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CALIFORNIA ENERGY COMMISSION

COMMISSIONER WORKSHOP

In the Matter of:) Docket No.
) 16-OIR-03
)
)
Developing Regulations,) Workshop re: Title 20
Guidelines and Policies) Data Collection
for Implementing) Regulations to
SB 350 and AB 802) Support New Analytical
<hr/>) Needs

CALIFORNIA ENERGY COMMISSION

THE WARREN-ALQUIST STATE ENERGY BUILDING

FIRST FLOOR, ROSENFELD HEARING ROOM

(HEARING ROOM A)

1516 NINTH STREET

SACRAMENTO, CALIFORNIA

WEDNESDAY, NOVEMBER 16, 2016

10:00 A.M.

Reported By: Kent Odell

APPEARANCES

Commissioners Present

Robert Weisenmiller, Chair
Andrew McAllister, Commissioner

CEC Staff Present

Sylvia Bender
Malachi Weng-Gutierrez
Christopher Kavalec
Martha Brook
Noel Crisostomo
Leon Brathwaite
Christopher Dennis
Caryn Holmes

Public Comments: (* Via telephone and/or WebEx)

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

2 November 16, 2016

10:08 p.m.

3 CHAIRMAN WEISENMILLER: Good morning. Let's
4 start off today's meeting. I thank everyone for being
5 here. We're obviously trying to move relatively quickly,
6 so we can get feedback on the Regulations and continue to
7 work with people to narrow the issues.

8 I think I'll let Andrew do the longer spiel about
9 how important data is going to be going forward and
10 particularly as we deal with the responsibilities under
11 350. So it's really a great time to do this sort of
12 refresh on what we're going to need. Obviously, over time
13 we'll probably find other things, but I think it's a good
14 start to allow us to do what we need to do. So thanks.

15 COMMISSIONER MCALLISTER: All right, again I'll
16 reiterate, thanks for being here everybody. I'm looking
17 forward to today and I know a lot of staff effort has gone
18 into this. And this really, as the Chair said, this is a
19 very important effort to lay a long-term foundation, a
20 solid foundation, for all the new responsibilities existing
21 really and new responsibilities that we have here at the
22 Energy Commission under SB 350, AB 802. It compliments
23 also a bunch of other efforts and other pieces of
24 legislation that we are and will be implementing.

25 I won't go on too much. I feel like we got a

1 good presentation at the last Business Meeting about the
2 data from the Efficiency Division for the most part. And I
3 wanted to just highlight that there are a number of moving
4 parts that involve data at the Commission. Today we're
5 focusing on the Data Collection Regulations, which is a
6 rulemaking that I think really is on the sort of legalistic
7 end of it. We need to make sure that we have a solid
8 framework for being able to collect the right kinds of data
9 that we'll need, again with a long-term vision.

10 At the same time we have a number of rulemakings
11 and activities that are going on that are actually
12 implementing efforts, projects, programs under various
13 pieces of legislations that are the programs themselves.
14 So Assembly Bill 802 with benchmarking, updating our
15 forecasting, which is in Sylvia Bender's Division that --
16 and we'll be hearing from her -- and that's kind of the
17 context mostly that we'll be talking within today.

18 The SB 350 effort to double energy efficiency
19 requires also similar kinds of data as the forecasting
20 effort and other efforts that we'll be doing. So they all
21 kind of overlap and relate to each other. So we're trying
22 to ensure that we have the regulatory framework that
23 clarifies all of this and make sure that we can move
24 forward without barriers. So that's sort of the big
25 picture.

1 I think finally, we all know that 2016 is very
2 different from 1995 or whenever the last time we updated
3 these Regs. The technology is just moving forward at
4 breakneck speed, automation. You know, big data has kind
5 of become a cliché and I don't think we're exactly talking
6 about that necessarily. It means different things to
7 different people. So we need to modernize how we develop
8 policy, how we implement policy and how we evaluate policy.
9 And we have many more tools at our disposal and that's both
10 the private sector and the state.

11 So this is nothing new to anybody in this
12 audience, but the state has a responsibility to move with
13 the times as well. And that's really what we're trying to
14 relate with these Regulations, is enable that to happen.
15 So all the good work and all of the specific skills that we
16 need to bring to bear can do so relatively unimpeded and
17 within a clear framework.

18 So with that, I'm looking forward to the day and
19 I'll pass it on to Sylvia, who I think is next. Yeah,
20 great. Thanks a lot.

21 MS. BENDER: Let me just do a few of the
22 housekeeping things to make sure that we're all on the same
23 page here. We'd like to ask you all please to silence your
24 cell phones. If you are on the WebEx, also please silence
25 and mute your telephone line. We will be letting you know

1 when it is time for public comment as we go along.

2 This workshop is being recorded and will become
3 part of the public record for this rulemaking. Restrooms
4 are to the left outside of the hearing room's main door.
5 There is a snack bar on the second floor. And in case of
6 an emergency, please follow the Energy Commission staff out
7 of the building and across the street to McKinley Park.

8 We're following up today on the preliminary
9 workshop that we held on September 26th. We've received
10 written comments from approximately a dozen different
11 entities. And based on those comments and a series of
12 informal data meetings with the stakeholders, staff is now
13 presenting revisions to those earlier proposed changes.

14 In addition to the specific discussion topics
15 noted on the workshop schedule, we will take additional
16 public comments in both the morning and the afternoon. We
17 will limit these comments to three minutes each, to
18 accommodate as many of you as possible. And it would be
19 very helpful if you would give your business card to the
20 court reporter if you make a public comment.

21 Written comments will be taken until 5:00 P.M. on
22 November 30th. And I understand that we may extend this
23 date. We'll probably talk about that a little bit later.
24 If you need instructions on how to do this, the workshop
25 notice has all that information.

1 So with that, Malachi, I think we're ready to
2 have you open the overview.

3 MR. WENG-GUTIERREZ: All right. Thank you,
4 Sylvia.

5 So as Sylvia mentioned, today we are presenting
6 some of the revisions that we have implemented as in the
7 process of evaluating the written comments and meetings
8 with different stakeholders. So I'm just going to give an
9 overview and talk about a couple of things that we're going
10 to cover today. And then talk about a few specific changes
11 that we made. And then I'm going to let staff come up and
12 talk about some of the analytical needs. And then we'll go
13 and hopefully this afternoon, we'll have some interesting
14 conversations about some specific topic areas.

15 So again, an overview of today, I'm going to be
16 providing the background and overview of the data
17 collection activities so far. Sylvia ran through them very
18 quickly, but I'll elaborate a little bit. Again, we'll
19 have staff come up and talk about some analytical needs.
20 Then we're going to highlight some of the language changes.

21 I'm going to have Christopher Dennis from Siting
22 come up and talk about some new language that was entered
23 since September. It wasn't in the September draft. And
24 it's almost a whole section, so I wanted him to go into
25 more detail and describe it much the way that other staff

1 describe changes that were implemented on the September
2 26th workshop.

3 Then we'll have lunch. Then we'll go into the
4 specific topic areas of discussion and then we'll follow up
5 at the very end of some regulatory next steps.

6 So as Commissioner McAllister mentioned, it's
7 been a while since we've done some significant rulemaking.
8 The last real significant rulemaking was updated around
9 2001 and that was where we had some major changes. There
10 was a minor update occurring in 2008, but really that was
11 just to revise and clarify some of the issues that were
12 brought about in the 2001 rulemaking.

13 So this current -- and that rulemaking in 2001
14 set up a number of data collection activities, including
15 the quarterly fuel and energy reporting activities, the end
16 use energy surveys, as well as a number of the
17 confidentiality procedures and declaration of
18 confidentiality. There's a whole set of procedures
19 associated with those procedures, the confidentiality and
20 designation of data. And those were all implemented in
21 this 2001 timeframe.

22 Recent legislation and analytical needs have been
23 driving a need to reevaluate our data collection
24 activities. It's been, again a long time since we've done
25 this rulemaking. And so that was our primary driver for

1 looking again at how we collect data and what data we need
2 in order to both fulfill the mandates of the recent
3 legislation as well as to look at the mandates and the
4 requirements that we've been asked as forecasters to
5 implement and what data we need in order to fulfill those
6 new responsibilities.

7 So this year there was an order instituting
8 rulemaking. It was adopted in January. And it basically
9 started the process of updating the data collection
10 rulemaking activities. Internally, staff has met across
11 many divisions. If you notice the draft language itself
12 covers many different areas. It's not just isolated to say
13 electricity demand. It actually has a wide range of
14 topics. And that really was because it's been so long that
15 we opened a rulemaking that many people wanted to jump in
16 and say, "Well, we have something that we wanted to change
17 for a number of years. Can we insert our language into the
18 draft rulemaking?" And so we've had numerous meetings and
19 coordination efforts to make sure that we've captured
20 everyone's sort of needs in this update.

21 As Sylvia mentioned, we had early regulatory
22 language drafted and presented at a workshop on September
23 26th. We received comments and we have tried to
24 incorporate those comments into these revisions. That
25 being said, there are many elements that we are still

1 internally discussing as well as discussing with
2 stakeholders to clarify how we might improve the language.
3 So I think this workshop again is another opportunity for
4 stakeholders to weigh in.

5 We are still -- and one of the items here is that
6 in our September 26th workshop, there was certainly a
7 response from stakeholders specifying they would like more
8 engagement. So we heard that and we've been setting up
9 discussions on specific topic areas, hopefully to answer
10 questions, clarify the intent of the language. And then
11 also the update the language as best we can, to meet
12 everyone's concerns, or address everyone's concerns as well
13 as meet our data collection needs.

14 So that's an ongoing effort. And we are hoping
15 to have many of those discussions continue through the --
16 in the coming months. And I know that there are a couple
17 of topic areas that we haven't really touched on yet. And
18 I'm hoping that we will have meetings on those specifically
19 the -- I believe we haven't one specifically on the EVSE
20 public network charging station and the natural gas
21 distribution data collection effort.

22 So I think I sort of touched on many of these
23 items already. And then the last item here that I want to
24 just highlight is I know there are plenty of concerns and
25 comments that are still not addressed in this revised copy.

1 I would hope that in today's workshop the comments that we
2 receive -- the verbal comments at least -- if they can be
3 focused on those priorities, which the stakeholders would
4 like the Commissioners to weigh in on. And those that you
5 feel have not necessarily been addressed in the revisions
6 that we've made, if we can focus on those, that would be
7 helpful.

8 Also, if there is sort of explicit regulatory
9 language that you would like to see inserted in a specific
10 area that helps actually, it helps us to know what you want
11 in the language and for us to sort of start working on how
12 best to revise the language. So in any area that you can
13 actually provide us with explicit language, that's helpful.

14 So the report itself, as I mentioned on September
15 26th is structured into four topic areas or categories.
16 The first of which is an Administrative and Deletions
17 Section and it primarily covers things like new
18 definitions, large deletions, and then it also will
19 eventually cover some of the changes in reporting methods.
20 That's something that we internally, are thinking about in
21 trying to figure out how best to modify the language to
22 encompass perhaps new methods of collecting the data. And
23 so we will -- we intend on evaluating that section. And
24 that would be an administrative change.

25 Section two, those Regulations which deal with

1 generation are primarily supply side. They focus on the
2 Power Plant Regulations and they include utility
3 distribution data as well.

4 The Forecasting Regulations sections, those
5 primarily discuss Regulations, which focus on collecting
6 energy consumption data, energy use characterizations,
7 including end use saturations and then also the load data.
8 So I know those are big topic areas that we've had lots of
9 conversations about.

10 And then finally, the Security and Data
11 Disclosure Section -- right now I think we only have one
12 change in there where we're adding some language to account
13 for the new natural gas requests that we have in there. We
14 want to make sure that that's automatically designated as
15 confidential when it comes in. And so we've made that
16 insertion in there. But that section, the entire 2500
17 Section, talks about both data confidentiality as well as
18 aggregation, disclosure regulations and procedures, and
19 other things. And those elements we'll probably be looking
20 at as well to revise.

21 And I think that's the last slide I have here.
22 So with that, I'm going to hand it over to Chris Kavalec to
23 discuss enter into the section where we start talking about
24 analytical data needs at the Energy Commission. And that
25 should -- I'm hoping that will highlight some of the needs

1 that we have and explain, and make a connection between the
2 data we're requesting and some of the analytical purposes
3 that we have at the Energy Commission. I know that was a
4 big topic that stakeholders have brought up multiple times.
5 So I'm hoping that these four next presenters will help
6 clarify that need.

