each of these recommendations should -- or can be allowed to take?

I know it's a lot, maybe something for next --

MS. FELLMAN: Let me parse that out. First of all, we had a lot of complaints in the Choice Paper that we asked questions and where were the answers. So when we did the Gap Analysis, we provided some answers and a structure for how to move forward. It is our intention, and, President Picker, you can weigh in on this because we've talked about it briefly, but I'd like to hear, you have the thought about it, that we will create a roadmap next in the final, which will be produced before the end of the year.

And the roadmap will do exactly what you
articulated, Commissioner Peterman. And, again, we cannot do that without broad internal input and external input.

I do want to mention that in addition to the Ad Hoc Advisory Committee that's been working with us, we also have a think tank connection, so we've been working with the Berkeley, Davis, E3 to weigh in and come to us, and this is a point where we'll go back to them and try to weave it together, but that's absolutely essential.

And I also will say that I was standing here about a year ago. This is my third En Banc on this project. We put out two major policy pieces. We've been working in a compressed schedule. And, again, I appreciate everybody participating, but I have confidence that we are going to finish by the end of the year.

CPUC COMMISSIONER RECHTSCHAFFEN: Can I ask you a little bit more about the emergency planning and response? That's one of the ones, the gaps, where you recommend more analysis, but is there anything more you can say about what you found and are there any thoughts about how authority or responsibility should be shared or needs to be shared? And we can ask -- the first panel after lunch is a good panel
to ask as well, but did the staff identify anything more you can share about what you identified in that gap?

MS. FELLMAN: Yes. First of all, there is a very comprehensive and excellent protocol in place for emergency response through the Commission and the Safety branch of the Commission. That applies to the IOUs.

So the gap with respect to the emergency response is not whether there needs to be more done on the protocols that are currently in place but, rather, as we disaggregate the market who is going to be responsible during an emergency, who do you call. The IOUs are clearly responsible for continuing to be responsible for the grid, but how do you get access to them. Will the CCAs and ESPs have some responsibility to their customers to indicate who to call, how to call. Is there a coordination function needed.

Those are the gaps that we identified. So it's not on what's being done today with the IOUs, under the Commission's authority, it's what happens when there are more providers.

CPUC PRESIDENT PICKER: So I'm going to return to this question of enforceability. I think both of
our early panelists pointed to the need to have
some common expectations to get folks together to
cooperate or to comply. Mr. Cavanagh pointed out
that that's the solution to people who don't come
to the table to find cooperative solutions to long-
term procurement. We not only need to have that
central procurement but we need to actually have
some ways to actually compel people to work towards
that.

Mr. Wood pointed out, Commissioner Wood pointed
out that you can do that by setting a cost, a
compliance cost, but I'm not convinced that we have
the same level of enforceability for all the
parties who are participating in California's
overall electricity industry. And somehow or
another we're going to have to give everybody an
equal reason to come to the table, an equal reason
to have an observance of market rules. So I will
ask that of a variety of the participants here.

I think that also falls into this larger question
that we'll have to deal with, and we'll certainly
have to turn to the Legislature for authority for,
which is how do we create that Provider of Last
Resort that folks refer to. These are both lessons
that we learned from the last energy crisis. And
we have had a lot of assurances from various parties that they will take care of these problems, but I'm a belt-and-suspenders person, I like to hear their assurances, but I like to know what we're going to do in case people fail in that.

And so I think that, again, this question if somebody is assuming that they are going to assume some of those responsibilities of becoming the Provider of Last Resort, if in fact it's not effective to require the incumbent utilities to take on those responsibilities on behalf of all these other parties, or if we decide to do that what are they going to be compensated by these other parties in terms of potential for market failure, so we know that they happen. We know that they happen on an individual level, we know that they happen on a global level. So I think we're going to have to prepare for that. We're going to have to think about this.

Do we need to, as part of this enforceability then, have some kind of neat way of stress testing the ability of parties to actually create financing to meet those things that they say that they're going to do. I hear a lot of claims about cheap electricity, cleaner electricity, and lots and lots
and lots of local assets that people would certainly like to see. I'm curious as to whether it's all affordable on the basis that people believe that it is. How, in fact, if that's -- if it fails and they fail, how do we actually make sure that they make all the different parties whole, because overall a failure in one community in the state of California reflects poorly on all of California's markets. How do we create an incentive then for people to be very realistic about the problems that they're -- the programs that they're going to undertake in ways that they actually back up. That is, in many cases here, the shareholders are not necessarily going to be affected, it's going to be electricity customers. Any of the sponsors of some of these entities, like the CCAs themselves, are not going to be affected nearly as much as their customers and other customers from other surrounding communities who may have to pick up the slack.

So I'm going to continue to be interested in this underlying structure of how we get equal interest in compliance, equal interest in participation at a realistic level.

CPUC COMMISSIONER RANDOLPH: Yeah. I think that,
you know, the whole question about enforcement and our authority, I tend to agree that we do have broad authority, but the question is how are we holding different entities accountable, because obviously some LSEs are much more -- have much more specificity in terms of what information they need to provide, what analysis they need to go through to look at the procurement they're planning on going through and the procurement they have completed in the past. And without some sort of mechanism to think about how different LSEs are doing their procurement, there's always going to be a lack of ability to hold the different LSEs accountable. And so thinking about what kind of structure we need in that regard is, I think, one of the key questions we're going to have to look at going forward with our roadmap or, you know, however we're going to characterize our filling these gaps.

CPUC COMMISSIONER RECHTSCHAFFEN: Right. And to follow up on what President Picker said or maybe said implicitly and Commissioner Randolph, there's different levels of accountability. And what our role may be to -- we have to figure out the right level of enforcement for accountability about what
counts for the grid. It's a very different question to say whether or not we're enforcing a claim that the service is more affordable to customers, or something like that. That goes to the heart of customer choice and decentralization. It's a much different question to me than accountability for meeting resource adequacy needs or meeting long-term RPS contracting needs.

And so there are a lot of claims that will happen in the market, and I know Pat Wood where he might say, he might come out and, you know, we're in a different place by statute, but I think we have to keep our eyes on what kinds of accountability we're trying to enforce.

CPUC PRESIDENT PICKER: Okay. Well, in the interests of keeping us moving on time, we're five minutes early so we're going to break now and we'll be back at 1:00 p.m. for our first panel, so thank you.

(Luncheon recess taken from 11:54 a.m. to 1:01 p.m.)

CPUC PRESIDENT PICKER: Good afternoon. I hope everybody had a nice lunch.

We're going to get started. So our moderator for the next panel is Diane Fellman. I'm going to let
her introduce the panelists.

Thank you.

MS. FELLMAN: Thank you, President Picker. And good afternoon, Commissioners. We'll kick off the next part of our En Banc with two panels, as I mentioned earlier. These panelists have been asked to provide their responses to the Gap Analysis from their particular perspective.

Each representative, I want to note, was chosen by the Stakeholder Group, so we didn't select. The IOUs, CCAs, and ESPs picked their representatives today. And I'm proud that three out of the four panelists are women, so just like our Commission, three out of five.

All right. So without further ado, each panelist, you have their bios. We'll go in the order from Caroline to Matt. He'll go last. They will give a five-minute opening and then there will be time for questions.

Caroline.

MS. CHOI: Right. Good afternoon. I appreciate the thought and leadership that the Commission has shown in putting forward this examination of customer choice in light of the State's ability to achieve de-carbonization, reliability, and
affordability. So my comments are going to touch real briefly on affordability, reliability, and then really quickly on the utility business model.

When we look back at the start of this investigation, how it advanced the State's core policy, principles of de-carbonization, reliability, and affordability. We think that we do need to think proactively about how to address those issues so that we can avoid Energy Crisis situations.

We believe, as we have stated in our comments earlier, that we have to prioritize these policy, principles. And, in our minds, de-carbonization should be the point of the spear, while ensuring that reliability and affordability are maintained or even enhanced. And a customer choice should be looked at as to how it can advance these principles of de-carbonization while maintaining or enhancing reliability and affordability but that it's not in itself a principle for the Commission or for the State.

The Gap Analysis of course alludes to affordability in several sections, but now it's done through the lens of consumer protection and no longer addresses affordability as a core principle,
which we believe should be maintained.

As was pointed out in the earlier comments and is pointed out in comments that had been written, affordability is core to the State achieving the 2030 Climate Goals. We're relying on the electric system to fuel more assets to the state's economy, through transportation and through building electrification. And in order for that to happen over the next 12 years, and in going forward into 2050, it's critical that prices be such that customers will choose these clean electric technologies as they make decisions in the next several years -- today and over the next several years in order for us to achieve that 2030 target.

You have seen studies, mostly recently the Borenstein Bushnell Paper that talked about how the prices in California are above the social marginal cost. That's something that we have to be cognizant of as the State looks at the policies to advance those Climate Goals, how much should be done through the electric bill, through the electric sector, how much should be socialized more broadly. I think that's a really critical question as we think about going forward towards 2030.

Certainly rate architecture is another area to
think about in terms of affordability and having transparency, equity, sustainability, and access, like reliability addressed in the rate architecture. We have to acknowledge of course that there are cost pressures as we move forward towards 2030, toward de-carbonizing more of the economy, and the idea of course is to try and do that at the lowest cost possible, recognizing that we want to ensure that electricity does not take up a burdensome part of our customers' wallets.

So as mentioned in the Gap Analysis emphasized consumer protection, certainly one of the most effective ways we think to protect customers is enabling informed choices, being access to sufficient, accurate, and relevant information. We share your concern about the slamming and cramming that had happened and certainly are concerned about predatory sales practices that may occur with some behind-the-meter service providers. And we believe that the Commission has broad jurisdiction to -- and can exercise that in its existing authority to protect customers.

As rate design evolves, we also advocate that rate and incentive transparency occur so that customers understand what in their bill is being
driven by policies, what is the value of grid services, the cost of policy mandates that are funded through rates.

And then, finally, we do have a code of conduct, PFM, before the Commission that we believe will also help address some questions around CCAs from our communities and counties and cities.

So we believe also with respect to the reliability that margin progress with respect to resource adequacy is not sufficient to ensure the grid's reliability is maintained as more fragmentation occurs from departing load. We know it's a complicated issue to resolve. And while interim progress has been made, the RA proceeding, we believe, has not adequately addressed a long-term vision. And so, for example, we should, we believe, explicitly modify the scope of the RA proceeding to address any reliability concerns resulting from increased customer choice and department load.

As we noted in our comments in June, we recommend the development of a reliability transition plan to ensure the smooth transition away from gas-fired generation and to determine the products and contract terms that would replace that gas.
And then taking a step back, the question about the role of utility and potentially different business models in the future, as we, the Commission staff, various stakeholders have said previously, regardless of the choices customers make, utilities will be relied upon to be responsible for the system that delivers the electricity to those customers. And so while we have been historically, we believe, the State's best and most effective clean energy policy implementers, given our reach to all customers, we believe that that still remains the case, and look forward to working with stakeholders as the decisions are made to move forward on a clean energy economy. So as part of that, maintaining the health of utilities is critical, we believe, for the State to achieve its de-carbonization goals and its reliability and affordability goals as well.

Thank you.

MS. SWAROOP: Hi. I'm Shalini Swaroop. I work at Marin Clean Energy and today I'm representing Cal CCA.

So thank you to all of our Commissioners and
Project staff, especially Diane and Nidhi for being so collaborative in this process as we moved through the Consumer Choice Project.

CCA has shared the State's goals of decarbonization, reliability, affordability, and social equity. And, despite operational setbacks, we are here to do the hard work with regulators as we all evolve into a new paradigm.

So I have two main points today and the first stems from the original Customer Choice White Paper, and I was very happy to see that it was addressed somewhat in the Gap Analysis.