7 And then just a couple of last minute changes
8 with this, obviously Chris is not on the agenda. And he's
9 not Cary Garcia, but Cary was busy and was not able to come
10 and present. So I appreciate Chris stepping up in a busy
11 time of the year -- I know everyone's busy -- but in a busy
12 time of the year here at the Energy Commission to give this
13 presentation. And then also, I believe we have someone in
14 Fuels and Transportation. Jennifer Allen is not going to
15 be able to make it today, so we have Noel Crisostomo, who's
16 giving a presentation for Fuels and Transportation in a few
17 minutes.

18 So with that, I'm going to hand it over to Chris.

19 MR. KAVALEC: Thanks, Malachi.

20 Good morning. I am Chris Kavalec. I serve as
21 the Technical Lead for the IEPR Demand Forecast. And I'm
22 just going to give a real quick overview today about the
23 data needs that we think we have to support a continuing
24 robust and relevant forecast into the future.

25 The current situation is that our main supporting

1 data that we use for our forecast, we refer to as the
2 Quarterly Fuels and Energy Report or QFER billing data.
3 And what that consists of is utilities aggregate individual
4 billing data into sectors, like residential, commercial,
5 industrial and so on, by county, using the North American
6 Industrial Classification system or NAICS Coding. And this
7 has been fine for past forecasts although there's always
8 issues with the accuracy or consistency of the NAICS
9 assignments. And right now, we have no way to check of
10 verify the NAICS Coding quality.

11 We do also get some limited hourly data from
12 CAISO at the system level for the three IOU TAC or
13 Transmission Access Charge areas. And we use that to
14 develop weather normalized estimates of peak that support
15 our peak forecasts.

16 So right now what we produce are mainly annual
17 forecasts for specified fixed planning areas. However, the
18 demands on our forecasts are understandably growing. And
19 to meet these needs, these future needs, the traditional
20 data collection that we get is not going to be sufficient.
21 So we need to start collecting and delving into more
22 disaggregated billing data as well as AMI or metered data.

23 We're interested in doing more localized
24 forecasting, geography-wise. As an example, the IEPR
25 Forecast, the Demand Forecast, is used as a benchmark for

1 Transmission Planning at the system level. And the IOUs
2 have asked us to provide forecasts in a more disaggregate
3 level, for example, the A-Banks level for Southern
4 California Edison and we just don't have the historical
5 consumption data to support that.

6 We also are planning to start doing monthly and
7 particularly hourly load forecasting. But we know that the
8 system peaks or local area peaks are still important.
9 However rising in importance is the actual hourly profiles.
10 We all know about the duck curve and the importance of
11 understanding and measuring the ramp-up period for peak
12 demand. And to do this properly, you need to at least get
13 down to the sector level and as well as more local
14 geographies.

15 Targeted analyses for some of our demand
16 modifiers, some are listed here, efficiency.
17 Commissioner McAllister talked about SB 350 related
18 analysis and just generally being able to measure
19 efficiency accomplishments using empirical data as well as
20 -- so we're not only programs, but also our own standards,
21 the impact of our own standards, which we haven't been able
22 to measure empirically very well.

23 Studies on electric vehicles, where they're
24 located, usage of electricity as well as charging profiles
25 could be imputed for more disaggregated data. Distributed

1 generation, the location of adoptions and the impact on
2 traditional utility-provided loads, utility-served loads.

3 I should add also regularly we do our saturation
4 surveys, commercial and residential. And typically in the
5 past the utilities provide individual billing data to the
6 contractor who uses that to develop sample frame. However
7 we don't have access to that data, which means that we
8 can't verify the quality of the sampling frame. We can't
9 do more specific studies related to commercial and
10 residential respondents of the survey. If we need to re-
11 weight the samples, for whatever reason, we can't do that
12 at least here in-house, etcetera. So what we require to
13 really meet the needs of the forecast is having the
14 flexibility to apply billing and hourly load data where we
15 want in terms of geography and also temporally in terms of
16 hourly loads.

17 So let me just repeat. Where we are now does not
18 really allow us to meet the growing needs for our forecast
19 into the future. To support that, we're going to need a
20 lot more data and be able to develop and modify and apply
21 this data in a much more flexible way rather than
22 collecting the data we do now for fixed planning areas.

23 So comments from the Commissioners?

24 CHAIRMAN WEISENMILLER: Yeah, just a couple. I
25 mean, first obviously one of the areas where we really need

1 a lot more data to deal with it is the proverbial PV Peak
2 shift issue. And also it's just, as we look at additions,
3 one thing that it brings up in my mind at least the first
4 time, you know, the surveys were alive and well. I mean
5 we're obviously trying to resurrect those on the saturation
6 surveys. But again, that was something which somehow,
7 somewhere along the line, atrophied. We're trying to get
8 back there. But that was certainly -- we were collecting
9 through that a lot more information in some respects than
10 we are now, at least on residential and commercial.

11 COMMISSIONER MCALLISTER: Yeah. And just to
12 build on that last point, you know I think we, through the
13 whole restructuring and deregulation, that we went through
14 in California a lot of stuff changed. A lot of who were
15 doing what, or not doing what, changed as everyone kind of
16 girded for the competitive environment that we were headed
17 into. And we all know how that turned out in the early
18 2000s and so I think we're somewhat kind of suffering. In
19 the decade or so we've been kind of suffering from this
20 lack of information that in some ways was more robust,
21 prior to deregulation. So in the new context of the second
22 decade of the 20th century, we're sort of trying to
23 reinvent that and get back and better than we were.

24 Really, I think you did a great job sort of at a
25 good level there, Chris, explaining our new data needs.

1 And I wanted to just also mention the world baselining,
2 because a lot of this is figuring out where we are
3 historically, and how it's not just -- in order to measure
4 things that you are talking about, we need a good baseline.
5 So we need to look at temporal trends over time and much
6 more specifically geographically in order to complement
7 that macro understanding at a granular level. But it
8 really is sort of a baseline and then we're looking at
9 trends, overall trends.

10 And then unpacking that based on some more
11 detailed discussions about okay well what might be going on
12 in this or that area, with this or that program, and being
13 able to see the overall trends and then determine which
14 pieces of those trends could possibly be attributed to what
15 efforts. And I think at a localized level, and so I think
16 those analytical functions are things that we, as you said,
17 have typically outsourced. And that has inherent
18 limitations in terms of its relevance for our use in policy
19 implementation and policy making and helping the
20 Legislature and other understand what's going on.

21 So I think I wanted to just sort of make that
22 context a little bit clearer and put a finer point on it.
23 But thanks for your presentation.

24 MS. BROOK: Good morning, I'm Martha Brook. I am
25 borrowed from the Energy Efficiency Division currently to

1 work as an Adviser for Commissioner McAllister. And I'm
2 pleased to be here today. So what I'm going to talk about
3 is how the data needs of the Forecasting staff relate and
4 integrate with the data needs of the Efficiency staff and
5 the Efficiency policy tracking requirements that Andrew
6 briefly mentioned.

7 So we have aggressive energy savings goals
8 articulated for the State of California. This concept of
9 doubling efficiency in buildings was first introduced in
10 the Governor's inaugural address last year or two years
11 ago, and followed quickly by an adoption by the Energy
12 Commission of the existing Building Energy Efficiency
13 Action Plan 2015 where we articulated this doubling and the
14 need to scale efficiency significantly.

15 So basically in that 2015 Plan we articulated
16 that the current efficiency savings trajectory is
17 insufficient to achieve our clean energy and emission
18 reduction goals. And this, as hopefully all of you know
19 now, has been reinforced by SB 350 in terms of energy
20 saving goals to be doubled and specific targets to be set
21 for entities across the state to achieve that doubling.

22 And as part of that SB 350 mandate the Energy
23 Commission is required to track and report on the progress
24 of the increased energy savings, through the Integrated
25 Energy Policy Report and the Existing Building Energy

1 Efficiency Action Plan, both of which get updated routinely
2 and will be updated routinely by the Energy Commission in
3 the coming years.

4 One other key tenant of the action plan is that
5 in order to unlock the energy efficiency potential in
6 existing buildings, we require market focus solutions and
7 data analytics. And the provision of data to the
8 marketplace and to consumers is a very important and
9 critical part of our action plan and will be required again
10 to scale efficiency across the state.

11 This is an illustration of the planning that we
12 will be doing for SB 350 in terms of setting individual
13 saving targets for different entities in the state. And
14 our obligation will be to track and report on achievements
15 of individual wedges of savings as illustrated here in our
16 policy documents and by extension to the Governor and the
17 Legislature in terms of how we're doing with our savings
18 goals.

19 So what's critical in this new mandate is we have
20 to collect data to support our policy development
21 implementation and tracking of efficiency. Our plans,
22 currently, which have been articulated in the 2016 Update
23 to the Existing Building Energy Efficiency Action Plan is
24 to complete macro consumption modeling to do the baselining
25 and the trends and the attribution of savings to specific

1 efficiency programs over time. That was mentioned by
2 Commissioner McAllister.

3 A big part of what we need to do better, both for
4 efficiency attribution and for long-term resource planning
5 is to understand the uncertainty in our estimates. And we
6 can't do that without granular and robust data supporting
7 our analysis and I'll talk about that next. And then I'll
8 also give you some examples of how we intend to map energy
9 use and load shapes to buildings and the built environment
10 in order to both implement policy and to track savings over
11 time.

12 And then finally there's a lot of good derivative
13 activities in terms of turning data back around to the
14 consumers and to the market for them to make decisions that
15 again will help transform the marketplace for additional
16 energy efficiency across the state.

17 So macro consumption modeling, we're intending to
18 leverage a lot of good work that was done by the Public
19 Utilities Commission over the last several years to
20 basically pilot the concept of macro consumption modeling,
21 in terms of a way to attribute at a high level savings from
22 efficiency programs from empirical data. This type of
23 modeling typically uses consumption data, weather, energy
24 prices and demographics, building stock characteristics and
25 efficiency program descriptors. It's typical for a

1 regression analysis to be used where each of those types of
2 parameters listed in blue would be assigned an independent
3 parameter in the regression analysis approach. And by
4 isolating energy efficiency in that regression, you can
5 understand which part of the changes in consumption is due
6 specifically to efficiency program activity.

7 So this is just an example of a table out of one
8 of the PUC consultant reports on macro consumption modeling
9 where they looked at six years of consumption data and
10 these independent parameters of price and demographics.
11 And were able to determine quite convincingly that there is
12 anywhere from a 4 to a 5 percent savings in consumption,
13 reduction in consumption, that's due to efficiency programs
14 in the IOU territories. They were also able to estimate
15 the cost of those savings anywhere from four to seven cents
16 a kilowatt hour.

17 So this is just an example that we hope to
18 leverage once we have the data that will support this type
19 of analysis. And again, we'll be required to do this
20 analysis for every one of those wedges that make up the 350
21 target setting exercise we'll be doing in 2017.

22 Currently, under the topic of uncertainty,
23 currently our efficiency policy impacts are reported as
24 singular estimates without error balance or levels of
25 uncertainty articulated. We really need to look at the

1 distributions of energy use by sector, by building type, by
2 geography and by demographics to improve these estimates
3 and to understand and include expected ranges in our policy
4 setting and our long-term resource planning exercises.

5 So this is just one example of why one average
6 value for an aggregated group of consumption is not
7 adequate for the planning and the analysis that we need to
8 complete. So this is just a random sample of Prop 39
9 school AMI data that has been delivered to the Energy
10 Commission. And in this random sample the average is this
11 blue line, the 1430 kilowatt hours per day. If this was a
12 normal distribution, the 50 percent percentile would match
13 that blue line. It doesn't, it's actually quite far from
14 that.

15 So in this distribution there's many more schools
16 that are under the average than the number of schools that
17 are above the average. So by assuming this is normally
18 distributed we will actually make the wrong decisions. And
19 it's really important to understand the distribution and
20 how far it is off of a normal distribution, so that we can
21 make better policy in the future.

22 This is just another example at the hourly level.
23 And so you don't need to understand every line in the
24 diagram. I think what I'm trying to communicate here is
25 all of the colored lines are measured. This is directly

1 out of the random sample of Prop 39 AMI data. And then the
2 gray and the blue and the black dotted lines are the model
3 data for this same building type in the same climate zone.
4 So this is where we get it wrong and it's just not the
5 Energy Commission. It's not just the Efficiency Division.
6 All of the work that we do across the state, where we
7 depend on modeled energy use, has assumptions about these
8 load shapes that promulgate through every policy report and
9 policy decision that we make and it's really important that
10 we get this right.