Diversification in California's energy market does not mean deregulation. Customers want choice, so while options diversify, a command and control style of regulation is no longer appropriate. CCAs have a different governing structure, but they are still regulated by their local elected officials and by state regulators, such as yourselves, on a variety of issues.

Today's energy market is vastly different from the energy market of the late nineties. In this new paradigm, regulators should be working collaboratively to understand how rules holistically affect LSEs and provide regulatory
certainty. For example, we now have divergent GHG accounting methodologies in the RPS statute, the Clean Net Short methodology proposed in the IRP proceeding before the CPUC, the AB1110 proceeding ongoing at the CEC, and current standard industry practices. A CCA focused on maximum reduction of GHG emissions does not know where to aim when signing our long-term contracts.

We also have to consider which option keeps costs low while causing the least confusion for our customers and how much time will we be given to make the shift to new methodologies when long-term contracts have already been signed. Collaboration between regulators at your two agencies could ease LSE uncertainty and market uncertainty on this issue.

In a new diversified energy market there is certainly an endearing role for the IOUs. There is: Transmission and distribution; safety, collaborating with first responders and coordinating with legal governments to lead emergency response efforts; and, most importantly for us right now, providing data.

My second main point is that something in the Gap Analysis was missing. What is the evolving role of
the regulators and how are we adapting our systems to the new market. The Consumer Choice Action Plan is an extremely heartening first step to this goal of collaboration, but how we continue these types of collaboration in a durable mechanism to foster ongoing communication. And, no, Ralph Cavanagh and I did not steal each other notes this morning.

Collaboration is crucial for information-sharing. Adversarial proceedings do not foster collaboration, and certainly they have their place, but collaboration will need to supplement and in some places replace the Commission's traditional approaches to a vertically-integrated utility market.

I'm going to give you an example. We all know that there is an RA issue. And the fact that there were 11 RA waivers filed earlier this year and they were filed by ESPs and an IOU show the breadth of the issue. It's not limited to one type of market -- actor. But there are a number of factors leading to the current RA issues we are experiencing: The transmission to intermittent renewable resources, once-through cooling requirements, other generators' retirement requests, growth of DERs, changing forecasts, lack
of market liquidity, hydro uncertainty, an increase in LSEs, and declining supply during a period of increasing demand.

I'm here to tell you that CCAs are here to solve this with you. No CCA wants to be short and cause issues on the grid. To enact a solution, we need robust collaboration with the CAISO, the CEC, the CPUC, generators -- as you indicated before, Commissioner, and all LSEs because we all have visibility into a different slice of the puzzle, and I think -- or a piece of the problem, and that really, with that diversified view is when we can really begin to understand how we got here and how to get out of here.

Returning to my main point, I ask for continued and robust collaboration not only between regulators and LSEs but also with each other and other market stakeholders to understand and solve market issues together. In MCE's comments we indicated that there could be a staff level working group at the CPUC that addresses pressing issues at a staff level and feeds into an annual En Banc structure to keep decision makers in the loop.

Now Ralph thought this didn't go far enough, and that's fine. This was a proposal that we thought
would be -- cause less friction for the regulators because it fed into a process that you already have. We're happy to be more creative as we move into the future.

At this point I'd like to renew a previous invitation to all of you to attend a CCA Board meeting. We have participated in En Bancs in many regulatory proceedings before all of you, and we ask that you come to us and, frankly, discuss areas of potential concern and collaboration. Thank you.

MS. LYNCH: My name is Mary Lynch. I'm with Constellation, an Exelon company, and here to present for you an ESP view of some of these matters.

We are very encouraged by the Gap Cap Report. It recognizes that its customers who are demanding choice -- and Diane and her team have done a great job of teeing up a lot of the important issues that need to be addressed as retail choice expands.

With my five minutes, I want to focus primarily on observations about the role of POLR as it impacts investment and POLR service in the face of increased retail choice while we ensure attainment of de-carbonization, reliability, and consumer protection. These remarks are just intended to tee
up some amplifications to what Diane and her team have already included in the report.

But before I get to POLR, just a couple of comments on retail choice and de-carbonization. There is a part of the Gap Cap Analysis that says that customer choice may conflict with de-carbonization goals. I do not believe that that is the case. There has not been a conflict today. the ESPs have met their de-carbonization goals. Their RPS goals that have been required of them. Many DA customers choose to go beyond the requirements for renewables and are deploying behind the meter and making even off-system purchases of renewables in order to have a cleaner footprint. But some customers don't make that choice. They only are in a position to meet the minimum, and that's our job as their supplier, is to make sure that there is enough renewable energy put on the system for their load to be covered from the RPS requirements. That's our job as their supplier.

Retail choice in the context of Ralph's comments about supporting voluntary procurement efforts and voluntary partnerships, Direct Access is tailor made for that. We are always looking for ways to provide better and more service to our customers.
And having more customers able to avail themselves of choice, allows us to get even more creative working with our -- working with generators, who may form partnerships to make equity investments, along with the types of things that Pat Wood talked about, with us going into multiple offtake agreements with multiple suppliers to meet some of our coming long-term requirements. We're investigating all of those things now.

But for a moment back to POLR, the Gap Cap Report teed up many important POLR issues, particularly noting that POLR is very important with respect to having something in place in the event that one of the retail choice providers fails. But POLR is much more than that. POLR is where it is predominant and used widely is there to facilitate choice, not to be there in case choice fails. It's there to help promote choice. And so the structure of the POLR service needs to be looked at in that context.

In many cases the POLR actually acts as an additional form of choice that customers had. So in the POLR markets, getting into the weeds just a little bit, the POLR provider is securing all the energy products needed to meet the load, and then
they execute the contracts to do that. The wholesale market is what steps up to the plate to help make sure that of the resources are there to provide that. And it's at that wholesale level that investments are being made. And it's in that area where California really has a lot of work to do with respect to POLR, because the fact of the matter is for us to make independent investments with generators, we are very hampered in doing that when there are contracts being given out that have rate-regulated protection that are made with -- in a mode that is not subjecting those contracts to market risk.

In other words, we're being faced with regulatory risks that our investments could be devalued by a decision to let the utilities invest large sums of money in a facility that could just render ours without much value, and they're assured of getting their money back, so there is a real investment problem that we have while we have one foot in the regulated world that needs to be addressed. Fortunately, a lot of these issues have already been teed up in Phase 2 of the PCIA proceeding; recently passed SB237, also calls for a study to look at just these sorts of issues. The RA
proceeding, while having additional things that need to be brought into play with respect to RA, is also teeing up looking at a more forward RA market. And we think that all of those proceedings, informed by the work that's being done here in Customer Choice, will help pave the way to a more vibrant retail choice market.

Thank you.

MR. FREEDMAN: Commissioners, I'm Matt Freedman with The Utility Reform Network. I appreciate the opportunity to talk here. I'll start discussing a little bit about first principles around choice and then I have five specific observations about the Gap Analysis that I'd like to bring to your attention.

We were asked to talk about the value proposition of choice. What is it? Well, we've got to ask ourselves what problem we're trying to solve. Competition and choice are not the goals. They're tools that can be used to achieve defined outcomes. Competition also creates a variety of challenges, many of which are identified in the Gap Analysis, transaction cost, customer confusion, loss of regulatory control, duplication of services, collective action problems.
And choice-based models, they're typically driven by vendors and marketers that are seeking to sell products, not by customers, who are seeking better outcomes. Customers care about lower rates, they care about cleaner energy. They care about reliable service. I think choice ranks far below those outcomes in where customers see the State having to place its priority.

And the environmental benefits of retail competition are typically overstated. They often result from resource shuffling and trading of excess resources. They fail to result in additionality. This word's going to keep coming back in my presentation. And most customers lack any real understanding of what choices produce meaningful and superior environmental benefits.

The bill savings we're seeing a choice-based market, well, sometimes they're just the result of cost-shifting and rate arbitrage. They're not a result of some actors being able to buy energy off the CAISO markets at a lower price than some other actor.

So the concern here is that retail choice and customer choice doesn't become a triumph of marketing over real world outcomes.
The five issues I'd like to talk about, first, confidentiality. The Gap Analysis identifies concerns over the confidentiality of customer-specific data, but it fails to note other types of confidentiality concerns. What's the problem? the increase in retail competition is creating more confidentiality claims by Load Serving Entities, particularly Electric Service Providers. We're seeing this trend at the PUC, we're seeing it at the Energy Commission. And in some cases we have Load Serving Entities objecting to providing any confidentiality data even to agencies that would inform the agency's review of certain policy matters.

So more competition can mean less information is available for public review and regulatory proceedings by legislators and by customers, but information is critical to good policymaking and to enabling meaningful customer choice. So it would be kind of ironic if this new era of customer choice leads to more confusion and less information available in the public domain. The Gap Analysis should take a look at this and point to the need for more transparency, reforms to confidentiality rules and practices, including for example
automatic releases of information that age out of confidentiality protections.

The second issue, disclosure of greenhouse gas and renewable content in portfolios. The Gap Analysis accepts the importance of full disclosure relating to resource portfolios, but it only recommends that the agency should monitor the Energy Commission proceeding, implementing the AB1110 revisions to the power content label. By the way, thank you to the Energy Commission for the great job that the staff has been doing in that proceeding, look forward to seeing that proposal go to rulemaking soon. But really it's not sufficient to simply monitor the implementation of that proceeding. That's a very incomplete understanding of the agenda.

These two Commissions, you both have to start looking at resource shuffling, secondary dispatch, how you account for emissions in the energy imbalance market, the inadequacy of the default on specified power emissions factors. There's a lot of issues around greenhouse gas accounting here that have not yet been resolved and additional modeling and research is absolutely necessary. So the agencies need to be must more actively engaged
in the development of metrics for measuring the impacts of procurement on regional, real world greenhouse gas emissions.

Procurement, the Gap Analysis identifies concerns over the ability of the fragmented retail market to produce financeable commitments for new generating resources. I agree this is a problem. We're going to need to look at alternatives. We're going to think outside the box. I've got some ideas. What do they include? Maybe a voluntary procurement entity which has been identified and talked about. It's already enshrined in the RPS Code sections for RPS compliance. It could be expanded to include procurement for other resources. Or maybe a separate statewide entity that does the procurement of resources that aren't selected by any LSEs but we all decide are collectively needed to ensure optimal portfolio results. That's something that should be considered. Or if Electric Service Providers, for example, are having problems locking into long-term contracts because they're taking this market risk, what about asking whether the ESPs themselves would seek rate recovery with PUC approval for long-term contracts? That would remove the risk and enable them to make long-term
commitments without the fear that these contracts get stranded.

I don't believe that the coordinated multi-party procurement between LSEs that's described in the Analysis is realistically achievable in a manner that is fair and implementable. The notion that a single large project would get developed under 30 individual contracts doesn't seem like a good use of this process. It's very burdensome and duplicative, lots of transaction costs. It's not really going to work. And reliance on the Integrated Resource Plan is also itself unproven and untested. Will it produce new results? I don't know, but I'd like to throw out a radical proposition here that the focus on greenhouse gas metrics for measuring success in procurement may itself be fundamentally misplaced given the problems with accounting and maybe we should just be focusing to a shift on additionality metrics.

New resources and new investments, that's what we're trying to do here, right? So maybe we should be looking at whether customer choice is resulting in these new investments' incremental output. That's the goal, and this may require a rethinking of how these targets are set.
So my time is up, and I've gone through two of my five topics, but I'm happy to talk about others and questions.

CPUC PRESIDENT PICKER: Can you at least identify for us what the other three are so that we can focus our questions?

MR. FREEDMAN: Thank you for asking, Commissioner. The first is the Provider of Last Resort. And I'd also like to talk about the rate design recommendations.

CPUC PRESIDENT PICKER: So let me ask about POLR since that's particular obsession of mine. What do you think is the best structure, should we leave it with the regulated entity, should each LSE have that responsibility? Should there be a separate entity?

MR. FREEDMAN: Well, the Gap Analysis certainly talks about this and suggests that we need to go and address this issue sooner rather than later. I don't see what the problem is with the current structure. We have what you could call a Provider of Last Resort, it's the existing incumbent utilities. They do this job reasonably well. The idea of coming up with an entirely new structure to provide this same service raises the question of
why we would be doing it.

The only question in my mind is how do we deal with tariffs for customers returning to bundled service, so we might see a scenario where there is a wave of returning customers, not just a couple but there is a market dysfunction event and you have a significant percentage of customers coming back. Right now they have transitional bundled service tariffs, the utilities, but that's a six-month tariff and then customers return to bundled service. Maybe we need a different kind of a tariff in the event of a mass migration back to customer -- bundled service.

CPUC PRESIDENT PICKER: Well, let me then ask Caroline Choi whether she feels that the incumbent utilities should provide that purpose and, if so, what's the best model for them to be able to provide the hedge they need for potential returning customers.

MS. CHOI: So the IOUs don't believe that they have to be the POLR, and certainly that is the role that we're playing today. And I want to also differentiate between the energy supplier role of POLR versus the reliability function that we have as the distribution network operator. And so we
would separate those. From the energy supply perspective, we don't see the utility has to be POLR, and happy to work with stakeholders on other opportunities for others that could provide that role.

From -- if they are going to remain POLR, it would be clearly articulated they are going to be the Provider of Last Resort, then I think we have some changes that need to be made in order to ensure the right rules are in place, to ensure certainty, to have cost allocation, these kinds of things to ensure that those are in place, and maybe the tariff idea that Matt just raised. But I think we don't see that has to be the utility.

CPUC PRESIDENT PICKER: And, again, if you do remain, then what do you see are the financial risks to your customers?

MS. CHOI: Well, it's an issue that we have today, right, where we are seeing departing loads, so having to plan for load that we don't know will be there, and so ensuring that there is proper cost allocation for resources that we do procure on their behalf. It is why I think we're talking about a central buyer function here for those types of resources.
CPUC PRESIDENT PICKER: But what does a Provider of Last Resort need to do for all of a sudden a large number of customers who are returning? What kind of hedges, what kind of resource allocations do they need to make, how do they ensure that at that point they aren't having to all of a sudden buy into an especially expensive market, which was an issue for the Providers of Last Resort in 2000 and 2001? For the same reason that some of the Load Serving Entities failed, because there was an abruptly sharp increase in prices that they couldn't meet for even a couple of weeks, then all of a sudden those customers showed back at the utilities who also then were finding themselves buying into that market not only for their customers but then for all of a sudden these customers they hadn't planned for; how do we begin to set that structure in place?

MS. CHOI: Well, I think part of it is certainly having the proper cost-recovery mechanism, so one of the challenges certainly during the crisis -- I wasn't here, but my understanding is that because of the price cap, despite having higher cost of power, we couldn't -- we couldn't, you know, recover those costs through our rates that we were
charging to customers.

So certainly one of the things is to be able to recover those costs of the higher-priced power that we may see if -- especially if we see a mass migration back to the utility for returning customers or CCAs, for instance. So I think that's one.

Two is how do we -- I mean I think part of it is do you have a capacity market that you plan around the capacity that needs that may occur if you have a bunch of returning customers back to the utility. I mean that's another mechanism, thinking about other markets that currently don't exist in California around those returning customers.

CPUC PRESIDENT PICKER: Do we need to provide some form of stress testing of Load Serving Entities on a regular basis so there is a picture of what the likelihood, the risk, so you can price the risk of this large number of returning customers if you remain the POLR? I'm just asking.

MS. CHOI: I think that makes sense,
Commissioner.

MS. LYNCH: May I address your question as well? So POLR, I think all of those points are very well taken. And I think Load Serving Entities having to
be, you know, creditworthy and financially healthy is important, but the whole POLR discussion is much broader than what we've been talking about here. It gets to how -- where is the resource base.

And if a CCA were to fail or if an ESP were to leave the market right away, it doesn't mean the generation is leaving the state. It means that somehow else that generation is going to be delivered to those customers who supplier went away. So that the generation resource is still there. And what POLR service does in places like in Maryland, the one that I worked on early in my career, is the utilities who no longer owned any supply went out with auctions. And they said tell us how much we need to pay you to supply a percentage of our load. And the winners in those auctions were then obligated to provide that power at that price, and customers were free to come and go. So the wholesale market had to price that risk of attrition into the market.

In Maryland, I don't know if they still have it, but we had a provision that said if for some reason the returning customer base was so large that it overwhelmed the service, that there would be some pricing accommodations. It never happened, but
that was there to provide some hedge so that the price, the base price to these customers over the term of that procurement would be reasonable, to ensure that if there was some big market dislocation, customers weren't paying for that day in and day out. They had a reasonable price most of the time, but there was a protection mechanism there.

So all of these things can go into designing the POLR supply. You can have all of these rules associated with when customers come and go. How you layer in the pricing for POLR, it's not done all at one time. The POLR, the utilities that are supplying the POLR go out with regular auctions once a year, doing a third of their load that's on POLR service. So there are auctions all the time going in across the POLR states at the wholesale level.

And it's very supportive of things like the other wholesale market structures that are out there like the capacity markets, because developers and owners of the resources know that there are going to be these recurring and very regular opportunities to deploy their resources and get contracts that are not super long-term, but that are usually three
years, sometimes a little bit more in some of the jurisdictions, but they know it's coming up all the time. And that's what provides the certainty to the marketplace for investments, to meet things when supply and demand start getting tight.

So there is a lot more to the discussion about POLR than just what happens if they're there to step in to fail. But on that topic keep in mind that certainly, I think, there are bond postings out there that cover some of those costs if somebody fails and leaves the state. There is some protection there on the cost side already. There isn't an ESP world because the customers, when we had that proceeding, recognized that they could absorb that risk. They were working with their suppliers, they were doing contracts that met their needs, and if we failed they said we will take the risk of going onto real-time pricing, the TBS rate, and they accepted that risk.

So there are a lot of rules that need to be developed for POLR, but it's a matter of just coming -- looking at the various models that are out there, seeing what applies best here, and developing the rules around that.

MS. SWAROOP: And I will just add two quick
points because most things have been said. The first is that CCAs are -- some CCAs are very interested in becoming the POLR and some CCAs are still investigating what that means, what obligations would be. As Caroline was indicating, there are different responsibilities associated with the gen and TND sides of the functionality.

The other thing I'll add is that there was recently a conclusion in the CCA bond hearing at the Commission where the rules were redone for how much the bond should be that's posted at the Commission by a CCA upon its launch to cover a mass return of customers. So that might answer some of your questions about financial hedging.

CPUC COMMISSIONER RANDOLPH: I have a question on -- oh, did you want to say something, Matt?

MR. FREEDMAN: Just offer one more thought on this. States that have done a lot of development on POLRs, they typically have skinny utilities, they fool retail competition. I don't think they're models for California. They're not up to the same kinds of big goals that we have here. And these POLRs typically engage in really short-term procurement. They do zero resource planning. They just want to be able to supply the needs of their
customers.

If you want to move in this direction, which I don't advise you to do, then you need to have resource planning figured out first. Who is responsible for buying all the resources that we want and need to reach our aggressive clean energy and Climate Goals. Now some would argue, well, let the wholesale markets figure that out, let's just set up a bunch of centralized concept markets, we'll federalize the policy, and FERC can tell us whether it's okay for us to prefer certain types of resources. Obviously I don't like that, but this is a very big break from where California has historically gone.

I get the problem with making sure that there is some entity for customers to come back to if markets go wrong, but trying to recreate the utility structure in a third-party entity seems like an awful lot of work for not much gain.

CPUC COMMISSIONER RANDOLPH: I was going to shift away from POLR, so does anybody else want to ask any questions on that?

CPUC COMMISSIONER RECHTSCHAFFEN: I was just going to ask does it have to be all or nothing? Can you have a short POLR that exists for a three-
or six-month transition period so you're not recreating the entire utility procurement architecture and then force customers go back to other providers?

MR. FREEDMAN: Then you'd have a bundled-service option that the utilities continue to administer but then a separate option which would be just for customers that are coming off of alternative service providers?

CPUC COMMISSIONER RECHTSCHAFFEN: Right. That's sort of I thought I heard Pat Wood suggested something like this this morning where you could have a competitive procurement -- competitive services for a POLR that exist just to meet a short-term need if the utilities didn't do it or if the CCAs didn't do it. It wouldn't replace the function of long-term resource procurement; it would just exist as a backstop in the interim period of time.

MR. FREEDMAN: All things are possible, Commissioner, but think of the amount of resources that will be required just to even set up the basic rules for such a process. Is that the really next set of tasks that you all want to be working on? There's a lot to do.
MS. LYNCH: Well, and I think that Mr. Wood was talking about the Texas model where -- and that was not the POLR model that I was talking about. The Texas model is a model that is just there to take care of customers who lose their supplier. it's not -- it's not any kind of a bundled service for customers who choose to stay with the utility, okay. It is just there to backstop the choice market. And, in fact, if you end up on that POLR service in Texas, you've got to hurry up and get off it, okay. It's not -- it is not there to provide long-term supply to those customers. Whereas in the other POLR models that I was speaking of, those -- in most cases and maybe in all cases it is the utility that has the POLR obligation and they are managing these regular procurements to have supply to meet that load. It's just that they're going out in the wholesale market for that load instead of being told what they shouldn't -- you know, what types of resources they should have in their mix. The resource mix is coming from the market. And it is the market that is deciding what that resource mix will be consistent with the reliability requirements, consistent with the RPS and de-carbonization
requirements.

So, you know, they are meeting whatever those requirements are. Energy efficiency usually remains as a utility-provided service except for demand response, which is very integrated into the eastern markets. So Matt is absolutely correct that choice is not consistent with command and control investment. It's not. In that tension that exists that the paper, you know, very much tees up has got to be -- has got to be addressed. There have to be new market structures if we're going to move to a POLR service.

And no disagreement that California is so not close to even the POLR models that I'm talking about, the ownership of assets and contracts by the utilities is a huge issue. We know that they own now in those contracts and facilities way more than they need, and that ship has to be righted. We have to right-size the utilities' portfolios and then we can talk about moving the remainder of the resource base back into the market and talk about these new models. So there does have to be transition if that is what we want to move to. And we do have to think through how we right-size the utility portfolios and manage their procurement to
accommodate choice going forward.

MS. FELLMAN: And I just want to offer that in the Gap Analysis we pulled out from the market assessments examples of POLR in each of those jurisdictions so you could -- we summarize those and you can check those out to see how other states have done it.

MS. CHOI: Yeah. I would just add that those states are, to Matt's point, not like California to the extent that we have clear goals around the climate, goals that we have towards 2030, and all the programs that are provided through the utility. So when you think about POLR and the Texas model, in particular, it's how do you provide insurance of energy but also still assuring affordability and equity and access. So those are the things that aren't done through the Texas model, and not that other POLR states have different models, I understand that, but California is in a unique position that I think that other states don't necessarily provide a great model for us to follow.

CPUC PRESIDENT PICKER: Mr. Weisenmiller.

CEC CHAIR WEISENMILLER: I just want to ask Matt, so if the next step then would be for the utility to figure out a POLR role, that means they have to
make some presumption on how often, you know, that
that is going to happen, how much load to line up.
Should we be moving in that direction?

MR. FREEDMAN: Is your question about trying to
figure out the residual load that's likely to
remain with the utilities after customer choice
does its work?

CEC CHAIR WEISENMILLER: No. It's -- I'm
assuming if we ask Caroline today how much are they
procuring for that POLR function, --

MS. CHOI: Right.