11 So for example in this case, we're probably by
12 only depending on the gray and the black lines, probably
13 overestimating assumptions about air conditioning savings
14 and probably underestimating assumptions about lighting
15 savings, because we have the load shape wrong. So this is
16 just an area where we have begun to calibrate model data to
17 monthly usage, but we have yet to. And it's super
18 important, to also calibrate it to the extent possible to
19 hourly load data, because of this important discrepancy in
20 assumptions versus empirical data.

21 And I will just have to say that this is just a
22 very small sample. Obviously to get this right, in terms
23 of a model calibration exercise, we would use 2,000 or
24 20,000 schools, not 20, which are represented here on this
25 chart.

1 I want to make sure I didn't want to say anything
2 about this, so then the only thing I wanted to say is again
3 it's just not an efficiency issue, because these estimates
4 of savings wind up in the Long-Term Demand Forecast. And
5 the impacts on peak wind up in the Long-Term Demand
6 Forecast. So there's a really strong connection here that
7 we're trying to articulate. And hopefully you'll
8 understand the need that we have for this type of data.

9 So this is just an example of some of the
10 activities that we're starting to report on and some of the
11 goals that we're trying -- strategies that we're trying to
12 set in our Existing Building Efficiency Action Plan in
13 terms of ways to use both modeled and measured data for
14 city and local and regional planning activities as well as
15 some of our statewide programs such as large commercial and
16 multifamily benchmarking and disclosure.

17 So this snapshot is taken from the City Building
18 Energy Saver. It's a Lawrence-Berkeley National Lab
19 product that they're partnering with cities across the
20 nation on right now. And it's just an example of a very
21 rich visualization and kind of data-driven platform for
22 making policy decisions about the built environment. And
23 what -- well I'm going to come back to this slide later, so
24 I won't say anything more about this now.

25 The other thing that we've committed to and have

1 articulated in our Existing Building Action Plan is the
2 need to develop test beds for AMI data analytics. So I
3 don't know how many of you have participated in AMI data
4 analytics. There are multiple tools across the state that
5 will help you look at your AMI data and try and make
6 decisions about where you can potentially save energy. And
7 our stakeholders thought it was important that an
8 independent body such as the Energy Commission provide a
9 means for some type of not necessarily a certification, but
10 some sort of a due diligence that a tool could come into
11 voluntarily and say, "Look. I've passed all these tests.
12 Therefore I must be doing my disaggregation of AMI data
13 correctly and I can now market my tool with this sort of
14 confidence that I'm getting it right."

15 So this test bed has two roles. It actually
16 helps analytic vendors test their product and improve their
17 product. But it also allows the Energy Commission and the
18 Public Utility Commission to do some sort of due diligence
19 role in terms of helping consumers understand that there's
20 value in these tools and that they're actually robust and
21 rigorous and more or less correct and won't mislead you
22 into inappropriate investments in your homes and buildings.

23 So this is just an example of three days of my
24 AMI data, in the last summer -- three days in the summer,
25 hot all three days -- and really different load shapes. So

1 the orange load shape is really typical of two
2 professionals who leave the house in the morning and come
3 back home on a hot day and turn on their air conditioner,
4 right? It's a really tiny little blip in the morning from
5 water heating or other usage when you're getting ready to
6 go to work, nothing for the rest of the day, and then you
7 come home, it's hot and you turn on the air conditioner.

8 So that's great and that's predictable and
9 hopefully AMI analytic tools will be able to identify why
10 your shape looks like that and what you could do about it.
11 And then along comes a millennial who comes home and those
12 other two days hangs out all day long in the house, who
13 knows doing what, but look how much energy he's using.

14 So these analytic tools and our assumptions about
15 behavior and load shape are all really important for us to
16 do a better job with. And if we have robust data, we'll be
17 able to build a test bed that allows vendors to test their
18 products against all sorts of load shapes for the same
19 home. And then be able to improve their tools to really
20 differentiate between these types us uses within the same
21 home or within the same building.

22 COMMISSIONER MCALLISTER: Martha, can I -- this
23 is great. I just want to jump in and sort of make two
24 points. So Chris mentioned actually that some of the data
25 that he gets for the forecasting, there's been a process to

1 sort of automatically label it as private as it comes in,
2 and sort of have that be just standard operating procedure.
3 So I think we can have analogous conversations about
4 individual level consumption data, other types of data that
5 may be sensitive. And I wanted to sort of put that out
6 there, because I think there will be possibly strong
7 feelings about that and we're absolutely I think in large
8 measure we're going to be on the same page with the
9 utilities and other stakeholders on that.

10 And so I think that the bigger point is that here
11 you're talking about you taking your own data and looking
12 at looking at it and mapping assumptions onto your own
13 family and your own millennial. And so that's a specific
14 use case of sort of enabling personal use of that data in a
15 way to help your decision making.

16 That is not the kind of information that -- this
17 should be obvious right, but I just want to make it
18 explicit -- that's not the kind of information that the
19 Energy Commission would consider releasing publicly.

20 MS. BROOK: Right, I agree.

21 COMMISSIONER MCALLISTER: We are not talking
22 about that, okay? So the two, there is a firewall here
23 that I think sometimes we gloss over that maybe I and
24 others sort of assume that we all know is there, which is
25 the aggregated data, the pre-baked analytical summary data,

1 that kind of thing, would by and large in many cases would
2 be ripe for release for the kind of uses that you mentioned
3 before. So to help the marketplace adjust and understand
4 load shapes in a specific place, but not for individual
5 consumers, you know, aggregated at some level. Whereas the
6 individual level stuff obviously gets a completely
7 different treatment.

8 So I feel like that needed to be said even though
9 maybe it goes without saying, but I think we just need to
10 at each step, be very explicit about when we're talking
11 about data that is for the Commission's use, on that side
12 of the firewall. And other more summary high-level policy
13 relevant knowledge or information that's not actually data.
14 It's derived from the raw data or the original data, so I
15 wanted to just make that point.

16 MS. BROOK: Okay. Thank you so much. No, this
17 is important.

18 And what I've been trying to communicate is that
19 there's derivative good things that come out of having a
20 rich and robust data set at the Energy Commission. And we
21 are very, very careful about confidentiality and I think
22 that's obvious. But there are good things that we can do
23 by turning the data back around to the public. And this is
24 just an example of that, where if you can imagine I don't
25 know how many of you know about our AB 802 Benchmarking

1 Regulations, but we're in the process of completing those
2 now. And in just a couple of years we will have this type
3 of visualization platform for all large commercial and
4 multifamily buildings across the state where any interested
5 party, tenants, building owners can fly over this built
6 environment and find out information about the built
7 environment in terms of the relative energy performance.

8 So while we intend to focus the disclosure on the
9 USEPA ENERGY STAR score, which was mandated in the AB 802
10 Regulations, we also hope to provide complementary
11 information. So for example, if we have distributions of
12 large commercial buildings in specific areas of the state,
13 why wouldn't we want to include not only where you are in
14 terms of relative performance across the nation, which is
15 what the ENERGY STAR performance score does, but also add
16 the information about where you fall into the California
17 distribution for that same building type.

18 So that's just an example, which I am sure that
19 most of the time those two metrics will not be the same.
20 Sometimes they will depending on the building type, but in
21 most cases they won't be the same. You'll probably get --
22 you'll fall more into the middle of the distribution of
23 California buildings then you will look on that national
24 scale. And I can talk to you ad nauseam about why I think
25 that's true. But that's not the important thing.

1 The important thing is there's additional
2 information that was relevant and useful. And as a
3 derivative product from our policy analysis and tracking,
4 we hope to make this type of data -- again that's not
5 confidential in any way -- available to decision makers to
6 help them help us scale efficiency across the state.
7 That's all I have.

8 MR. WENG-GUTIERREZ: Great. Thank you, Martha.

9 So next up, we have Noel and I don't believe
10 there are any slides. So I'm just going to leave this up
11 here.

12 MR. CRISOSTOMO: Hi, Commissioners and hi
13 everyone. My name is Noel Crisostomo. I am a new Air
14 Pollution Specialist in the Fuels and Transportation
15 Division working on electric transportation. I previously
16 was at the Public Utilities Commission working on all the
17 CPUC's Alternative Fuel Vehicle Policies and the Utility's
18 Charging Infrastructure Plan. So I'm glad to be here,
19 working across the Fuels and Transport Division, but also
20 trying to link those efforts with EPIC's R&D programs and
21 the IEPR Forecasting efforts.

22 So I'll be talking about energy and public policy
23 uses of transportation data. I apologize for not having
24 slides, because I'm filling in for Jennifer. But I'd like
25 to, along the lines of the previous presenters, explain the

1 needs for detailed information on electric transportation
2 energy use given that our state has extremely lofty and
3 aggressive goals to de-carbonize our transportation fleet
4 per SB 350's transportation electrification efforts. As
5 well as the broad state goals under the previous executive
6 orders targeting halving of petroleum use in the light-duty
7 vehicle and truck sector, as well as a overall 80 percent
8 reduction in carbon emissions from transport by 2050.

9 So just to give you a quick market snapshot this
10 month, I guess yesterday Chair Nichols from the ARB tweeted
11 that California now has 250,000 electric vehicles in the
12 state. Across the public charging infrastructure there's
13 over 10,000 public Level 2 stations, 800 DC fast chargers,
14 and roughly 25 percent of those have been funded by the
15 Energy Commissions investments representing over \$51
16 million in those stations.

17 And in terms of the market that is growing there
18 will be dozens of new battery electric vehicles developed
19 by the automakers to be released in the next coming years.
20 There will probably be at least 40 by 2019. So what does
21 this mean for energy planning in the state? There will be
22 millions of new, potentially high-power charging loads that
23 will potentially eventually be mobile storage devices.
24 It'll be common place that battery-electric vehicles will
25 have over 200 miles of range, which has the equivalent

1 storage of almost a dozen Tesla power packs, or power
2 walls.

3 Charging on the DC side will approach 350
4 kilowatts for the Combined-Charging System Standard. And
5 so this is an extreme add of new load in an era that load
6 is currently declining and retail electricity sales are
7 currently declining. So across the agency's efforts to de-
8 carbonize transportation I've come up with at least a dozen
9 uses of transport data coming from both connected car
10 systems like Telematics, but also intelligent charging
11 systems through networked EVSE, Electric Vehicle Supply
12 Equipment.

13 So I'll just go through this parade of different
14 agency efforts that cross. For example, the Department of
15 Motor Vehicles, The Natural Resources Agency, The Energy
16 Commission, The ARB, The Public Utilities Commission, the
17 Department of Measurement Standards, the California ISO,
18 the Department of Transportation, the State Transportation
19 Agency, and probably others.

20 I haven't done the full regulatory review, but
21 the point is everyone is going to be developing rules
22 similar to this effort coming under SB 350. And so it'll
23 be important to send a consistent market signal to the
24 EVSPs and the automakers to develop the ability to share
25 this information in a way that balances the need for

1 privacy, and clearly the need to transform our energy
2 system in an intelligent way.

3 So first, customers will need to be able to
4 locate charging infrastructure. This data is already made
5 available to the National Renewable Energy Laboratory
6 through the Alternative Fuel Data Center, which is
7 organized by the Department of Energy. And soon through
8 Fuels and Transportation Division contracts that are being
9 developed right now the NREL will be streaming data from
10 networked charging stations.

11 In addition to locating charging infrastructure,
12 we'll need to understand where vehicles are residing to
13 avoid Grid impacts. This is already regulated by the
14 Public Utilities Commission in its orders for continued
15 load research reporting, from at least the investor owned
16 utilities, to understand how to avoid high costs to upgrade
17 the distribution system when someone buys a car and is
18 going to blow their transformer, because they're adding new
19 load on an already saturated transformer.

20 ARB is developing a rulemaking on open
21 authenticated access to public charging sessions. And the
22 Department of Measurement Standards in a kind of a related
23 effort is developing meter technology requirements for the
24 accurate receipt and commercial sale of electricity as a
25 transportation fuel.

1 The PUC, CEC and ISO are working together on
2 Vehicle Grid Integration to, for example, control
3 charging of these electric vehicles to avoid adverse Grid
4 impacts using time of use rates and increasingly dynamic
5 rates. And to eventually provide for the settlement of --
6 monetary settlement of Grid ancillary services like
7 frequency regulation.

8 These efforts require -- are already requiring a
9 level of granularity in reporting under the distributed
10 energy resource provider and energy storage and distributed
11 energy resource initiatives at the ISO at a more aggregated
12 level. But, for example, at the three electric investor
13 owned utilities their light-duty vehicle infrastructure
14 applications are already requiring, in order to track the
15 functioning of the utility efforts against the private
16 market, monitor utilization of the charging stations that
17 are being approved at the PUC right now.