CEC CHAIR WEISENMILLER: -- the answer is
unlikely she's going to say anything, so if you
want to be able to stay in the utility, then we
have to provide some guidance to them to move
forward.

MR. FREEDMAN: Well, I think this gets to the
larger issue of what happens to the existing
portfolio of utility resources. Utilities have
assembled a large portfolio, as we all know, of
utility-owned and contracted resources, which
contains some stuff we like and some stuff we don't
like. And now with the load migration, the big
question at least on the PUC's plate in the PCIA
case is what to do with that portfolio. Do we
simply take it away from the utilities' bundled load entirely and treat it as a totally separate asset that is sliced and diced and sold into the market? Is some piece of it reserved for bundled-service customers? That's are the questions that remain to be answered. And I think it informs the answer to the question you're asking because given that they have got a lot of resources already, do we have them go out and line up entirely new resources to serve residual load? I'm not sure that that makes sense right now. We kind of have to see how the first part of the equation plays out.

CPUC COMMISSIONER RANDOLPH: Can I talk about consumer protection for a while? And this is specifically a question for the CCAs. Because in our recent decision sort of implementing some new consumer protections, we kind of leaned heavily on the IOUs to implement those consumer protections. So I would love out hear your thoughts about where -- what you see as the role of CCAs in terms of things like solar providers and protecting consumers from fraud or high-pressure sales, things like that.

MS. SWAROOP: Absolutely. Thank you. Because we
do tend to have close connections with our communities not only through our local elected officials but also through our program staff who are providing energy efficiency and other types of programs, also through our grassroots advocates and outreach with different community organizations and also, you know, everybody -- and also our customer engagement, we do tend to -- we do want to make sure that obviously our customers are protected. And so we have had a few issues with some of those core gas -- gas core transportation folks and so we have reached out to our customers on particular issues like that. We're happy to continue moving forward on those consumer protection issues.

We have seen MCE and other CCAs become a trusted source for consumer information from our customers who have been working with us on our NEM rates or other programs, so we're happy to integrate into the Commission's processes in terms of consumer protection and figuring out how we can bolster them with our own unique community viewpoint.

CPUC COMMISSIONER RANDOLPH: I'll just add that I think this is an area where the CCAs and the utilities can collaborate. We share a customer. You're right, much of our communication has been
directed by the Commission and I think the utility
is and continues to be a trusted energy advisor to
those customers. As they move to CCA service, I do
think it's important that those messages echo one
another and support one another so they are hearing
a consistent message around what they should be,
thinking about what they should be asking, the
types of questions they should be asking of service
providers when they come to them and do especially
the hard sales tactics around energy savings and
bill savings and those types of things, to make
sure that they are aware of and are educated
consumers of those products, whether it's solar
storage and other services that may be coming to
their phones or doors.

MS. SWAROOP: And if I could just add, you know,
you're used to seeing the IOUs and the CCAs in very
adversarial roles in front of the regulators, but
actually on our customer service side we often talk
about each other as partners and in partnership.
And we do a lot of customer outreach and programs
and service together. So I think that really is a
ripe role, for us to collaborate.

CPUC COMMISSIONER RECHTSCHAFFEN: I have a
question for Shalini and Mary about time-of-use
rates. I know some of the CCAs have been following the Commission's rules on time-of-use rates. I'm wondering if you could tell me how many that you know, how many plan to, and I mean I think it's the same question, if you know for Constellation over the other ESPs and if it works with the business model that the ESPs have. So I'm interested in the adoption of time-of-use rates.

MS. SWAROOP: Absolutely. So I can't give you a number off the top of my head because it depends on the IOU service territory and where CCAs are in their launch. However, I will say that many CCAs are interested did in doing TOU rates and some CCAs are interested in doing their own TOU time rate periods because when TOU rates are set -- or time periods are set for the whole state, that may or may not match the local load needs for each CCA. So depending upon -- for example, some CCAs don't peak in the summer, so CCAs are interested in going to TOU rates, it seems to be. I can double-check with other CCAs, but it does -- it depends on each CCA and where they are in their launch period.

CPUC COMMISSIONER RECHTSCHAFFEN: We have different CCAs for each of the three Investor Owned Utilities, as I'm sure you know, so we don't have a
single statewide TOU rate.

MS. SWAROOP: Right.

MS. LYNCH: And from the ESP perspective, we offer our customers whatever type of pricing they want. And a good -- I can't give you numbers either, but a significant part of our load does prefer to be paying indexed, daily indexed pricing.

Now what we do with those customers is provide them with information on what we're seeing happen in the marketplace where we're seeing pricing trends, and then we can help them layer in hedges to take away some of that volatility at times that seem advantageous to them, but it's their decision. Some of them -- like I said, some of them prefer time of use, some of them prefer to lock in fixed pricing primarily to manage their energy budgets. That's why we see fixed price preferences from a lot of our customers for specific time periods, in order to be able to tell their managements here is what our energy budget is, here is what we're going to be spending, and then they're locked in that way.

So we respond to what they want with respect to the pricing of their energy. And it's really -- I'm trying to think of what kind of numbers I've
seen recently, but there's a significant amount of our load in each camp, fixed pricing versus indexed pricing.

CPUC PRESIDENT PICKER: So I think that as we move into a much more dynamic era with really high peaks, this is going to be an important question, so we may return to this at some point in other discussions.

I wanted to ask a little bit about some of the RA issues, the resource adequacy issues. Now Resource Adequacy can be both system-wide but frequently the stumbling block is for specific load pockets where transmission is constrained and there have to be some indigenous resources to provide part of the generation for peak in order to meet needs.

So this is a question about the scale of some of the providers. If you just have a few commercial industrial customers in a particular load serving area, how -- if you have portions of a load-constrained area in your service territory which is geographic and not related to the constraints of the grid, are we ever going to get to the -- to the bottom of this?

We saw in the past two Load Serving Entities being issued waivers for being out of compliance
with the resource adequacy requirements. Last year
we saw 11 as well as one that failed to meet
system-wide requirements. Is this going to
continue? Do you have conversations amongst the
Electricity Service Providers and the CCAs, do you
really see a solution? I'm not sure that either of
you anticipated this when you got into the
California market, and so I'm just wondering
whether the solutions that we are going to impose
really are going to be that, or is there actually
an effort at the local level to solve it rather
than punting it to the CPUC?

MS. LYNCH: Well, I would leave it to Shalini to
talk about whether she's seen local solutions.
From our perspective as an ESP, we're looking at
the supply and demand dynamics all the time to
figure out what we need to get to serve our load.
It's very hard to do in this state with respect to
RA because the load forecasting changes, the RA
requirements are not clearly set forth, there is
aggregation that's going on that then needs to be
backstopped because we don't go out and procure the
right resources, there are problems with getting
the supply we need from the entities that have it
under contract who don't need it, there have been
issues with that. So there are a lot of disparate issues going on in RA, all of which are hopefully going to be addressed in the RA proceeding and a lot of what we believe would be addressed by moving to the multi-year forward requirements that people need to meet. But we also believe that it's really important for that to work well, to have a centralized clearing market that allows all of that supply to come in, all of that demand to come in, and clears out through that market so that in one place at one time the requirement that's been established for RA is met by the demand. And that mechanism, where it's used in other markets, really tends to reveal when you're getting close to problems, okay. It's really telling you when the market's getting short and what's happening, especially if you're doing this several years forward.

The problem from the ESP perspective of doing this multi-year forward isn't that we object to having a multi-year forward obligation, but our load is contestable, it can leave us at different times. So we need to have ways to move in and out of these RA positions. We're not looking for recovery of stranded cost, we're just looking for
ways to manage these commitments that we make to RA three years out when we may get a year down the road and not be serving that much load. And that's what we see as one of the primary benefits of a centralized clearing market, is that it gives us that opportunity through the regular auctions that are held under those mechanisms to put in supply that has been excess or to go in and buy someone else's excess because the load has migrated to us. So we very much, my company very much likes the forward-capacity markets, but we need to have tools to manage those obligations.

CPUC PRESIDENT PICKER: I wondered when somebody was going to say those words.

MS. LYNCH: Pardon me?

CPUC PRESIDENT PICKER: I wondered when somebody was going to say those words.

MS. LYNCH: Oh, well, okay, my job.

MR. FREEDMAN: Commissioner, if I may. The word centralized capacity markets gets me going, so there is another way here. Rather than creating a new set of markets to replace the current set of markets that aren't working, maybe -- here is a radical idea -- maybe we should take away local RA compliance obligations entirely from Load Serving
Entities. What if we gave it to a third party, a procurement entity that went and did local RA compliance on behalf of all the retailer sellers serving customers in a given area?

I mean Mary's right, the ESP community has this big challenge if customers keep leaving. Customers commit for one year, two years, maybe three years. So many Load Serving Entities can't tell you what they're going to need for RA compliance in a local area five years down the line, so why are we asking them to buy stuff for that market. Why don't we instead come up with a third-party procurement entity that's PUC jurisdictional, has to come in for approval and review of all deals, can enter into long-term commitments, can allocate the costs nonbypassably, and it isn't affected by the market turn that's happening at the retail space. So the regulators can be involved in helping to ensure that local resource needs are resolved optimally at least cost rather than through a disconnected set of choices by various market actors.

MS. LYNCH: And that type of idea certainly in the near-term as we transition to more choice doesn't need to be off the table, that for some elements of the requirements -- it's the same as
saying we need to have backstop procurement, right? It's backstop procurement of a different flavor. So that idea doesn't need to be off the table, especially in the near-term, that there would be some centralized procurement of local RA. But what has to be kept in mind is when I talk to my folks about it, when we lose degrees of freedom for serving our customers, we're not helping them as much as we could be helping them.

Now there has to be a balance there between what Matt's talking about, needing to, you know, get to a point where we have the confidence that all the resources there versus this idea of we want to help our customers get the resources they want. I recognize that there needs to be a balance there. So that needs to be kept in mind.

And we also have to very much keep in mind that if we're going to do that, we have to take into account commitments that entities may have already made, so we don't want to let a centralized procurement buyer come in and devalue something that a CCA might have done or that an ESP might have done.

**MS. FELLMAN:** And let's have -- we're reaching the end of our hour, but I think the CCAs and IOUs
would like to respond.

MS. SWAROOP: Yes, I'll be very brief. We are interested in doing different solutions for local RA. For example, East Bay Clean Energy and PG&E have gotten together in Oakland to do the Oakland Clean Energy Initiative and it's a storage project specifically to address things like local RA. So I unsurprisingly disagree with Matt on this issue for the need of a central procurement process with non-bypassable charges.

The point is: Give us the rules, we'll follow the rules, we'll innovate. We might not get to the rules the way that you want us to get to them, but we will get to them in a way that satisfies them and is innovative and serves our local communities. Thank you.

MS. CHOI: Well, we're very interested in a central buyer.

(Laughter)

MS. CHOI: And we think that it can protect customers, in particular, if you think about resources, particularly what you just said, President Picker, in terms of a resource need that would have to be split amongst multiple entities in a local area, that to simplify the contracting a
central buyer makes a lot of sense. Because you
don't know where load's going because it's
shifting, I mean IOUs have the same issue that the
ESPs are saying that they have in terms of where is
load going to be in the next few years, a central
buyer again serves that purpose in terms of
shifting between, and you don't have to worry about
that as the buyer. So we are very interested in a
central buyer. We think it makes a lot of sense,
and so something that we would be very interested
in talking about.

CPUC COMMISSIONER RANDOLPH: So can I ask kind of
question sort of, kind of up on the higher level in
the sense that some of this discussion has kind of
-- gets to the heart of what Pat and Ralph were
talking about which is, you know, sort of command
and control versus the markets, right. Because
some of these issues, like resource adequacy, there
is a clear kind of regulatory framework and we look
at, okay, here are the different levers we can pull
and we have this whole conversation and we come up
with a solution.

But then there are things like we have the whole
conversation about time of use and are CCAs going
to have their own time-of-use rates and then are
people next door to each other going to be on different time-of-uses. Somebody stays with bundled service instead maybe goes to a CCA, and then end up having different rates intent that defeats the whole purpose of time-of-use rates because the whole purpose is to affect people's behavior, to affect the grid, and help the whole system work better, so there is that tension there.

So I guess my question is for those of you who are sort of more supportive of the concept of choice, how do you grapple with these big policy shifts like, you know, trying to put together a demand response program that's really working, trying to solve these different problems in a situation where your regulatory levers are different? Because just going to kind of an enforcement framework doesn't seem to be the thing that would get us there. So how do we make some of these big high level policy questions and policy determinations in a world where we have so many different providers? A softball question.

CPUC PRESIDENT PICKER: I think you could answer that yes or no.

CPUC COMMISSIONER RECHTSCHAFFEN: The panel is over now. It's two o'clock.
MS. LYNCH: Yeah. Maybe, maybe. I think that choice is messy sometimes. Different customers see different things that they want. If we have price signals that's out there that tell them energy is getting more expensive, certainly businesses will respond and increasingly with Smart Meters homes will respond. I worry about my husband sitting in front of our meter watching it go and, you know, he worries about it all the time. What can we shut off, what can we not run anymore? And that's what you get with choice. You get people getting really engaged in their energy usage and how they manage it, and you have to let some of that just happen, okay.

So if one CCA sees a different time-of-use period that they want to use as part of their rate design, I don't think that that compromises getting good demand response programs in there, as long as people are responding to some kind of price signal that they're actually seeing, that's actually impacting their energy usage. So I'm not sure that having different time-of-use rates, I don't really see how they could be all that different from one jurisdiction to another, but if they were I don't think that that compromises, you know, vibrant
demand response programs, but I think you have to let some of that innovation bloom as we move to retail choice. And, you know, if we're not getting demand response, then we've got to try something different, but customers do respond to price. If prices go high, they're responding. And I think they can -- they respond very quickly most of the time. So I'm not sure that it matters if we have different time-of-use rates across different jurisdictions, although I'm not exactly seeing how that could come about.

MS. FELLMAN: Yeah, we have time. Let's --

MS. CHOI: I would just add that -- I mean I think it goes back to what's the problem we're trying to solve and from our perspective it's trying to get to the 2030 goals as reliably and affordably as possible while accommodating choices for customers, whether that's demand -- distributed energy resource type choices or larger community choice aggregation efforts. And so it may be, and I think it showed up in the Gap Analysis that there may be a potential need for more broader PUC oversight authority. And I think it depends on -- depending on the issue, I think that may be necessary or some entity oversight. Because as we
move towards 2030 and the transformation that's happening to our industry and the choices that customers are making, we need to make sure that we are able to achieve those goals, again, reliably and affordably; and the authorities that the current agencies have, they need to change in order to assure that happens and it's done in a way that doesn't increase customer confusion and have programs work as, you know, coordinated as possible.

So it may be that a demand response, time-of-use period from a CCA being different from the utility in which it resides is not a problem, but it could be, and we want to make sure that it's also just not creating additional customer confusion when they're seeing some information from their CCA and then their neighbor who happened to stay with bundled service gets different information. So we really want to make sure that the system is operating as effectively as possible, you're optimizing all the resources on the grid, and to the benefit of all customers. And it may be that additional oversight authority is necessary from the regulatory agencies.

MS. SWAROOP: I'm just going to make one last
full push for a collaborative process, because I think if a CCA is doing a different TOU rate it's probably to achieve the same de-carbonization goals that you are trying to achieve also. So I don't think that they're necessarily at odds with each other. I think they're complementary in that CCAs can be used as laboratories for innovation for different things. So part of that is local programs, but part of that is also rates, and so I don't believe that there needs to be further enforcement authority but, rather, better collaboration and collaborative processes so that we can all get comfortable with where we're all going together and achieving those statewide goals.

MR. FREEDMAN: Commissioner, I'll offer just two thoughts. If customers are choosing between various rate options and the Commission has invested a lot of political capital in to making multiple rate options available to customers, we need good rate comparison tools. And there's got to be a central place that a customer can go to see all the rates that are available to them and to compare how they would fare under different options. Without that type of comparison analytics, choice is meaningless. No one
understands how different rate options affect their personal bill until they run it through the calculator. Seriously, if any you have done it, you will see, it might produce results that are not what you expected. So maybe making sure that the utilities have all of the competitive provider rates that they can also model for customers as part of that tool. I know the utilities will resist this idea, but it's kind of necessary in order to make choice meaningful.

And the final thing I'll offer is you talked about an enforcement framework. I think you were asking do we just wait to see if the entities non-comply and then we hit them with penalties, is that the role of the Commission or are we trying to get out in front of this, well, my view is you have to get out front. By the time non-compliance happens, it's too late and your choices are pretty ugly, especially if there is widespread non-compliance. The Commission might be in a position of having to enforce company-killing penalties, and in that case you have a whole other set of political considerations that get overlaid on that. And meanwhile you're fighting about what happened in the past rather than making sure you develop...
policies to prevent it from happening in the future.

CPUC COMMISSIONER GUZMAN ACEVES: Anything else? I add one point to this which is a point I think Commissioner Randolph was making, in addition to just having less customer confusion, which is certainly an issue, although we kind of have that already with some of the munis and their different times as well, it's an issue of really this equity issue around system benefit, where we are forcing the bundled customer to make this adjustment even if it's not a benefit to their bill. And then you have the luxury of an ESP customer or a CCA customer not even using time of use because of protection for their bill. So we're kind of making the bundled customer suck it up for the benefit of the system benefit to go on time of use, and that's an equity issue. We don't have the direct authority to tell all ESP customers and all CCA customers that they must go on time of use for the system benefit in reduction, which is probably -- I don't want to get into that anymore, but a better policy that we have headed in that direction, but that's really the equity issue, is that it's not just about customer confusion, it's about not
having to have the same bill impact and
collection to system load reduction.

CPUC COMMISSIONER RANDOLPH: And to be clear, to
me, that time-of-use question is an example of kind
of, you know, we keep running into these kind of
high level policy questions and they just become
more challenging, a little more fragmented, the
market is. And I don't know that there is -- I
mean the fragmentation is there, it's going to
increase, but I think the hardest part of figuring
this all out is not the issues we have right now in
front of us but the issues that we're going to see.

CPUC PRESIDENT PICKER: I turn to our colleagues
from the CEC.

CEC COMMISSIONER MCALLISTER: So this is really
just scratching, in my view, the surface of one of
the key issues that we have to resolve. You know
if we are going to get demand response to scale
such that it -- such that it actually does help us
avoid some serious investments in the system and
create the headroom for all this electrification
that's coming in and we have to transmit, as
Commissioner Guzman was just saying -- well, both
Commissioners, we have to be able to transmit the
grid conditions and some sort of rate signal that
reflects those in basically real time and at some
scale in some uniform way.

And so what we're highlighting here in the POLR
discussion and in this discussion is the lack of
uniformity or the potential lack of uniformity. So
that doesn't help markets. I mean if you really
want to -- if we want third parties to develop
products and go out there and sell them to end-use
customers, whether they're -- you know, whatever
the model is, whatever the customer provider,
whatever the provider is, those have to be
consistent in some fundamental way or California
doesn't have a policy.

And so I think, you know, it's all nice that
you're all very in tune with your customers. But,
you know, if you think about the telecom example or
something where you have whiplash, everybody's
moving back and forth, it's not that extreme,
obviously, because we don't have as many choices in
the market, but there is going to be some jumping
around of customers from one to the other, and
there is going to be some competition for customers
presumably. Like, hey, I can do you one better, I
can do you one better, and then from year to year
that will swing.
So I kind of am looking for -- there are jurisdictional and authority issues here, but, you know, how -- and I'm hearing from a CCA, 'We can work it out if we just go Kumbaya.' So I guess I'm not really seeing an adequate -- at least -- you know, Matt, I think you came closest -- but an adequate structure by which we get some coherence in the signals that customers see and we get some response that functionally acts as a supply resource, which is what we need to avoid -- to sort of optimize the system going forward. So comments on that.

MR. FREEDMAN: Well, Commissioner, I will offer one thought on this which is maybe you need to stop thinking about retail rates as the only way to accomplish these goals. Perhaps if you're trying to incent demand response based on real time grid conditions, the answer isn't going to charge every customer a real time retail rate because 99 percent of customers have no idea how to deal with that. But you can compensate demand response resources using a real time rate, so it's really looking at different structures providing -- for providing compensation for the behavioral changes and the automated responses that are embedded into the
system that might provide the uniformity that we're looking for so that it doesn't get all commingled with all the different retail rate structures out there.

CPUC PRESIDENT PICKER: So I'm going to cut the conversation off now because we were supposed to move onto another panel -- unless there is one more question? Thanks. So.

MS. FELLMAN: Right. Thank you to our LSE and -- (Applause)

CPUC PRESIDENT PICKER: One quick comment from Commissioner Peterman who is going to have to leave early.

CPUC COMMISSIONER PETERMAN: I have to leave early, that's my only comment, I'm leaving at 3:00. It's just more of a request. So as we were having this conversation I was thinking about how have we coordinated so far with the fact that we have several municipal utilities. And one of those coordinating structures is legislation, and we still see sometimes inequity. But I would say for stakeholders who are providing comments in response to the Gap Analysis, if there are good examples you have out there from how we have coordinated with the munis and Investor Owned Utilities to get to
certain State goals, please provide that, because I think we do have some examples out there to look towards as well as some cautionary lessons.

Thanks.

CPUC PRESIDENT PICKER: Thank you.

MS. THAKAR: Okay. Well, we're going to go ahead and move into our last panel of the day before public comment begins. This panel is the Stakeholder Response Panel. And we'll be starting Emily Watt, Senior Energy Project Manager with Microsoft, providing the customer perspective; followed by Matt Vespa, Staff Attorney with Earthjustice, providing the environmental perspective. Marc Joseph will be next. He's an attorney with Adams, Broadwell, Joseph & Cardozo. He will be providing the labor perspective. And then finally we will have Elise Hunter with Grid Alternatives, who is Policy and Regulatory Affairs Director, providing a consumer protection perspective on rooftop solar. And then Jith Meganathan, who is an attorney with his own law firm, will provide a little bit more of a robust discussion on customer protections from the rooftop solar and PACE space. So with that I will have Emily go ahead and kick it off.
MS. WATT: Hi. Thank you all for having -- having me here. I am a new -- excuse me. I am new obviously to this, and lost my voice. (Coughing.) So I wanted to start off with two -- this is really weird.

MR. VESPA: Yeah, I'm happy to start off. Matt Vespa for Earthjustice and I'm here to provide an environmental perspective, to share observations based on my experience advocating for de-carbonization of California's energy system as quickly, as cost-effectively, and as equitably as possible. And from where I'm sitting, as far as choice goes, I'm fairly indifferent to who does it as long as it gets done.

For my opening remarks, I'd like to highlight three gaps that warrant further action. The first is one that Matt Freedman raised. I do see the need to address continued shortcomings in accurately communicating and marketing greenhouse gas and renewable content that go beyond the power content label.

The second, I think Matt also raised this -- we did not coordinate talking points, by the way -- is the need for more centralized and coordinated procurement to achieve air quality to disadvantaged
communities and greenhouse gas objectives and to enable the early retirement of existing gas-fired generation, particularly in local areas.

And the third is something I feel like the gas -- the Gap Analysis largely overlooked which is to break down the silos between gas and electric service and much be more expansive about what we mean when we say choice. And for me what is interesting here and the choice we need to talk a lot more about is the choice to get off gas and go all electric. That is a choice that matters to the environment. That is a choice that is not before Californians right now and that that is a choice I would like to see us focus on a lot more.