18 This information, by the principal energy
19 agencies, will help inform the reliable operation of the
20 grid by actually being able to schedule this EV demand
21 based on people's behaviors. That might change
22 dramatically as technology in batteries and charging
23 systems continue progress. This is, also at the PUC, a
24 extremely important issue around distributed energy
25 resource planning in their Rulemaking 14-08-013.

1 Two critical initiatives under the DRP proceeding
2 are one tracking and forecasting DER loads, which include
3 electric vehicles. And two, having the utilities complete
4 integration capacity analysis at the feeder level to inform
5 DER providers how they can integrate solar storage, demand
6 response, EVs etcetera into the Grid without causing
7 upgrades. So the major electric utilities are already
8 responsible for releasing down to the feeder and segment
9 level data the operational conditions on the Grid. And
10 that, I believe, will continue to be more granular and
11 specific for frequency or voltage conditions.

12 Another point of this information is to validate
13 the credits and revenue from the Low Carbon Fuel Standard.
14 So the ARB in concert with the Public Utilities Commission
15 has set up a means of returning the value of a Low Carbon
16 Fuel Standard Credit to an EV customer to reduce the
17 upfront cost or ongoing operational costs of their
18 vehicles. But that requires that the electricity dispensed
19 into the vehicle be validated by the continued integrity of
20 the LCFS Program

21 This information will help us analyze the
22 utilization and maintenance needs of our deployed networks
23 and private charging end uses. And overall improve, as why
24 we're here, load and generation forecasting and planning.
25 And further infrastructure investments that are strategic

1 by a variety of agencies funding the transformation of our
2 transportation system.

3 As we shift from gasoline taxes to potentially
4 something else, potentially road use charges, we'll need to
5 be able to allocate the costs of maintaining our public
6 infrastructure, so that we can have drivable roads on which
7 to travel within our electric vehicles. So the STA is
8 implementing a Road Use Pilot, which might use a different
9 data collection effort. It'll be important to coordinate
10 all this.

11 And eventually when all of our cars are connected
12 and electrified in some way, we could improve the system
13 efficiency by monitoring traffic flows and congestion, road
14 capacity and towing, as we have more intelligent
15 transportation systems. Overall, this will help us track
16 progress on our 50 percent petroleum reduction goal and GHG
17 reductions under SB 350 and SB 32. And we can essentially
18 leverage the existing technologies within our connected
19 cars and intelligent charging networks to make this happen
20 without too much additional cost.

21 COMMISSIONER MCALLISTER: Great thanks.

22 MR. CRISOSTOMO: If you have any questions I'm --

23 COMMISSIONER MCALLISTER: Yeah. I do have one
24 question. And I'm maybe going to show my lack of sort of
25 paying attention to this issue, but you did mention DMV if

1 I heard. So thanks, this is really good stuff.

2 And I wanted to highlight maybe the big fleets
3 that Uber and Lyft represent and their jurisdictional kind
4 of regime is going to change. And so maybe that's an
5 opportunity to gather data from very large fleets in some
6 way. I wanted to just ask if anybody's thinking about that
7 in terms of, you know in this context of data and planning
8 and forecasting.

9 MR. CRISOSTOMO: So in terms of the agencies or
10 private industry?

11 COMMISSIONER MCALLISTER: Well, just to the
12 extent that they will probably see some more standardized
13 regulation, maybe there's an opportunity to sort of treat
14 them as fleets, instead of as individuals. And not to
15 impose more regulation, but to get data.

16 MR. CRISOSTOMO: I'm unsure of the interpretation
17 of individuals versus the fleets and where that is
18 residing, given the PUC reform efforts that might be
19 continuing in some manner. But last time I was up at PUC,
20 the Safety Enforcement Division still had enforcement
21 authority over data collection and in some manner over the
22 TNCs, that is Transportation Network Companies. They did
23 gather information from the TNCs.

24 COMMISSIONER MCALLISTER: Okay, great. I was
25 just hoping that since you just came over from there, you

1 might have some insider information. But I think the
2 fleets in general could be a really nice source of data.
3 And they're obviously huge in number, so but so but in any
4 case thanks a lot for the presentation. Welcome to the
5 Energy Commission. I'm glad you came over.

6 MR. CRISOSTOMO: Thank you.

7 MR. WENG-GUTIERREZ: Thank you, Noel.

8 And then just one quick word on that, the
9 Regulations as they stand today don't exclusively prohibit
10 the collection of data or characterization of the load
11 shapes for only say, residential users. So when we talk
12 about estimating the behind-the-meter consumption
13 associated with transportation, electrification or electric
14 vehicles, that would include commercial entities as well as
15 residential.

16 And then for the public charging stations,
17 although fleets may have dedicated charging stations, which
18 would not be part of the public charging station networks,
19 they might also have through service providers which would
20 then be obligated to provide us that information. So there
21 might be some way to differentiate those, but we might not
22 be able to do that. It depends on sort of the level of
23 detail we get in the data and how we might be able to look
24 at it.

25 COMMISSIONER MCALLISTER: Yeah. And this really

1 is a question beyond these Regs even, but I mean it might
2 be worth reaching out to some of the MPOs and the COGs, you
3 know, those that have transportation planning authority and
4 just see where they're at with this.

5 MR. WENG-GUTIERREZ: Yeah. That's a great
6 suggestion.

7 All right, with that I'm going to ask Leon to
8 come on up and give a quick presentation about the natural
9 gas distribution more data.

10 MR. BRATHWAITE: Good morning, Commissioners.
11 Good morning, members of the audience. My name is Leon
12 Brathwaite. I work in the Supply Analysis Office.

13 Today I'll be talking about hydraulic modeling of
14 the natural gas distribution system and the associated data
15 needs. SB 828, the Budget Act of 2016, codified the Budget
16 Change Proposal known as Aliso Canyon Natural Gas Electric
17 System Interaction and Gas Reliability. The budget change
18 proposal required the Energy Commission to improve its
19 technical ability. It also requires the Commission to
20 monitor, model and analyze the interaction of California's
21 electric natural gas system for Grid reliability. Also, SB
22 839 did task the Commission with some related activities.

23 The language of the BCP did require the
24 Commission, did call on the Commission, to model the
25 natural gas system and to monitor the natural gas flows

1 within the system. And with other agencies we tried to
2 ensure reliability both in the electric and the natural gas
3 sector.

4 The Energy Commission, as a result, is in the
5 process of acquiring a hydraulic model. With that model we
6 will be able to simulate the natural gas distribution
7 system in each utility service area. We will monitor the
8 interaction between electricity and natural gas. And this
9 will allow the Energy Commission to independently replicate
10 and verify the results of any work that we must review.
11 With this, of course, we will be able to ensure
12 reliability.

13 To complete this though, to do this modeling work
14 that we are now proposing, this hydraulic modeling work, we
15 will need data. We will need pipeline data, the
16 characteristics of the natural gas distribution system. We
17 will need flow information of the fluid, in this case it's
18 natural gas, that is flowing through the system. And as a
19 result and as such, changes to the Code of Regulations
20 provide an avenue whereby we can collect the necessary and
21 needed data. Remember, the BCP tasked the Commission with
22 this activity.

23 So the development of these Regulations will
24 further the goals and objections of SB 826 and SB 839. So
25 we'll collect data and we'll do the modeling as required.

1 There is one problem though. Under present reporting
2 requirements, no Regulations are in place to facilitate the
3 collection of the data. So staff proposes to make changes
4 and/or additions to Section 1308(e) of the California Code
5 of Regulations, which will help us collect the data that we
6 need to do the modeling as required by the BCP.

7 We will be proposing that we collect data
8 monthly. And that will fall, that monthly collection of
9 data, will fall into two groups. First, we will look at
10 the natural gas characteristics. That is its chemical
11 composition, its specific gravity, its maximum mass molar
12 fluid. (phonetic)

13 Secondly, we will also be collecting information
14 on the pipeline segments. First, we will need monthly
15 averages and maximum inlet pressure. We'll need monthly
16 averages and maximum outlet pressure. And we'll also need
17 monthly averages and maximum flow volumes.

18 And I think finally, as was stated several times,
19 and I know Commissioner McAllister made a very important
20 point about this, any data that's collected as a result of
21 these changes or additions to the Regulations, will be
22 automatically designated as confidential. And this of
23 course is provided for in law.

24 That brings me to the end of my comments. And
25 any questions, Commissioners, I'll gladly attempt to answer

1 them at this point in time.

2 CHAIRMAN WEISENMILLER: Just a comment really,
3 when I was back at FERC in May and met with FERC on
4 hydraulic modeling, they indicated that -- obviously the
5 staff there are quite familiar with hydraulic modeling --
6 that any application to either add or delete a pipeline to
7 FERC has to be accompanied by hydraulic modeling results to
8 demonstrate the impacts on the system.

9 We both talked about how any time they had seen,
10 or I had seen public hydraulic modeling, of the California
11 systems was in the Mojave days where we did that or Pro
12 Ingrich (phonetic) did that. So again, they were just
13 surprised that was not a regulatory tool in California.
14 Obviously we're not talking about distribution lines, but
15 pipelines.

16 MR. BRATHWAITE: Well, Commissioner the model
17 that we are thinking of requiring actually will allow us to
18 add and delete pipelines, and look for pipeline segments
19 for that matter, and look at the impact it will have upon
20 the overall system.

21 Okay. Thank you very much.

22 MR. WENG-GUTIERREZ: Thanks, Leon.

23 With that, I'm going to go ahead and transition
24 back to talking about just a summary of changes. That's
25 pretty much, what we just heard from staff, where again

1 ideally an explanation of how the data will be useful to
2 the Energy Commission for multiple purposes. And I hope
3 that has addressed some of the concerns or some of the
4 questions regarding how we're going to use the data.

5 If not, then certainly during public comment,
6 we'd like to hear about if there's more interest in getting
7 even more detail or how that might be conveyed. We can
8 certainly have those conversations in further stakeholder
9 conversations or discussions later on as well, but we're
10 open to understanding how more we need to sort of explain
11 the needs for the data.

12 And certainly in the context of the rulemaking,
13 I'm sure Caryn will touch on this when we go forward and we
14 create the initial statement of reasons, we have to present
15 a set of comprehensive justifications for all of the data
16 we're requesting. And so certainly we'll be making that
17 effort as well in that document.

18 So I'm going to go ahead and just go through a
19 summary of the changes. These are changes not from
20 September, but the changes in total, so from the current
21 Regs to what we're proposing. I'm going to go over this at
22 fairly high level, because we spent a whole workshop in
23 September talking about many the details of the changes
24 that we're proposing. So if you have an interest in
25 hearing discussions about what the detailed changes are and

1 why we're making them, I would recommend looking back at
2 that September 26 workshop and perhaps listening to the
3 staff presentation on the specific sections. But I will go
4 over them sort of at a high level here.

5 I will probably skip over, or quickly go over
6 some of the elements, which we'll be discussing this
7 afternoon on those specific topic areas as well as the
8 topic area of section that Christopher Dennis will talk
9 about again, which is a brand new change since the
10 September workshop. So that's something he didn't get a
11 chance at the September workshop to discuss and so he's
12 going to be giving a more detailed description about what
13 changes were made and why those changes were made.

14 So as I mentioned before, the first section deals
15 with some administrative and definitional changes as well
16 as deletions. So we have a number of new terms, which are
17 actually inserted into the regulatory language. And these
18 are primarily to both clarify existing definitions as well
19 as to specify new definitions that are needed in the codes
20 that we -- the language that we're proposing.

21 The way that it's written now, obviously all the
22 definitions are still at the end of the definitional
23 section in 1302. Once we finalize the document obviously
24 it will be incorporated in alphabetical order, but just to
25 know that all of the changes have been placed at the very

1 bottom. There have been some changes to existing
2 definitions. For example, in the alphabetical, the
3 previous language, if you look at the customer sector
4 definitions I think we made some modifications there,
5 really to be consistent with how we're collecting QFER data
6 right now and how we designate those customer sectors by
7 NAICS Codes. So those have been modified slightly.

8 In some instances the definitions that are
9 inserted, the new definitions, we're trying to be
10 consistent with other statutes and regulations where those
11 definitions are used. But there are instances where we
12 have be slightly different in our terminology and so to the
13 extent that we can use consistent terms in other statutes
14 we've referenced those.

15 And then we would, of course, welcome any
16 comments that could better or improve the understanding or
17 terminology that's used in the definitions. I know that
18 the definitions for each of those elements have a
19 significant role in how the actual regulatory language is
20 interpreted and how it could affect the implementation of
21 those Regulations. So it would be great to hear if they
22 were comments of questions or suggestions about the
23 definitions themselves.