So first with regard to disclosure, I very much support what the CEC is doing with the power content label. I think it's a great step forward in accuracy and disclosure. For example, not counting unbundled RECs as your covered resources. This really helps provide clarity to decision makers, but -- or, excuse me -- to customers, but I don't see it ending there.

We have heard this concern raised before, but I think it's important that marketing standards, to better marketing standards to ensure that when an
LSE is offering a 50-percent or 100-percent renewable project that the resources that are coming from it are incremental. And it continues to be very difficult to figure out, when you sign up for one of these things, where they're sourced and whether participation is actually making a change from business as usual.

And as an environmental advocate I am very, very frustrated by this, climate change is real and we need real solutions, not one-click wonders for, you know, dimes that seem to do something. And so if you are as frustrated as is by me and looked for a cause of action under Fraudulent Green Marketing Practices in the Business and Professions Code, you would find that there is none because under the Code -- there is a Code section under Environmental Green Marketing, but it relies on 2012 standards from the Federal Trade Commission as a defense. And under those standards you can rely on bundled RECs for 100-percent green energy claims. But what was okay in 2012 isn't okay now, and I think, you know, we talk about achieving de-carbonization, we always set our expectations higher and higher and higher.

And so, for example, the business community,
Apple, Microsoft, I mean they're all doing additional projects to meet their 100-percent renewable claims. We should be raising the minimum bar here. So I think what needs to be done is to create some kind of new criteria that is short incrementality for anyone marketing a 100-percent renewable claim, and then you have to modify the Business and Professions Code to have compliance with that. And that will really get at some of the -- you know, I don't want to say less scrupulous, but -- some of these representations that really aren't helping the environment.

And then of course I think additionality is really a base, we have to go beyond that. One hundred percent renewable representations, even if incremental, are knitted out, so gas or other fossil resources continue to be relied on. It's just do you fully offset the excess renewable generation. And so I have a concern that we have these expectations in place that encourage loading up on solar as a least course resource to be 100-percent renewable claims, but the same thought isn't given to how their integrated, right. And so you run this risk of ending up with worse air quality, increased cycling of gas plants, with a
disproportionate impact on disadvantaged communities, and putting resources on the grid that have a diminished greenhouse gas benefit.

And the reason I'm waving all this in the context of marketing and disclosure is because, you know, I think it's important to ensure that the projects that are marketed and the goals that communities set for themselves really keep at pace with where we need to go. And when they start to fall behind, we have a little dissidence, and I'm starting to see that.

And then moving onto the second point around procurement. I just don't see independent and uncoordinated actions by LSEs as being able to effectively get us to where we need to go for air quality, greenhouse gas, and equity objectives, especially when it comes to putting the right resources in the right places to transition past reliance on gas-fired generation. So, Commissioner Picker, you had asked a question earlier about RA, I do think we need a central buyer, at least for the existing gas-fired generation in local areas to make sure we're keeping the right resources, but also a central buyer will allow for the factoring in of disadvantaged communities issues and other
considerations, and really be more holistic about how we transition the fleet past gas-fired generation.

And so one example of directed procurement the Commission really recently embarked on that environmental justice and environmental groups were very supportive of was the 565 or so megawatts of storage procurement following the Metcalf RMR. This is a draft resolution still, but it went to a local sub area. That sub area is on capacity constraint, it's very reliant on gas-fired generation. A lot of that gas will go off contracts in the next several years. And so you're mitigating market power in the right place. You get a bang for your buck. You're integrating the system with renewables on a system-wide basis, but also helping to facilitate moving past gas.

But this was ultimately very reactive. There was an RMR, you reacted to it. I think the outcome was very positive, but planning isn't by definition supposed to be reactive. And I don't see -- I think Caroline from SCE referenced this, there's a place to think about the orderly retirement of gas. RA right now is very much what do we need to do to change and so block down the existing gas-fired
resources, and we need it for reliability either
piece ten years ahead, totally uncoordinated. As
far as I can tell, none of the LSEs are really
thinking about -- my time is up -- thinking about
how you move past gas in the system, so I think the
Commission needs to step in.

And my third and final point was really let's
just talk about building electrification a lot more
as a choice. Thank you.

MS. WATT: All right. I'm going to try this
again. It's hard to be the voice of the customer
when you lose your voice. And then the only other
thing I'll say is you have to tell my husband that
happened because he will not believe you. So, yes,
I'm Emily Watt. I'm with Microsoft.

I'm sure you're wondering, yes, that is my real
last name. It's been very helpful in this
profession. And also why is Microsoft here, why do
we care about customer choice.

So we actually happen to be one of the biggest
corporate purchasers of energy out there. We have
offices, stores, manufacturing, but most of our
footprint comes in the form of our data centers,
which are global. We're in many different regions
in the U.S. We're also around the world. We're in
deregulated markets, we're in regulated markets.
We're all over the place in the state of
California. We have data center load here. We
have office buildings here, we have a large campus
here, plenty of stores. So energy in California
and energy procurement in general is very important
to us.

A little bit more about Microsoft. We have a
hundred percent carbon neutral voluntarily since
2012 and we have ambitious direct renewable energy
goals. We already have 1.2 gigawatts of solar and
wind in the ground or under construction right now.
And we have signed on to the RA 100 Movement where
we pledge a hundred percent renewable energy. So
we have some milestones and we recently just passed
50 percent of our global energy consumption is from
an actual renewable energy project we can point to.
We're rapidly growing that, even as our data center
demand grows exponentially.

So speaking for customers, I think it's really,
really important to note that all customers are
different. I'm speaking on behalf of a large C&I
customer. I can't even begin to represent smaller
customers, residential customers. We all have
different needs. And I think that's one of the
biggest points here, is that we're talking about choice. We're not talking about one perspective, we're talking about a choice that will meet each different customer's perspectives.

As I mentioned, we have different needs, we have different risk profiles, we have different consumption habits. For Microsoft, we have -- we differ from other large customers in that we can bring back-up generation assets, not just in terms of typical generation but also in terms of batteries that we already put into our data centers anyway, so we can use some of that, look at it, how can we provide RA services, how can we provide capacity that we have to build anyway.

We also have a commitment to pay for all of our infrastructure upgrades. We don't want to unfairly burden other customers, but I'll get more in to that later.

I just want to reiterate once again we're all different and we're looking for choice, mainly because we're all different.

So as panelists we were asked to speak about the value proposition of customer choice. And, quite simply, we see energy as your economic growth engine for California. Choice and specifically
what we look for, which is access to market-based rates would encourage us to grow our presence here. It offers us certainty not so much in the price that we'll pay but in our ability to control our exposure and take on the risk that aligns to our business practices, again, one of the things that makes us unique from other customers.

Choice allows us also to achieve our renewable energy goals. I have heard carbon as the main point of today's proceeding, we believe that as well. And for us, having market exposure in the same markets that our renewable projects financially settle in is crucial to meeting our carbon requirements.

When I look at -- briefly, when I look at the choices available in the California market I am encouraged by the process that -- the progress that's been made, but I recognize that there is a long way to go. CCAs offer a choice. It's a tool for some customers. However, they only offer a few rate options, and we don't see it as true customer choice. Direct Access is much more representative of true customer choice, but even with the raising of the cap it only covers 15 percent of nonresidential load, so there are 85 percent of us
out there with still no access to true customer choice.

And then, lastly, I will just say that I do agree with the Gap Analysis that it is time to reexamine how rates are made. We believe that customers such as ourselves should completely pay for the costs that are required to serve us, but we want to make sure that no one rate class is cross-subsidizing another. And when I say that I mean traditional rates. We're of course not talking about low-income assistance programs or anything else where we of course will pay, you know, above and beyond what's required of us.

So because we believe in this rate-setting, I would ask that you pay specific attention to new, unanticipated load coming to your state. We don't think this should be part of legacy -- we don't believe that new load should be part -- or should be subject to legacy costs and we believe that rates at such -- that marginal load should have complete cost recovery but not take on an unfair additional burden. So I see that my time is up.

MR. JOSEPH: Good afternoon, Commissioners. This morning Ralph Cavanagh told you that we were in the room 22 years ago. By my count at the time, there
are four of us who are now in the room today who were there 22 years ago. I want to say for the record that none of us have aged.

(Laughter)

MR. JOSEPH: I'm going to talk about three gaps, and, Commissioner Weisenmiller, respond to yours, you know, which are the three that I think are most pressing to look forward for the Commissions to deal with. First is the interaction between electrification and gas rates. Second is the interaction between grid hardening to prevent wildfires and NEM. And the third is the effect of fragmented procurement on our de-carbonization goals.

So first the gas rates. So with transportation electrification, the more we electrification transportation we put downward pressure on electric rates because we're spreading the fixed costs over more kilowatt hours. And as a side benefit we put downward pressure on gasoline prices because we lower demand. In contrast with building electrification, we do put downward pressure on electric rates by using more kilowatt hours, but we put upward pressure on gas rates because the fixed cost of operating the gas-distribution system and
the gas-transmission system don't change based on
the volume of gas that's flowing through it. So as
we electrify buildings and we reduce the amount of
gas-fired generation, we are going to put upward
pressure on gas rates.

We can see this problem coming. If we cut our
gas usage by 50 percent, you know, there's not much
we can do for the fixed costs, the rates are going
to go up substantially. This is a problem we can
see coming. The Commission should have a program
in place to think about this and to figure out how
we can avoid a gas-rate crisis in two, three, five,
seven years from now. I think that's perhaps the
highest priority you have right now. Let's avoid a
crisis we can easily see on the horizon.

Second, the grid hardening. SB901 was passed, it
was signed. Last week you issued the OIR to start
submission of the fire-mitigation plans. Thank you
for your very quick action. As part of that,
utilities are required to describe their plans for
hardening the system, to prevent wildfires.

Edison has already filed an application with
substantial investments to do exactly that. We all
know that it is far, far cheaper to prevent fires
than to pay for the damages, to say nothing of the
loss of lives, but it will cost money. And at the same time we are still allowing NEM customers to avoid paying their fair share of the distribution system costs.

Besides all the other inequities of NEM, it's not fair for people to choose to avoid paying for safety improvements that benefit everyone. If a neighborhood burns down it will burn down those with rooftop solar and those without it. The safety benefits are the same, the cost responsibility to prevent it should be the same as well.

And, last, the most popular topic of the day, the fragmented procurement. The Gap Analysis identified this, we have been talking about it all day. The situation is bad right now. Since CCA expansion became clear, IOU procurement has stopped. The CCAs have procured very little. In a recent ex parte handout, they identified 1900 megawatts of contracted new projects. That's a drop in the bucket. Beginning in 2021, they're going to have to have 65 percent of their RPS compliance come from long-term contracts. This was identified in the Gap Report. They claim they're going to have almost 7,000 megawatts in the ground
by 2022, but most CCAs have zero long-term contracts right now, they have no credit rating, and 2022 is not very far away.

Even worse, almost all of their planned procurement is solar and wind. And we know you can't run a system on just solar and wind. You have to do some other things that cost more money. We need things like large-scale solar. We're probably going to need some geothermal. And so while voluntary coordination and cooperation, you know, sounds nice, it's sort of our Kumbaya moment, it's not enough, it will not do the trick. You're going to need a stick. You can color it orange if you want.

The good news is you have a stick. You have in Sections 454.51 and 52 the ability to mandate that the IOUs procure the things that are needed to meet our RPS goals and to spread the costs among all of the LSEs. You can do this now under current authority. I think what you need to do to be sure that you could just have to hold up the stick and not have to use it, is to make it absolutely clear that you are willing to use it. Take all the work you're doing in the IRP and say this is what we are going to do. Give the CCAs and the other LSEs the
opportunity to voluntarily procure and avoid
incurring those costs for themselves, but make it
absolutely clear if they don't and if they don't
procure the things that you have decided are needed
for the system, then they will bear the cost. That
way we have the right mix between being sure that
we get what we need for our de-carbonization goals
and yet allow as much autonomy as people are
willing to step up to the plate and exercise.

MS. HUNTER: Good afternoon. Thank you,
Commissioners, for hosting this panel. My name is
Elise Hunter. I am here from Grid Alternatives.

Grid Alternatives a nonprofit direct service
provider and our mission is to expand access to
clean energy amongst low-income customers and
disadvantaged communities, and so I'm planning to
comment today from that lens.

Just a bit about Grid Alternatives. We are a
program administer of low-income solar programs.
For ten years we have been administering the
Single-family Affordable Solar Homes, or SASH
program, and recently we just took on the Solar on
Multi-family Affordable Homes as a team. As an
administer, we also install solar directly for
customers here in California and other states. So
my comments today take a low-income focus and I am
looking specifically at the rooftop solar and
predatory practices gap as well as the
disconnection gap.

First of all, just sort of a broad lens of the
Gap Analysis. I was really happy to see low-income
programs discussed amongst the affordability
principle in the Gap Analysis. I think there could
be even more intention and attention paid to equity
in the Gap Analysis overall. As we're moving
towards a de-carbonized future, there is a risk
that if we don't pay attention to low-income
customers and disadvantaged communities and their
unique needs, that these populations could be left
out, last to be served, or not served at all with
de-carbonized solutions.

First of all, on the rooftop solar predatory
practices, my organization was present at a meeting
in the town of Huron hosted by the California
Utilities Commission where residents in the
surrounding area came forward and talked about how
they had been harmed by predatory solar contracts.
It was quite shocking. A number of the
stakeholders here in the audience were also there
today, which made me think that it's really a two-
prong solution that's necessary. It's reducing the harm that is being felt by customers today and it's making more robust consumer protection measures for solar going forward.

As far as reducing the harm that customers are feeling today, I think one of the challenges is actually reaching the customers and making sure that they feel comfortable sharing their experiences with whoever is collecting that data. And for that I think it's very important that community-based organizations get involved in that outreach. I am also happy to see that the solar industry is also taking a very proactive approach to consumer protection and I think there is a real opportunity for the solar industry, community-based advocates, and the Commissioners present here today to work together to come up with a solution to reduce harm for those customers.

It also comes to my mind that for lack of a better word, I think it's important that we triage the grievances in terms of a grievance that could potentially be resolved by working directly with the solar provider versus a grievance that is more severe that is would trigger a legal recourse such as a class action lawsuit or another enforcement
mechanism.

And then going forward and making more robust consumer protection measures, and speaking from a low-income customer lens, I think low-income customers need to be considered differently than the general market. They tend to have higher energy burdens in the first place, and so if they are harmed by predatory practices, their situation, they could be even more impacted than a general market.

I am pleased to see that a lot of the low-income customer programs that are focused on clean energy already have very robust consumer protection measures baked in. And I'd like to see that continue going forward, regardless of the Load Serving Entity. Without going down the rabbit hole, I'll just throw a few out there.

The SASH program requires that 50 percent of the solar credits generated go directly to the customer. There is also -- it's not allowed that any lien be placed on the home as a result of the solar installation. Under the SOMAH program, it's required that the customer -- or the tenant customer receives at least a hundred percent of the benefit of the solar portion that is dedicated to
their account. So those are just a few examples of thoughtful program design that could be expanded as we're thinking about more clean energy programs for low-income customers.

We also very much support the idea of an ambassador for low-income customers, to help walk them through the process, in addition to all the great resources that are being created for consumer protection today. Thank you.

MR. MEGANATHAN: Good afternoon. My name Jith Meganathan. I am an attorney who represents the California Low-Income Consumer Coalition in proceedings at the Public Utility Commission. My coalition is made up of 12 nonprofits from throughout the state that provide free legal services to low-income Californians, typically at 200 percent of the federal poverty line or before.

I want to preface my remarks by saying that we fully support California's Climate Goals. We believe in the reality of climate change. We just don't believe that a lot of people need to be foreclosed on in order to meet these climate targets.

So each of the nonprofits in my coalition functions a bit like an emergency room. People are
helped when they're facing a life-altering crisis
that requires the help of a lawyer. And just as
it's possible to see that a flu epidemic may be
breaking out because a lot of people are visiting
emergency rooms all across the state with the flu,
we're seeing something very similar. People are
coming in statewide because they are the victims of
solar energy scams and are at risk of foreclosure
as a result.

So when I say solar fraud what do I mean?
Homeowners are enticed in to signing up for solar
with promises that they will have free electricity
or that the cost of their panels will be covered by
a, quote, “free government program”. Their
signatures are induced and sometimes forged on
electronic tablets. These homeowners are surprised
to find that they have entered into 15-, 20-, or
25-year financing, or lease contracts in many cases
secured by liens on their homes. Their electric
bills don't go down enough to cover the costs of
repaying these contracts. And in some of the most
egregious cases, homeowners are left with major
damage to their roofs and/or with solar systems
that aren't even hooked up to the grid.

Often the victims are from vulnerable
communities. They're elderly. They have limited English proficiency and/or they suffer from disabilities. So just to give a few examples, a 92-year-old woman in Siskiyou County who recently entered into a 25-year PACE contract, okay. I think that just speaks for itself that there would be fraud in the situation. A 99-year-old woman in Los Angeles County, who was induced by a contractor while she was in the hospital, to enter into a PACE-financed project. And last week I was contacted about a gentleman in his seventies who is visually impaired who was surprised to find that his property tax bill had tripled and that his electricity bills had not gone down as a result of entering into PACE financing. Egregious, egregious cases.

This is happening in every part of the state. I have personally heard reports from San Diego County, Orange County, Los Angeles County, Riverside County, Fresno County, Monterey County, Alameda County, and Siskiyou County. The same tactics are used in each of these regions. And so many complaints are coming in that members of my coalition can no longer take these cases, there are just too many to handle.
The other problem is that there is no clear avenue of redress. People make complaints to the Public Utilities Commission, to the Attorney General's Office, the Department of Business Oversight, to the Contractor's State Licensing Board, to their local DAs. If they're lucky they can initiate a lawsuit. They try this shotgun of approaches in the hopes that something will provide redress, but in many cases it does not.

The key takeaway from my comments, I hope, is that there are structural problems in the market for residential solar that make it profitable to defraud customers and to leave these customers bearing the costs. I want to make clear here that I'm speaking anybody the unscrupulous contractors. Honest contractors want satisfied customers to build reputable businesses. Unscrupulous contractors want to extract as much money from third-party financing as possible and then exit the market before they're found liable.

So the first major problem is that in many cases contractors both sell their project -- product -- projects -- I apologize -- and arrange the financing for those projects. So this provides an incentive for them to overprice their projects and
to mislead customers about the terms of the financing.

The second major problem is that contractors are under insured. The Business and Professions Code requires most contractors to post only a $15,000 bond as a condition of licensing. If a contractor is found liable for fraud and goes out of business, $15,000 is hardly enough to cover the cost of even a single, small-sized residential solar system.

The third major problem is that it's unclear whether financing companies are liable for contractor's fraudulent acts that they are profiting from. In other areas of law, it's very clear that this is the case. So, for example, in another market where there is a lot of fraud and a lot of fly-by-night sellers is the market for used cars. So under the Federal Trade Commission's Holder Rule, it's clear that a bank or a credit union that finances the purchase of a used car is liable for the fraud of the auto dealer if the dealer goes out of business. This has two effects. It provides an incentive for the financial institution to police dealers to prevent fraud and it ensures that there is an entity that can make the customer whole in cases where fraud occurs.
There isn't the same clarity in the law for solar fraud. We don't know if PACE companies, unsecured creditors, and leasing companies can be held liable for the fraudulent acts of solar contractors. And the main problem is that these financing companies profit either way. Either the defrauded consumer pays back the loan or, in many cases, it's possible to foreclose on the home in order to recover the loan, so the financing company is safeguarded regardless of whether fraud was used to procure the transaction. They're perverse incentives.

My coalition has a number of proposed solutions to these issues. We deeply appreciate the efforts of the Public Utilities Commission, the Department of Business Oversight, and the Contractor's State Licensing Board to address fraud in this space, particularly in the past year, but more needs to happen.

At the Public Utilities Commission level, first of all, disclosure is not enough. As I said, vulnerable communities, it's -- you can't expect them to be able to evaluate the trade-offs and risks of proposals in the same way that consumers who don't have these vulnerabilities may be able to.
One proposal that we made after the -- at the Huron forum and in our comments afterwards is targeted moratoria on utility grid hookups for bad actors that are identified in this space until problems are cleaned up retroactively.

There are also solutions that we propose that would require legislative action, most likely. The first, it should be made clear that despite the rather unusual structure of PACE assessments, which is through a repayment through property tax bills, or the fact that somebody may have a lease agreement, that these are for all intents and purposes loans and should be subject to the same disclosure requirements and consumer protection that loans are.

Another area that's of key importance, and I believe Ms. Hunter pointed to this as well, prospective solutions are needed, we also need retroactive relief for customers who have been harmed and who are at risk of losing their homes.

There should -- there are a number of known abuses that can also be stopped, such as selling homeowners multiple PACE loans close in time. There is -- there is what's known as the emergency exception so that people can be given PACE loans
even though they haven't yet demonstrated an
ability to pay. If they're in an emergency, so for
example if their air conditioning breaks down in
the middle of the summer, it should be made clear
that this can only apply to HVAC systems and not to
things like solar panels or other sorts of energy
efficiency improvements.

Finally, we'd like to see lien subordination that
PACE assessments, in particular, should not take
priority over all other financing liens that are
present because of financing on the home, so people
can refinance their mortgages and also sell their
homes freely. So with that, thank you very much.

CEC COMMISSIONER HOCHSCHILD: Thank you. I have
two questions. First for you Mr. Meganathan --
Megan- --

MR. MEGANATHAN: Meganathan.

CEC COMMISSIONER HOCHSCHILD: Meganathan. Yeah.
How many of these abuses you're describing -- by
the way, which are unacceptable and have to be
corrected -- but how many of them occurred this
year? Because obviously there was a bunch of
reforms that happened with PACE and the PACE market
in California has been cut in half the last year as
a result of those reforms. Are these cases that
have happened subsequent to the legislation or were they, some of the abuses you're describing, prior to the reforms?

MR. MEGANATHAN: Many of them are from prior years, but we are continuing to see abuses. For example, through the use of the emergency exception. The ability to repay requirement, while it has had some salutary effects, it's still letting in some people who should not be getting these assessments, so it remains a problem.

CEC COMMISSIONER HOCHSCHILD: Okay. Well, thank you for raising. Obviously this is everybody's problem. It's a challenge for the folks being abused, but it's also a setback to the legitimate market that we want to see develop. And there's obviously a lot of need in the housing stock for these upgrades and that's not going to succeed as long as abuses are taking place and people don't trust the market. So thank you for bringing that to our attention.

I want to ask Mr. Vespa a question.

You were talking about building electrification. Your point is very well taken. And, by the way, you know, part of our ability now to even turn to this is because we've had such success with
renewables. And just in Governor Brown's term since he took office in 2011, we have basically tripled renewable production in California. Now, you know, we have really resolved the destination point, we're going to a hundred percent clean energy, so the challenge really does turn to migrating services that today are powered by diesel, natural gas, and gasoline onto the electric grid. And there are different technologies that are going to migrate to the grid at different paces. But in terms of how that expresses itself through choice, can you put a little more meat on the bones, are you suggesting for example that we need choices in rate design for all-electric homes? Because I'm just -- the context is -- I mean some people are doing it voluntarily. People like Commissioner McAllister are building an all-electric home. I am not at his level of seeing it, but I did convert my water heater to heat pump. And, you know, there are incentives, like obviously if you do that in SMUD territory you get an incentive.