24 The next item I wanted to highlight sort of at
25 the outset is a large section that we're looking at

1 deleting. I mentioned this is September. We're still
2 looking at getting a confirmation from the CPUC that we no
3 longer need to collect this specific data. And this is
4 primarily because I believe we've reached the cap. And
5 once we've exceeded that cap, we're no longer obligated to
6 collect the data. So our proposal in the Regulation is to
7 delete the entire Article 6 section under Division 3, which
8 is the data collection section.

9 And we don't believe that it's necessary. We're
10 going to get confirmation -- we'll of course get
11 confirmation before we actually do submit it in the OAL
12 package. But for now, we are assuming that we no longer
13 need to collect the data and that we're proposing it to be
14 deleted. If there are comments, if any stakeholders are
15 interested in having that data, maintaining that collection
16 or have comments about it, I mean we'd like to hear about
17 that alternative interpretation of the cap.

18 The next section in the draft language deals with
19 generation. It primarily focuses on three different
20 sections of Regulatory Code: 1304, 1308, and the wind
21 performance sections 1383, 84 and 86.

22 So 1304 is a fairly comprehensive section. It's
23 got lots of different sections. Christopher Dennis is
24 going to actually be talking about one section within 1304.
25 Probably the three major areas that we made changes to are

1 the insertion or clarification about CHP reporting dealing
2 with waste heats and thermal energy calculations. And so
3 that's an important set of clarifications that we're
4 introducing into 1304.

5 Additionally, we also have a set of
6 interconnection threshold reporting changes, which I think
7 we have had numerous conversations about. And I believe we
8 did in fact change some of that language in there to
9 account for some comments that were received in discussions
10 with stakeholders.

11 And then the last is there's a section of, or a
12 new subdivision of balancing authority reporting
13 requirements. And I think we have had some comments on
14 that, but certainly I think we've had some written comments
15 on that and we're still talking about that section, but if
16 there are any additional comments on that section we'd
17 appreciate those as well through either verbal or written
18 comment.

19 1308, I believe the primary change we've made
20 there, is again the natural gas distribution subdivision
21 that Leon just spoke about. We're just inserting that
22 again in order to facilitate the simulation work that's
23 going to be done in the supply office, surrounding the
24 natural gas distribution network.

25 In the wind performance reporting sections, again

1 we've got some changes in there to help clarify our
2 analytical needs. We've inserted a few sections of
3 language where we're asking for additional details in order
4 to facilitate our calculations and some other clarifying
5 language. So those are the primary areas that we've dealt
6 with, dealing with the generation side.

7 Next, we have the forecasting sections that we're
8 modifying: sections 1306, 1307 and then 1343, 1344 and
9 1353. So the first two sections here are dealing with LSE
10 and UDC reporting for customer classification reports and
11 then the gas utility and gas retailer reports. The section
12 -- what we've added there is actually a request for
13 customer level data. So that was a fairly significant
14 change to both of those sections.

15 And I don't believe it's one of the topics that
16 we're talking about this afternoon, so if people would like
17 to weigh in on those changes in those two sections, we
18 probably want to do that in the morning, during public
19 comment.

20 But those again, much of the reason why we're
21 going with that data is in support of the demand forecast
22 as Chris had mentioned as well as the surveys that we want
23 to implement. We need to get our characterization of the
24 population. So again if there's some comments or
25 suggestions about modifications to the language, we'd

1 appreciate hearing about that.

2 Next is the section 1343, which is the end use
3 characterization data. This is where we are implementing
4 surveys. We have had at least one meeting on the surveys
5 with stakeholders as well as received written comments.
6 The changes in 1343 again were pretty significant. In the
7 old framework the utilities were obligated to perform the
8 surveys after providing us a implementation plan and us
9 approving it.

10 And there was a schedule for the implementation
11 of the surveys. We've changed that around a little bit.
12 And so I think the obligation in the new language really
13 falls to the Energy Commission, but requires the support of
14 those entities or those regions that we are surveying. And
15 then there's an alternative compliance mechanism, through
16 which the utilities could implement their own surveys.

17 And so it would be great to get some feedback.
18 Perhaps on that section that might improve the alternative
19 compliance methods. Or if there's comments about the
20 primary mechanism, that new primary or proposed primary
21 mechanism for compliance that would be great.

22 1344, which is the load research and load
23 metering report section has lots of detail in it and
24 there's lots of sections under there, many of which we're
25 going to cover in the afternoon. So I'm not going to go

1 into too much detail on that. But there were one of the
2 things that we haven't changed in this version that was
3 discussed, that I did want to take a look at and change,
4 are the reporting dates. So I know that pretty much
5 throughout we've talked about the March reporting date and
6 there were some comments that the data might not be able in
7 the timeframe given the work and the data cleaning and all
8 the other work that needs to get done in order to provide
9 this data. So we were going to look at changing some of
10 those reporting dates to a little bit later in the year,
11 maybe April or sometime of the timeframe. So that's not
12 reflected in the current version. But we are looking at
13 what those dates might be, what might be appropriate
14 timeframe for reporting for that.

15 And then of course in the load metering, that
16 section includes all of that behind-the-meter, the interval
17 meter data, the network EVSEs, which are all topics we'll
18 talk about in the afternoon.

19 Lastly there's some compliance language, Section
20 1353, and we did receive some comments on that. The
21 original language, I think, was using sort of another
22 section as a template. And one of the points that were
23 made was that it didn't necessarily allow for an iterative
24 process of compliance. So I did insert a 30-day compliance
25 period in there or an opportunity for some discussion. I

1 don't know if that's adequate. And so certainly if there
2 are suggestions about what would be a reasonable mechanism
3 for resolving any sort of compliance issues, I'd be
4 interested in hearing your comments on that.

5 And then lastly is the security and
6 confidentiality section. Again, the only thing that we've
7 made modifications to so far is the insertion of the
8 automatic confidential designation for the natural gas data
9 that we'd be getting in support of Leon's work for the
10 simulation work.

11 Beyond that, we feel that everything else that
12 we've been asking for is covered in the existing language,
13 at least for the confidentiality elements. There are a
14 couple of other sections dealing with the release of data
15 and aggregation and things like that that we still need to
16 take a closer look at and will probably be revising as
17 well, but for the time being we've only really looked at
18 this one designation of confidentiality. And that's what's
19 in the Regs right now.

20 So that pretty much completes my high-level
21 summary of the changes that are presented in the proposed
22 Draft Regulations. And I guess I could, if there are any
23 questions about any of that I could answer them. Otherwise
24 I'll hand it off to Christopher Dennis to give a
25 presentation on the 1304 Section that he's -- the new

1 language that he's inserting into that regulatory section.

2 CHAIRMAN WEISENMILLER: No, that's good. Let's
3 move on to that topic.

4 MR. WENG-GUTIERREZ: Great.

5 So again, this is Christopher Dennis.

6 MR. DENNIS: Thank you, Malachi.

7 I'm Chris Dennis from the Siting Engineering
8 Office and I'm here to talk about proposed changes to the
9 1304(a)(3) Regulations. I'll start off first with a
10 summary of the existing Regulations and then go into a
11 highlight of our proposed changes.

12 What are the Regulations and what do they do?
13 The Regulations consist of three parts. There's part A, B
14 and C. Part A is a requirement for data collection and
15 water supply in use and wastewater production and
16 discharge. Part B is a collection of biological take and
17 biomass impingement. That part's already been discussed on
18 the proposed changes there in a workshop we had previously.
19 Part C collects data on violations related to environmental
20 quality and public health.

21 Who provides the data and how often? Power
22 plants that provide electricity to California within a
23 control area -- provide electricity to a control area with
24 end users in California required to provide this
25 information. However, there's a limit to that. Part A

1 limits it to power plants with a capacity of 20 megawatts
2 and greater, parts B and C to power plants with a capacity
3 of one megawatt and greater. Reports are due annually
4 February 15th of each year.

5 Who collects the data and what do we do with it?
6 The California Energy Commission collects the data, and the
7 data is used for research, analysis and reporting. I've
8 given a few examples. Here at the Energy Commission we've
9 used the data for the Integrated Energy Policy Report.
10 We've used the data for evaluation of renewable energy
11 policy and impacts of water use by the power plants. And
12 we've used the data to identify power plants whose water
13 supply might be susceptible to the drought. And to then
14 contact those power plants and ask if they need assistance.

15 Universities that use this data in research:
16 Universities such as Berkeley, Stanford, USC, Humboldt.
17 The news media agencies use the data and other federal and
18 state agencies use this data.

19 I took the data that we used for our Drought
20 Investigation and gave a snapshot of our power plant fleet
21 in California for power plants 75 megawatts greater that
22 consumptive use water. There are about 78 operating power
23 plants in California under the Energy Commission
24 Commission's jurisdiction. There are 22 non-jurisdictional
25 power plants. That makes a total of 100. These 100 power

1 plants have a capacity of about 29,000 megawatts. That's
2 for natural gas, solar thermal and geothermal power plants.
3 And because we're looking at the drought, that doesn't
4 include hydro-electric, wind and once-through power plants.
5 Hydro-electric power plants generally use water for -- it's
6 a pass-through use and its used for non-evaporative
7 cooling, so it's not consumptive.

8 Wind, we found based on our experience, basically
9 doesn't use any water, negligible amounts. So we've
10 excluded that and then once-through cooling watts ocean
11 water. So that's not related to any drought.

12 Of these power plants, they use about 123,000
13 acre feet per year of water. The water comes from surface
14 water, groundwater, recycled water and degraded ground
15 water. Of the 100 power plants, 30 of them are using
16 surface water, 20 are using ground water. The vast
17 majority are using recycled and degraded groundwater, which
18 we consider as drought resistant. Of the 30 power plants
19 that use surface water, probably most vulnerable to drought
20 because of yearly curtailments on surface water supplies.

21 And now I'd like to go into our proposed changes
22 for the data collection. Regulations -- we're proposing
23 these changes to clarify the requirements to make the data
24 collection more useful and to remove data collection
25 requirements that are not needed. I'll go through these

1 requirements following as a summary, highlighted summary.
2 And the proposed changes are in the strike-through/
3 underlining format.

4 One of the first ones I want to go through --

5 CHAIRMAN WEISENMILLER: It would be good to stay
6 -- I don't really see anyone from the generation industry
7 in this workshop.

8 MR. DENNIS: Okay.

9 CHAIRMAN WEISENMILLER: So one of the things I
10 want to make sure the staff reaches out to IEP, certainly
11 NRG, Calpine, reach out to the power plant owners, have a
12 very detailed conversation, see where there are issues and
13 where there aren't. But since they're not, I guess it's
14 possible for someone on the phone, but I'm just trying to
15 avoid going line-by-line and discovering the people who
16 should be reacting aren't really here.

17 And I know, for example, on the water stuff you
18 mentioned trying to identify power plants whose water
19 supply susceptible. Well, I know in the drought work one
20 of the things that obviously the owners were concerned
21 about was if it became public that if their water supply
22 was vulnerable. They could suddenly discover that their
23 price of water would go up dramatically or their options
24 could get pretty limited, pretty damn fast. So anyway,
25 great to get more data, I just want to make sure that we

1 really reach out to the affected groups before this comes
2 back to the full Commission. And not discover at the
3 Commission meeting that we've got a crowd showing up saying
4 we haven't heard any of this stuff.

5 So again, continue on with the high level. But
6 really have a very detailed conversation with the people
7 that it really matters to.

8 MR. DENNIS: I appreciate that, Commissioner.
9 Thank you.

10 CHAIRMAN WEISENMILLER: Okay.

11 MR. DENNIS: Proceeding on, with that in mind, we
12 were proposing to remove from the Regulations both the
13 hydroelectric power plants from the Reporting Regulations
14 and the wind-powered power plants. Basically again because
15 wind doesn't generate any water -- or use any water much
16 and doesn't generate any wastewater. And the hydro-
17 electric is basically a pass-through process, so we're
18 thinking we don't need to have this data collection. Let's
19 remove it.

20 I'd like to stop at this point and mention that
21 maybe -- we're likely to be adding Regulations, proposed
22 Regulations, here for the online data collection of the
23 data through an online system. The system's in development
24 right now, probably will be deployed in 2017, and it should
25 make the data reporting quality more accurate, more

1 efficient to make it for the owner-operators more easy to
2 report the data and for us to query the data and report it
3 also.

4 In that line we're trying to make the data report
5 units consistent, so like the water and wastewater reported
6 in gallons all the way across.