Can you say a little bit more like what kind of choices in the market would you like to see that don't yet exist?
MR. VESPA: Well, I think there's any number of steps to facilitate this. The three-prong test is obviously one thing, but that's just like one little bit. The rate structure is probably to be thought about for all electric, you know, a higher base line credit. That's helping facilitate things. But beyond that, I mean just communicating the need to people, that you can do this, this has an environmental benefit, would be very helpful.

So I think it's interesting, people talk about EVs and solar just outside of this world, you know, everybody knows that. Nobody has any idea about why we should be electrifying homes yet, so there's just so much work to do there.

You know I also wonder just in terms of energy efficiency programs, like why are we now still incentivizing, you know, flipping out a gas heater with a more efficient gas heater when you're locking in that combustion source for another 15 years where there is an electric option. So I kind of feel like there needs to be an understanding of the gas versus electric systems and how you kind of unpack all that. So you can facilitate the migration over. There's any number of little things you do to make that choice possible.
economically through rate structure but also just communicating it to people.

You know, I mean to me like when you had this -- I think in the Gap Analysis there was some kind of screen about the choices. Well, I want to see a click on there, go all electric. You know, what happens there. I mean just informing people more that that's even something.

CEC COMMISSIONER HOCHSCHILD: Thank you.

CEC COMMISSIONER MCALLISTER: This question is sort of another aspect of the gas transition. I was intrigued with, Mr. Joseph, your observation about the infrastructure problem, the sort of social compact issues really that we're going to but up against in this, you know, large investment that we've all made and how we -- you know, what your view about -- a lot of questions I could ask, I'm going to ask one.

What do you see as the right kind of level for that discussion? Is that purely sort of within the CPUC or is there a broader kind of social compact discussion that you feel might need to happen? You know, multi-agency led by Governor's Office, I don't know, what's your sense of the most appropriate kind of forum for that?
MR. JOSEPH: I think it probably has to start in the agencies because you have the expertise, but I think you're absolutely right, there is a social equity component to this, there is a compact, social compact component to it because we know that the last people to be switching will be those with least means. And we'll be putting higher and higher rates onto those people and, you know, that's an outcome which should not be as a matter of social equity acceptable to us.

I wish I could tell you I knew exactly what the solution to this problem was. I don't. And that's why I think we need the collective expose and brain power at least starting here to address the problem, and see if we can figure out what the solution is, because it's not apparent to me how we manage this transition.

CPUC PRESIDENT PICKER: That's what you told us last time you were here.

MR. JOSEPH: Can I just add, I'm a little busy in the last year. I mean I think -- fires.

MR. VESPA: I think we can start by not making the problem worse. That's not making new gas connections. Let's shut down Aliso, let's, you know, think about every gas investment that we make
knowing that we'll be stranded and create more problems for people that remain. So clearly there is a lot of work to do thinking about this, but there are things we can do now to start.

CPUC PRESIDENT PICKER: This is a challenge that stands way outside just our scope. And just to point to your example of Aliso Canyon, that's exactly what we suggested, yet the County of Los Angeles issued construction permits for 23,000 units of housing that all had gas connections including gas pizza ovens, directly adjacent to Aliso Canyon and the surrounding neighborhood. So I think that -- I hear your message, you've been saying this for years, but I think you're going to have to do your proselytization elsewhere.

So, Mr. Joseph, I'm going to return to your equity issue in relationship to bearing the cost of various distribution system improvements to reduce fire hazard. What do you see is the best way to do this? Is this a specific change in the NEM process or is it something that we do by changing the rate structure overall, given that we have a very limited fixed charge direct charge?

MR. JOSEPH: I think the path of least resistance also happens to be the one which is compelled by
state law, which is to make nonparticipating customers, customers who don't participate in the NEM program economically indifferent, when other people choose to put rooftop solar on their house. You know, NEM 3.0 is on the doorstep now and I think this is one of the things you should be considering: Let's remove the subsidiary and/or have a nonbypassable charge for incremental improves to harden the grid to prevent wildfire.

CPUC PRESIDENT PICKER: Thanks.

CPUC COMMISSIONER PETERMAN: I have a different question, but if folks want to follow up on that one. I wanted to follow up with Ms. Watt. Regarding -- you know, large corporate leadership on renewables, and I think this point was raised by someone else about how does that leadership extend or how does choice extend when we think about integration of renewables and grid reliability, and you mentioned having back-up batteries. It wasn't clear to me if you were talking about making those available in terms of demand response products, but could you speak to what you see as the next evolution in customer choice as it relates to reliability and integration?

MS. WATT: Sure, yeah. One example comes to
mind, what we've done in Cheyenne, Wyoming, where we were able to partner with the utility there and allow them use of our back-up generation. They are natural gas combustion turbines, but allowing them to put those at the top of their capacity stock, and so, you know, just for a few hours a year if they needed to call on our back-up generation, they could. And that allowed it so they didn't have to build a whole new natural gas power plant. So those are the kind of things that we've done already.

We are always looking at ways to use batteries that we have to put in as uninterruptable power supply, allowing the utilities access to that. Now that's more in their R&D phase, but it's something that we want to start working with utilities to see how we can develop some of the things that we have to install anyway.

CPUC COMMISSIONER PETERMAN: And that would be through -- but with some compensation or some market participation or some contractor relationship with the utility?

MS. WATT: Yeah, yeah. We have looked at in the past a generation credit on the utility bill.

CPUC COMMISSIONER PETERMAN: Thank you.
CPUC COMMISSIONER RECHTSCHAFFEN: I have a question for Elise and maybe Matt can comment on it.

We heard a little bit earlier this morning about one of the things the Gap Analysis focus on is making sure there is adequate funding for public purpose programs. And put that question aside about adequate funding, do you have a view about in a decentralized environment who should -- who is best to administer these customer side programs like energy efficiency or providing infrastructure for EV charging, programs like that which are now mostly run by the utilities, put the funding aside, they have multiple players, do you have a sense of what would make the most sense?

MS. HUNTER: I hate to answer a question with it depends, but I think if we're -- you referenced EV infrastructure. I'm having a hard picturing how any entity other than a centralized entity would manage lots of infrastructure that connects directly to the grid. I don't see how you'd on that in a fragmented way. But if we're talking about a customer program that enables access to a more distributed technology like energy storage, energy efficiency, solar programs, I think there is
an interesting movement of a proliferation of more third-party administrators that can often access funding directly from utility sources, such as public purpose programs, and in some cases from greenhouse gas proceeds, and to have those third parties who bring experience often in the field, often dealing with specific customer types such as low-income customers or disadvantaged communities, to come in and administer those programs and to act under contract often with a utility so that there is plenty of oversight there.

Bringing in third parties as program administrators I think lends an interesting competition to the space and can result in having a cost-effective and experienced party to serve the customer base in question with a new technology.

MR. VESPA: It might depend on also how the interests of the LSE align with the particular program, so I was thinking building electrification more specifically where the CCAs are electric only, they're going to be motivated. PG&E obviously is split. SDG&E, especially when your parent company is Sempra and your utility is SoCal Gas, you are very fossil fuel centric, I would not want them to implement that program. So, you know, I think it
may depend on it's going to be more successful if the entity implementing it has a motivation to do so.

CPUC PRESIDENT PICKER: Okay. Do we have other questions? We're reaching the end of this panel and time, but I don't want to cut people off.

Good-bye.

CPUC COMMISSIONER PETERMAN: Good-bye.

CPUC PRESIDENT PICKER: All right. Well, thank you very much.

(Applause)

MS. FELLMAN: Thank you. We'll now turn to public comments. So if you've signed up for a public comment, we'll take them from the side microphone. Here comes the Public Adviser with the sign-up sheet.

So the public comment was Jith Meganathan. He signed up to speak, so he didn't realize he was going to be on the panel. So we heard from him.

Jith, unless you want to say something else? No, thank you, okay.

Are there any members of the audience who would like to make a public comment who did not sign up?

Well, is there one? There we go.

MS. BRANDT: Hello. Melissa Brandt with the East
Bay Community Energy. And thank you for being here today and convening this panel. And we appreciate the opportunity to hear from the panelists as well as to speak.

I did want to mention, address a few things that East Bay Community Energy is doing that I think relate to some of the themes that were talked about today. For starters, I think it was mentioned that we are partnering with PG&E as part of this Oakland Clean Energy Initiative. One of the things that's really interesting about that is that it's only taking about 40 megawatts of preferred resources to offset the need for 165-megawatt plant today. And that goes to the theme of making sure that whatever we're doing with preferred resources we're doing holistically and strategically to get the most bang for our buck.

When we talk about affordability for customers, when we talk about grid stability, it's really trying to understand where is it that we can have the most impact and investing our resources there. So that's what we're doing through this partnership. It's really a first step, but we'd like to see these kinds of efforts expand throughout the state and we want to be part of that
and part of the solution.

    I also wanted to mention that East Bay Community
Energy launched a peak day pricing pilot a week
after our launch for our large customers. So we do
have a lot of potential to do things with rates
that are innovate as well and to contribute to
solutions in that vein.

    We do need to have a more -- we need to have more
regulatory certainty to continue these kinds of
investments. So of course the RA proceeding is one
place where we're starting to develop that
certainty, but right now, as we have this
transition from primarily Investor Owned Utilities
to the CCAs, you have this time period where we
don't know what's happening with RA, we don't know
what our obligations are going to be. It's really
hard sitting here today to make an investment 10 to
20 years into the future when you don't know if
you're going to get credit for whatever you're
investing in.

    So I think that when you want us to bring
projects and you want to see solutions for the
state, we are getting there. It's not just talk,
it's something that we are actively looking at, how
do we invest, how do we take responsibility for our
share and make sure that we are meeting whatever
compliance requirements that we are faced with, but
we do need some certainty from the regulators as to
what that goalpost is so that we can get there
together.

So we look forward to continuing to partner with
you and to work together. We'd love to continue
the conversation about POLR and all of those
implications and what it means to take on those
responsibilities and we look forward to continuing
to work with you in all of that. Thank you.

MS. FELLMAN: Are there any other members of the
public or the audience who would like to speak?

Any further remarks from the dias?

CPUC PRESIDENT PICKER: I'm going to just point
out that we will probably continue to take another
effort to refine the Gap Analysis, but principally
it's really just also starting to move them toward
specific forums. So some of the forums will be
within the agencies, Clean Net Short, Content
Labeling will continue to be refined and
implemented at the CEC. We'll continue to look at
reliability issues within the CPUC, for example.
But others I think are going to clearly require
some additional legislation, so I think this
challenge of predatory behavior in terms of marketing I think is going to require some legislative action. This question of having that big orange stick that several people pointed us towards probably will require some additional legislative action. And certainly this challenging of trying to define who will have that responsibility of being the Provider of Last Resort and providing the certainty that allows for additional customer choice probably goes to the Legislature.

So I look forward to working with all of you. If the Legislature and our proceedings are not collaborative, then we'll certainly have lots of opportunities to talk outside of them, although the law does tend to circumscribe at least our framework, and I don't know how much when it comes to making decisions that we can avoid using the PUC's and CEC's procedural programs. But certainly everything that is done in the Legislature is collaborative, friendly, and the outcome of consensus. So we look forward to seeing you there.

MS. FELLMAN: And that concludes our En Banc. Thank you very much.

(Applause)
(The En Banc was concluded at 3:06 p.m.)
REPORTER’S CERTIFICATE

I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were reported by me, a certified electronic court reporter and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

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IN WITNESS WHEREOF, I have hereunto set my hand this 6th day of December, 2018.

Susan Palmer
Certified Reporter
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