7 And then I'd like to emphasize that we collect
8 primary and back-up water supply source data and supplier
9 data. This was important, for example, when we were doing
10 our investigation on a drought. We didn't have a good data
11 set for that. We had to make numerous phone calls, look
12 through lots of data. It took days. If we had a good data
13 set our response time to assist the power plants could have
14 been a lot quicker. So we're looking to get good quality
15 data that way. We have some help, but we need more.

16 And another thing I'd like to highlight is with
17 the online data reporting format we are looking to get
18 descriptive information, so we can do better analysis. And
19 part of that we are looking to get consumptive and non-
20 consumptive water processes in detail. For example, what
21 is the steam cycle cooling water use at the power plants,
22 how much are they using for inter-cooling, mirror washing,
23 dust control emissions control, drinking, sanitation,
24 landscaping. So that's clarified here.

25 And I think last thing I like to highlight is for

1 industrial wastewater. We're trying to clarify that we're
2 not interested in the sanitary wastewater production
3 disposal, but actually industrial wastewater production and
4 disposal. That's the majority of the wastewater that's
5 produced at the power plants. And this information may
6 become more important as time goes on, as water becomes
7 more scarce in the future.

8 And that's it for my presentation, are there any
9 other comments?

10 CHAIRMAN WEISENMILLER: No, thanks. That's good.
11 I appreciate it. And certainly any way we can modernize
12 our data collection systems are great.

13 MR. DENNIS: Super. Okay, thank you.

14 CHAIRMAN WEISENMILLER: Thank you.

15 MR. WENG-GUTIERREZ: All right. Thank you,
16 Chris.

17 So with that, that actually is the end of our
18 formal set of discussions and presentations in the morning.
19 I had here an opportunity to open it up for public comments
20 so we can certainly do that before lunch. We're running a
21 little bit ahead of the schedule. I know the lunch might,
22 or after lunch, the afternoon might be a little quick. So
23 I guess my suggestion I guess would be to open it up to
24 public comments for a few minutes. And maybe we can get
25 done a little bit early and then come back a little earlier

1 than one perhaps.

2 COMMISSIONER MCALLISTER: Sounds great.

3 MR. WENG-GUTIERREZ: Okay great. So let me --
4 again if you could limit your comments to three minutes,
5 that would be appreciated.

6 COMMISSIONER MCALLISTER: We have not been doing
7 the blue card thing, so we'll just let people raise their
8 hands and --

9 CHAIRMAN WEISENMILLER: Yeah. Let's start with
10 anyone in the room who has public comments? Please.

11 COMMISSIONER MCALLISTER: Go ahead.

12 CHAIRMAN WEISENMILLER: Yeah.

13 MR. BOYCE: Bill Boyce with SMUD on electric
14 transportation focus.

15 A couple of observations, there's actually quite
16 a few agencies all starting to request similar data between
17 the Air Resources Board, Division of Measurement Standards.
18 And I know my folks' counterparts at the IOUs are also
19 answering the CPUC. So I'd like to suggest maybe really
20 trying to form an interagency group to really tackle this,
21 because a lot of the data is very close. And I think we're
22 going to end up in a situation we'd have to kind of split
23 reports quite frequently to do that. And the amount of
24 data being requested is also a lot of data with a lot of
25 access.

1 The second comment I would make, a lot of this is
2 looking at energy utilization of course, particularly here.
3 But one the other things that the data does not seem to be
4 focused on, which would be consistent with the Governor's
5 Executive Order for a marketed option is really taking a
6 look at what sort of utilization patterns exist that could
7 help guide us with regards to the effects infrastructure
8 have on adoption. And those are the types of things that
9 could help guide investment in infrastructure to help boost
10 adoption. And looking at things such as for example if the
11 pricing structure is too expensive and people aren't using
12 the infrastructure, then what is kind of a break-even point
13 where we actually get good utilization of the
14 infrastructure, which would then tend to make us think of
15 higher adoption.

16 So I would suggest really trying to think about
17 this in an interagency and then also looking at the data
18 for that other set of policy needs that actually I think at
19 some levels is more pressing than the energy, where the
20 energy issues will come farther out when there are a lot
21 more vehicles on the market. Right now, data collection on
22 how to build the market is probably more paramount. Thank
23 you.

24 COMMISSIONER MCALLISTER: Thanks.

25 CHAIRMAN WEISENMILLER: Anyone else?

1 And again, obviously you don't get three bites at
2 the apple and do this morning and do this afternoon and
3 then there's public comments at the end as much as you stay
4 eye level.

5 MR. TUTT: Good morning Chair Weisenmiller and
6 Commissioner McAllister, Tim Tutt from SMUD. I'm not
7 trying to get a second bite of the apple. I'm actually
8 going to talk about different things. And I do expect to
9 talk in the afternoon as well on specific topics. Maybe
10 the whole apple will be eaten by the time we're done.

11 What I wanted to talk about was sort of a -- I
12 mean it's obvious that your staff has spent a great deal of
13 time thinking about what kind of new data that they need
14 and what kind of uses that they might put it to. And it's
15 been sort of a -- from the perspective of the stakeholders
16 that are going to provide the data, very little time to
17 look at those proposals.

18 This initial proposal, the draft language, just
19 came out a few weeks, a month ago. And we were going
20 through some, I thought, very well done informal meetings
21 with Malachi to try to understand better exactly what was
22 happening and so on. And then we're not sure where it all
23 stands in terms of timing.

24 When this workshop came up, it seemed like we
25 weren't done with the informal meetings. And it seemed

1 like the language that we were presented last week was not
2 done in terms of incorporating all the stakeholder comments
3 to date, there's still changes to be made. And so they
4 just -- it feels like we're in the midst of an iterative
5 process where part of the iteration is us making comments
6 on a regular basis on stuff that's not finished from your
7 end yet. So that's a work burden that we want to avoid.

8 But I wanted also to say that one of the things
9 that is of concern to all the stakeholders is that this
10 does represent a significant expansion of data collected by
11 you guys. That's clear. And particularly in two areas,
12 that aren't going to be talked about this afternoon, in
13 1306 removing the 100 kW limit for reporting -- UDC's
14 reporting on power plants is a huge expansion of our
15 reporting responsibilities there. And 1304(b), going down
16 to customer level data, is again a huge expansion that
17 comes along with a lot of confidentiality concerns from the
18 stakeholders. Thank you.

19 CHAIRMAN WEISENMILLER: No, that's good.
20 Actually with public comment you normally don't have a
21 dialogue, so excuse me.

22 I was going to say I think the thing we're
23 struggling with, and in terms of by adding today I was
24 trying to be helpful, I guess is what I'm trying to say.
25 Is that on the one hand, under 350, we just have a

1 phenomenal step up in what we have to do on forecasting.
2 And as you know we've sort of -- this IEPR -- you know,
3 you've not seen our traditional crank the knob forecast
4 situation, which we're going to spend much more time on
5 next year.

6 Now the problem in a way next year is we don't
7 really have the data we're going to need, right? I mean to
8 really do all the things we want. And as I often say on
9 forecasting these things are iterative. It might be four
10 years from now the forecast is really humming and does all
11 of the things one would like to have it do this year.

12 And so we spent a lot of time on the data part.
13 And indeed, as you know, once the Commission adopts an OAL
14 there's this long lead time. And then actually data will
15 start dribbling back in here, somewhere out -- hopefully
16 before (indiscernible) out. So we're trying to move this
17 along in that sense.

18 But what I thought is important was first for the
19 staff to get -- it is a big change -- so for the staff to
20 get something out to really start the dialogue. And at the
21 same time I was concerned that there was an opportunity for
22 the stakeholders to -- for Commissioner McAllister and I to
23 listen to the stakeholder concerns. Now obviously, this
24 wasn't to end the conversations, but hopefully to give you
25 a different channel.

1 And again, I certainly encourage people to keep
2 working through issues. I always say on a siting plant
3 basis, as you know we start out by law, with there are 24
4 issues. And by the time you -- somewhere along the line
5 you like to get down to 4 major issues on what's really
6 important and not go into the final days litigating all 24
7 of those. Some are more aquatic and some are more desert,
8 so you can't quite get to 24 for any individual case -- but
9 again, narrowing issues.

10 So again, certainly this was an opportunity for
11 Commissioner McAllister and I to both listen. And but at
12 the same time, certainly encourage people to keep talking.
13 And that's an opportunity for both you and the staff to
14 figure out priorities. I mean and to make -- I assume
15 there's some data with some adjustments that are probably
16 relatively easy for you to provide. And try to work
17 through those adjustments and see if those adjustments
18 still get us to what we need, so hopefully that.

19 I don't know if you have anything else to say on
20 process? I mean I'm sure this is going to take longer to
21 get through. It's taken longer so far to develop it. It's
22 going to take longer to have the dialogue than I'm sure we
23 were hoping to have. But it's really important to do it
24 right, you know?

25 MR. TUTT: Yeah. I appreciate the comments

1 Chair Weisenmiller. And the opportunity to speak directly
2 to you is important I believe.

3 In the informal discussions we've been having
4 with Malachi the concept of a working group has come up
5 many times. And that I think it would be a useful sort of
6 part of this initial process leading to formal regulations,
7 if you could consider that. Thank you.

8 COMMISSIONER MCALLISTER: Yeah. I wanted to just
9 chime in a little bit. So and maybe at some point, now or
10 in the afternoon, Malachi could kind of remind us of the
11 schedule that we're hoping to meet for the rulemaking
12 itself. But I definitely appreciate your comment on the
13 workload and we're not trying sort of make you reinvent the
14 wheel every meeting. And keeping the threads going in a
15 way that's substantive and not kind of piece meal and
16 forward back, you know, jerky in that way. I think we all
17 would benefit from.

18 So and my report that I've gotten from staff
19 about discussions is positive as well. So that's good to
20 hear that you also agree with that. So this isn't stopping
21 the clock in any way. This is sort of just a mid-stream
22 kind of check in.

23 Certainly, you know, it is a big step up. I mean
24 there's no doubt about that. I guess part of what I'm
25 hoping we get to is an appreciation or an agreement or an

1 understanding of like, "Okay. Well, what are the steps we
2 need to take to create the infrastructure that then will
3 facilitate this automate it as much as possible in an
4 iterative way make sure that the burden is not -- is as low
5 as it can be and not ongoing. You know, that sort of once
6 the system is in place, it's in place. And so with
7 incorporating all the privacy concerns and all that, I
8 think that that's kind of where we'd all like to go. But
9 the details matter here, so we have to work through it.

10 MS. WINN: Good morning, Valerie Winn with
11 Pacific Gas & Electric Company. I share many of the
12 concerns that have been voiced by Mr. Tutt and by --

13 CHAIRMAN WEISENMILLER: Put that on the record,
14 that PG&E and SMUD agree on something. (Laughter.)

15 MS. WINN: Well, and I do in particular share
16 Mr. Tutt's concerns about some of the granularity of
17 customer data. As Mr. Tutt shared, in some of our working
18 group conversations you don't necessarily need to look at
19 every hair on his head to tell that he has gray hair. So
20 we're certainly looking for on some of the customer-level
21 data, that perhaps there might be a more aggregated level
22 that might address some of your concerns.

23 And we say that from the perspective of we have
24 15 million customers. And when you start looking at hourly
25 data for 15 million customers that's a lot of data and we

1 do have privacy concerns around sharing some of that data.
2 And it's a lot and we're still learning how to turn that
3 data into useful information. So I think that's something,
4 we have all the data, but what is the most useful level for
5 you?

6 We also share concerns of some of these requests,
7 in particular on some of the new information that's been
8 added in the current draft on water for power plants, that
9 that is duplicative of other reporting requirements at
10 other agencies. So I think some of the concerns or the
11 idea for a broader working group all the agencies might be
12 helpful.

13 And then lastly, and we'll get into some of these
14 details later in the day, there are requests for
15 information that the utilities simply do not collect. And
16 so as we look at affordability for our customers of
17 electricity, all of these expanded requirements cost money
18 to be able to comply and to hire the people to do the work
19 and then to report it. So looking for what's the right
20 balance there, what are we trying to accomplish, and what's
21 the most cost-effective way to achieve that result will be
22 important for us.

23 And finally, we look forward to continuing to
24 work with Malachi and other people on the Energy Commission
25 staff. We have really valued the very interactive nature

1 of the discussions. Particularly, the one we're looking
2 forward to will be the natural gas discussion, which we
3 have not had an opportunity to dig in on those issues yet.
4 But certainly, for PG&E the hydraulic modeling at the
5 transmission level may be done, but it's certainly not done
6 at the distribution level.

7 And a lot of the information requested again, is
8 not something that we have available. So again, how can we
9 find the right balance to help you -- for you to achieve
10 your goals and for us to also be able to comply? Thank
11 you.

12 CHAIRMAN WEISENMILLER: One of the things that
13 may help us move along too, is if there are data that
14 you're providing to other agencies that seem similar. And
15 you've talked about trying to do the sort of
16 (indiscernible) state working, you know, and we could do
17 that. But a simpler thing might be to say, "Look, this is
18 what we provide to the Water Board on water. If we provide
19 this to you at the same time, will you be happy?"

20 MS. WINN: And we'd be happy to do that. Thank
21 you.

22 CHAIRMAN WEISENMILLER: Yeah.

23 COMMISSIONER MCALLISTER: The other thing, I
24 think often data requests suffer from a -- I guess it's
25 information asymmetry -- when often requesters of data

1 don't even really know what data you do collect. And we're
2 not immune, we're not free from those constraints as well.
3 So I think kind of a come to Jesus a little bit about like
4 okay what do you have, what don't you have, those sorts of
5 things. Just so we're all operating with the same deck I
6 think just that sort of basic information would be helpful.

7 MS. WINN: Thank you, appreciate that.

8 MS. HACKNEY: Good morning Chair Weisenmiller,
9 Commissioner McAllister, Catherine Hackney Southern
10 California Edison. And my colleagues have already
11 expressed many of the concerns that we all share, so I get
12 to be the good guy. And I would like to express our deep
13 thanks and appreciation to staff, Malachi and Caryn in
14 particular. They've been extremely open and accessible and
15 helpful to us today. We certainly understand how
16 foundational the Demand Forecast is to inform multi-billion
17 procurement and infrastructure investment decisions.

18 We understand that greater granularity is
19 important, that there's a big difference between measuring
20 and modeling as was said earlier. And so we look forward
21 to our ongoing conversations, we too support the creation
22 of a working group. We think it would be very helpful to
23 resolve a number of these kind of outstanding issues, what
24 you have, what can we give you? We very much appreciate,
25 Commissioner McAllister, your comments about

1 confidentiality.

2 Clearly, Section 2505 is on the books. We may
3 need to refine it somewhat to make sure that it is kind of
4 in lockstep with all of our understanding that individual
5 customer information will not be made public. So that's a
6 good thing, so again thank you so much for the effort
7 underway. Your staff is doing a tremendous job in bringing
8 us together in trying to vet these issues and find a path
9 forward. So thank you.

10 MR. VONDER: Tim Vonder from San Diego Gas &
11 Electric Company. And I have a list of questions and
12 concerns probably that long, but I think we'll have an
13 opportunity after lunch to get into a lot more. But I
14 thought I've been hearing quite a few comments and concerns
15 on confidentiality, so I thought maybe I'd take this
16 opportunity to just mention a few things on
17 confidentiality. And maybe we can kind of think about them
18 over lunch.

19 And my comments on confidentiality come, in part
20 from years of experience working with both the Public
21 Utilities Commission and the CEC in our efforts to provide
22 data to both agencies. And many times over the years we've
23 run into little roadblocks when it comes to
24 confidentiality. And I thought I would just kind of bring
25 a few things up, you know, as something that we can think

1 about and talk about later. But confidentiality is a very,
2 very big issue when it comes to providing information,
3 especially at a very, very detailed level. And the level
4 of detail that we're being asked to provide this time, I
5 don't think it can go any lower than hourly information by
6 individual customer.

7 So there's a lot of concerns there when you
8 provide that much information. Trying to keep it
9 confidential, masking the information is one technique, but
10 also we have to realize that through triangulation and
11 putting other pieces of information together it's easy
12 sometimes to zero in, taking a couple of different pieces
13 of information and zeroing in on an individual customer and
14 identifying that customer without actually having the name
15 of that customer in front of you. And so that's something
16 that I think we need to pay attention to, and guard against
17 being able to identify a customer by triangulation or
18 putting together other sources.

19 Another thing with regard to confidentiality is
20 over the years I've found that providing information to the
21 CEC and asking for confidential treatment that is
22 consistent with what would be granted confidential at the
23 PUC, I've learned over the years that the rules here are
24 different than the rules there. And if we're going to be
25 getting down to the level of individual customer again, I

1 think we need to take a look at the confidentiality rules
2 that we are expected to use at the PUC along with the rules
3 that are being developed here. And hopefully that they can
4 be developed in a way that are consistent.

5 CHAIRMAN WEISENMILLER: I hate to tell you, but
6 one of the big issues in the Legislature last year was to
7 reform the PUC's confidentiality provisions. That
8 ultimately led to that bill was not successful, but
9 certainly the Governor and President Picker are committed
10 to reforms in that area. So I would not hold that up as a
11 gold standard.

12 MR. VONDER: Well, thank you. It certainly is a
13 concern. And I guess the other thing that I'd like to
14 mention with regard to confidentiality is transmitting the
15 data and custody of the data.

16 When we transfer large volumes of data, I think
17 cybersecurity is going to become an issue here in ways of
18 making sure that someone cannot hack into this process of
19 either transmitting the data. Or once the data arrives,
20 hacking into it, because the volume of data that we're
21 going to be asked to provide to you is basically our entire
22 billing file. And so, in essence we'll have our billing
23 file in two places and when you have data in two places
24 then it's more risk of it being hacked than it is if it's
25 one place.

1 So I just think that those are a few things that
2 we should consider for the future.

3 COMMISSIONER MCALLISTER: Thanks, Tim.

4 CHAIRMAN WEISENMILLER: Thanks.

5 MR. VONDER: Thanks.

6 CHAIRMAN WEISENMILLER: Anyone else in the room
7 or on the line?

8 (No audible response.)

9 No, nobody. Okay, so --

10 MR. WENG-GUTIERREZ: All right, does anybody
11 online have any questions? It doesn't look like anybody
12 had any questions so far, but just if you could let us
13 know.

14 CHAIRMAN WEISENMILLER: Or at least comments.

15 MR. WENG-GUTIERREZ: Yeah, sorry, comments.

16 CHAIRMAN WEISENMILLER: But again we're going to
17 have a public comment series at the end too. And so --

18 MR. WENG-GUTIERREZ: Yeah, I don't any popping
19 up.

20 CHAIRMAN WEISENMILLER: -- you don't see any, and
21 at this point we're on going to be back at 1:00 schedule.
22 So Malachi has identified five topics we're going to cover.
23 Obviously more when you get to the written comments if
24 there were high-priority other topics, it'd be good to have
25 those spelled out. So again as we look at going forward we

1 can continue to work on issues, so thanks.

2 Back at 1:00.

3 MR. WENG-GUTIERREZ: All right, so yeah. We'll
4 return at 1:00 o'clock then, thank you.

5 COMMISSIONER MCALLISTER: Yeah, 1:00 o'clock.

6 (Off the record at 11:58 a.m. for lunch)

7 (On the record at 1:08 p.m. after lunch)

8 COMMISSIONER MCALLISTER: And let's get started
9 again. Sorry, we're running just a couple of minutes late,
10 but I think still in the ballpark. So Malachi, do you want
11 to get us started off again?

12 MR. WENG-GUTIERREZ: Great, thank you. So I hope
13 that -- I've certainly felt like there were quite a few
14 conversations during the lunch period, the lunch time, and
15 hopefully that some of those conversations and comments
16 will come into the conversation of the afternoon as we
17 touch on some of these in-depth discussion topics.

18 So for the afternoon we have five items and I
19 think we have a fairly short period of time to run through
20 them. Hopefully we can touch on most of them and get some
21 pretty substantive comments and concerns identified.

22 I'd like the focus again to be on, if there can
23 be, how to improve the existing regulatory language that's
24 been presented or proposed. So to that extent, that would
25 help our staff in revising the language. It gives us a

1 pretty clear and concise starting point to work with, so it
2 would be great if comments could be focused on that sort of
3 detail.

4 Also, I'd also want to emphasize though that if
5 you have a high-priority concern this afternoon, I would
6 recommend that you sort of focus on those concerns as
7 opposed to all of your concerns, which again, you can
8 provide in written comment or in the further discussions
9 that we'll have, the staff level discussions. I'm
10 certainly intending on having some additional meetings on
11 various topics, probably all of the topics that we're going
12 to talk about today or this afternoon will be topics for
13 further conversations.

14 And then lastly, I just want to say again I think
15 we did a good job in the morning session where if there was
16 a comment that you agreed with you were able to say, "I
17 agree with their comments, but I'm going to say some other
18 things." So again, not duplicating the comments would be
19 helpful in expediting the process as well as focusing the
20 conversation.

21 So with that, I'm going to start right in on the
22 first topic area that I wanted to emphasize this afternoon,
23 which was the Behind-the-Meter Load Modifiers. And this,
24 of course, includes electric vehicle charging as one of the
25 components of the Behind-the-Meter Load Modifiers; the

1 other two being photovoltaic systems and energy storage.

2 So each one of those three items are pretty
3 important in us understanding what the load shapes are
4 comprised of. And I wanted to just -- I don't know if
5 everybody's had a chance to look at the actual language and
6 what we've inserted n there. But just to highlight, it's
7 on page 53 of the language. It's basically Section 1344(g)
8 and the primary thing we've done to change this was really
9 to include a 1 percent of peak as the basis of that
10 reporting, I believe.

11 So what that does is instead of having -- so it
12 basically adds another threshold for reporting that might
13 cap or limit the obligation to report. So I think that was
14 part of the concern, was if you may be a smaller POU or you
15 may not have the ability to do some of the work or have the
16 resources, that language was inserted in there ideally to
17 help differentiate those parties that might have resources.
18 But also to focus on those that have a significant
19 potential modification to their loads given these
20 resources.

21 So it would be interesting to hear what people
22 have to say about that language. And what I want to do is
23 sort of open it up for actual comments, with again
24 emphasizing those areas where you felt that the language
25 may have met some of the needs, but may not have met all of

1 the concerns. And then if there aren't very many comments
2 on this -- I think there were a few people that wanted to
3 comment on this -- if there's not many comments on this
4 topic area then I'd like to maybe explore some of the
5 questions that were presented here to get a better sense
6 about how do the utilities differentiate the components of
7 load shapes and other things.

8 So with that, I think I'm just going to open it
9 up for comment. And I think yesterday there were a few
10 people who suggested that they would be commenting on this.
11 So and again I guess what I will do is I will limit, I
12 think, to three minutes to keep us moving forward.

13 MS. WINN: But Malachi, I can be very succinct.

14 MR. WENG-GUTIERREZ: All right, then.

15 MS. WINN: Good afternoon. Thanks for that lunch
16 break. It was nice to get out and get a little bit of a
17 walk.

18 We are, of course, still going through the
19 updates to the second version of the Regulation. So just
20 the quick feedback I've gotten from some of our folks on
21 the load modifiers has been that some of these -- as we've
22 talked in the Working Group -- PG&E simply doesn't have
23 information on some of these things.

24 For example, I think we've got pretty good
25 information right now on PV wind and fuel cells on our

1 system. But we may not have information on whether there
2 are energy storage systems or the type of electric vehicle
3 that a customer might have. And so particularly on energy
4 storage what we're seeing now, particularly with some of
5 the SunRuns and SolarCitys is that the PV may integrate
6 storage with it. And so but if a customer hasn't asked us
7 for a new panel in their house, we're not even going to
8 know that they have an electric vehicle or that they have a
9 storage system behind the meter.

10 So there are some real gaps in the information
11 that we actually collect.

12 And then on electric vehicles, the distinctions
13 by vehicle type, some of that information might be better
14 gathered from the Department of Motor Vehicles. I mean,
15 again we don't necessarily know that a customer has an
16 electric vehicle unless they need to upgrade a panel. And
17 that's probably only 20 to 30 percent of our customers.

18 And then as I understand from our technical
19 experts, that some of the distinctions by whether it's a
20 battery electric vehicle or a plug-in hybrid, that some of
21 those distinctions really aren't going to have much meaning
22 going forward. They're kind of obsolete, because they're
23 about the same battery size. And so that's really what the
24 important part is there.

25 So we'll address that some more in our written

1 comments, but we still have challenges in providing some of
2 this data. Certainly if we have it, we can talk about what
3 we're able to provide. But we don't have it for everyone
4 in our service territory.

5 CHAIRMAN WEISENMILLER: It's interesting, because
6 I know when I got my Volt one of the things that was part
7 of the package was basically telling PG&E that I had a
8 Volt, so I guess part of it was this question. I don't
9 know how many people say, "never" or "yes." But and then
10 trying to guide you towards the different charging options
11 you had.

12 MS. WINN: Interesting. Well, of course, yeah
13 and if you do have it separately metered -- if it's
14 submetered -- then we would have you on that EV charging
15 tariff and we would have the information. But that could
16 be then because you've requested either an upgraded panel
17 or perhaps a different tariff. I don't know all the
18 details with that.

19 CHAIRMAN WEISENMILLER: Yeah, but at least
20 there's some option that people might just tell you that we
21 have it. Now, what happens if they tell you, is probably
22 an interesting question.

23 MS. WINN: Okay. That's a good question. Thank
24 you.

25 COMMISSIONER MCALLISTER: Yeah, and I'll also

1 just say you're right; a lot of this information might
2 exist elsewhere. And I think there's a rebate program and
3 virtually all the EVs participate in it and so there's
4 addresses associated with that. And then also DMV does a
5 lot of the registration data.

6 But I think the point here is that we need to be
7 nimble in terms of what the expectation is, and getting
8 clear on what the expectations with you are, and also what
9 the expectation of what we're getting from other places is.
10 So that we can match all that up as best we can.

11 MS. WINN: Right, and it's also one of those
12 things that solar panels are a bit easier to track, because
13 you can't easily sell them off of your roof to someone
14 else. So then you've also got that additional complexity
15 of well someone might have an EV today and sell it to
16 someone else in two years and maybe not replace it with an
17 EV.

18 So those are some of the other things that might
19 lead us to say DMV would have better record keeping on some
20 of that, and how could we look at that information and
21 leverage it in a meaningful way here?

22 COMMISSIONER MCALLISTER: Are you looking at
23 analytics to recognize load shapes EV charging and detect
24 that through other means than just their telling you?

25 MS. WINN: Well, I think we're certainly looking

1 at some of these things. And it still, as the penetration
2 grows in our service territory, we'll probably see more
3 trends. But I can't really say what they're able to glean
4 from some of the analysis today. I don't have that
5 information with me.

6 COMMISSIONER MCALLISTER: Okay. Thanks.

7 MS. WINN: Thank you.

8 MR. WENG-GUTIERREZ: So just a couple of
9 comments, just clarifying again the Regulations itself. So
10 this section is really looking at developing an estimation.
11 It's not necessarily that it would be capturing every
12 single EV owner in the territory and then combining it into
13 an actual load shape or developing an average load shape,
14 so there is some leeway here as to what methodology could
15 be used in order to estimate what that load shape would
16 look like.

17 And I was going to wait until a further section
18 down in the Load Research Section to talk about it, but
19 there is that component of flexibility that I hope can help
20 in alleviating some of the burden to comply with this and
21 other load research sections.

22 Part of that language, where we've inserted it,
23 actually talks about what is the uncertainty given the
24 existing set of data that you have. So that's the other
25 thing, that we recognize that you may not have all the

1 data, but what data do you have and can you leverage to
2 make an estimate? And then how certain or what's the
3 quality of that estimate? And that would be helpful.

4 MR. TUTT: Tim Tutt from SMUD, good afternoon.
5 Very much appreciate the addition of the 1 percent
6 threshold for these load modifiers. I think that's a good
7 change. One slight edit to that I think is rather than
8 saying 1 percent for that year, which implies the reporting
9 year, it should be you reach 1 percent and maybe then you
10 have a year to develop a methodology. So maybe it should
11 say two years prior to. You know, you reach 1 percent two
12 years prior and then your reporting obligation is two years
13 after. You know what I mean.

14 MR. CHANGUS: Good afternoon. Jonathan Changus
15 with the Northern California Power Agency and I will go
16 into deeper detail, I think, in written comments. But just
17 I think would echo some of the concerns PG&E raised about
18 what data we may or may not have at this point, in this
19 juncture. And it seems like the -- I appreciate that
20 there's some flexibility about what exactly may be required
21 in working with what we've got.

22 And we just want to note that in discussions
23 about the integrated resource planning, transportation and
24 electrification in particular, one of the key takeaways I
25 had from that conversation from CEC staff was what were

1 areas the CEC could be helpful, where are the gaps? And I
2 think we've heard in that forum, as well as again here, is
3 that the DMV Registration Database I think could be very
4 useful to a utility planning owner understanding what's
5 going on as well as to the CEC, so trying to explore that
6 as well as the CVRP Database. And we'll go back as well
7 and look and see more specifically what do we have and what
8 don't we have. And to look and see what are some of those
9 other data sources to help inform this portion of the
10 forecast going forward.

11 MR. DONALDSON: Good afternoon, Daniel Donaldson
12 with Southern California Edison. I just wanted to thank
13 you for the opportunity to comment.

14 One of the sections that was really impactful to
15 us was the new section that Malachi just referenced adding
16 to the draft language, Section 1344(a), talking about what
17 to do if behind-the-meter data isn't available for all of
18 our behind-the-meter generation and other assets. And
19 really there was a lot of discussion with the working
20 groups around the statistical estimation methods that would
21 be used to really refine how to estimate that data. So we
22 think that was a really good addition and really would
23 warrant some additional discussion in the working groups.
24 Potentially at a DAWG meeting as well would be an
25 opportunity to gain some consistency around those methods

1 that could be used moving forward.

2 MR. WENG-GUTIERREZ: Thank you.

3 All right, well I think then I wasn't going to go
4 into detail on the plans and that 1343(a) until the actual
5 threshold level conversation, but I'm glad to hear that it
6 actually is somewhat being received with some positive
7 things. It may not be the actual solution, but hopefully
8 it does give some flexibility to obligated parties.

9 Was there anyone else who wanted to comment on
10 the behind-the-meter modifiers, in particular maybe the
11 language associated with the energy storage or any of the
12 other elements, the specifics? I know Valerie touched on
13 what they might have as data sets, and the focus seemed to
14 be on EVs, but is there anything on energy storage that
15 might be of concern?

16 (No audible response.)

17 All right, okay well then with that certainly
18 this is not the end of the conversation on this specific
19 topic area. I think unless there are some comments from
20 the dais from the specifics that were brought up here we
21 will continue to have those conversations about the behind-
22 the-meter estimation. And we can certainly talk a little
23 bit more specifically about both the 1 percent value with
24 maybe a two-year timeframe versus a single year and also
25 the compliance mechanism that we've inserted into 1344(a)

1 when we can refine that language as well.

2 So I'm going to move on then to the next section
3 or the next basically set of topics, which is Section
4 1344(h) and that, if you're following along at home, is on
5 page 53 of the revised regulatory language. It's dealing
6 with Networked Public Charging Stations and there was a bit
7 of confusion about who were the obligated parties under
8 these Regulations.

9 I tried to convey that who we had intended on
10 providing the data would be the electric vehicles, EVSE
11 service providers as opposed to say an owner or someone who
12 manages the site. Really, we want to basically leverage
13 existing data that's being collected through the networked
14 EVSE service providers. And use that data as a resource
15 for our purposes. And I know Noel, this morning, touched
16 on some of those uses as well as in our previous
17 conversations people have talked about how to leverage that
18 to better inform our investments going forward in EVSE
19 infrastructure.

20 So the language that has been changed for this
21 section really focuses only on trying to clarify who the
22 obligated parties are, not necessarily at what we're asking
23 for at the data. But really to say we want to make sure
24 it's the EVSE service provider versus anyone else. And I
25 know there might be some ambiguity if a utility is entering

1 a marketplace installing EVSE charging stations that if
2 they were then to become the service provider for some sort
3 of proprietary network then they might have that
4 obligation. But if they are offloading that sort of back-
5 off as responsibility to a different service provider then
6 they wouldn't necessarily be an obligated party.

7 So I wonder if there are any comments on this
8 section from anyone in the room?

9 COMMISSIONER MCALLISTER: Okay. I have a
10 question --

11 MR. WENG-GUTIERREZ: Sure.

12 COMMISSIONER MCALLISTER: -- which is maybe not
13 exactly what you're asking, but I guess I'm just wondering
14 what we know about the -- you know, a lot of digital
15 communication's going on here. And I guess I'm just
16 wondering is this a topic of discussion in the PUC
17 proceeding in terms of what data obligations or what
18 information would come along, as sort of being built into
19 that ecosystem in terms of either cars themselves, and
20 understanding where they are and where they're charging and
21 when versus the charging stations themselves undertaking
22 which car is there and when it's charging. I mean, is that
23 data being generated and what's happening with it?

24 MR. WENG-GUTIERREZ: I think I'm going to let
25 Noel talk to that. I mean, I have a pretty good idea about

1 it, but I think he might be the resident expert on that.

2 CHAIRMAN WEISENMILLER: No, that's good. Yeah, I
3 agree. I mean, I have to think if say PG&E is putting in
4 7,500 chargers we've got to end up with something that
5 shows how effective they were.

6 MR. WENG-GUTIERREZ: Yeah.

7 Go ahead.

8 MR. CRISOSTOMO: Hi, this is Noel Crisostomo from
9 the Energy Commission. The three utility applications, I
10 guess PG&E just recently received a proposed decision from
11 the CPUC on Monday. But they all closely mirror each other
12 around monitoring and reporting for utilization of the
13 networks that are being deployed.

14 So the pricing and the responses by the customers
15 will all be collected in order to understand how first the
16 provision of infrastructure will help EV adoption. And
17 then two, understand how the different models of directly
18 sending the price to the driver or an alternative --
19 sending it to the site host who might be giving it away for
20 free -- will affect the charging profiles of the actual
21 EVSE array.

22 What was your next question?

23 COMMISSIONER MCALLISTER: Well, so that's
24 helpful.

25 MR. CRISOSTOMO: And then I'm envisioning the car

1 versus the charger.

2 COMMISSIONER MCALLISTER: Only the car knows
3 where it is and what charger, where is the information
4 being sort of collected and then aggregated by someone?

5 MR. CRISOSTOMO: So for the utility programs
6 there will be essentially meters in the charging stations
7 or at the head of the array, like the top of the array.
8 So the utility will be a single source, but the EVSPs who
9 are providing the charging station itself could also be a
10 source of information as well as the automaker's
11 telematics-based systems. But this exact issue about the
12 automaker data and the EVSP data and the utility data will
13 be the subject of a joint CEC/PUC workshop on the 7th about
14 grid integration communications, which I will be leading.

15 COMMISSIONER MCALLISTER: Okay. Great, perfect.
16 So that really does answer the question. I guess I wanted
17 to kind of endorse the idea that eventually this would be
18 an interesting topic. In the context that we're on today
19 it would be -- and in the forecast in particular -- it
20 would be good to have a discussion at the DOG about this
21 issue and how it's impacting demand and how it's doing the
22 load modifiers and all that. So behind-the-meter
23 modifiers, so I want to endorse the Edison idea.

24 MS. WINN: Hi, Valerie Winn for PG&E. And I'm
25 not familiar with the reporting requirements that the CPUC

1 may be imposing as part of the Electric Vehicle Decision,
2 but I think certainly it would be worth, as part of the
3 working group, to take a look at what the CPUC is asking us
4 to provide. And syncing up with those reporting
5 requirements as much as we can to avoid duplication of
6 effort.

7 And I would say also that PG&E's charging
8 stations, once they are up and running, we will be a small
9 portion of the market. So I think some of the other issues
10 in this area with respect to network service providers,
11 others will need to comment on what they are able to
12 provide.

13 And, of course, as Noel's already indicated the
14 models for how these stations will be run are different
15 amongst the three utilities. So there well may be some
16 information we have as the station owner and there may well
17 be information we don't have. So I think that's still
18 evolving and to the extent we can structure the regulation
19 to provide flexibility to update as information changes
20 going forward, that would be helpful.

21 MR. BOYCE: Bill Boyce with SMUD on more on the
22 electric transportation viewpoint. Some of the data
23 request requirements on this area literally are at every
24 single transaction. So even today when we were at the
25 utility talking about hourly type data, for every single

1 account this would even be down at every single charge that
2 happens on a public charger, so just wanted you to be aware
3 of that. That's even more data if you think about like
4 every time someone fills up at a gas station type of data
5 collection.

6 The other thing I was going to say with regards
7 to where the vehicles are, where the data gets collected,
8 only about 80 percent of the market participates in the
9 Rebate Program at the state level, CVRP. So about 20
10 percent of the cars really don't participate; that's kind
11 of like the very first access data point. Certainly, DMV
12 does have records on the data. You all would have a lot
13 more access to that.

14 And last overall on the CVRP be aware that the
15 legislation went through that also put additional price
16 constrictions on who will be able to get that. So the
17 amount of data we'll be collecting at that will be reduced.
18 Thank you.

19 MR. WENG-GUTIERREZ: Great, thank you, Bill.

20 I believe we are having some issues with the
21 WebEx connection and the audio, so I think we've gotten
22 some comments from people online just through a chat
23 session saying that they haven't been able to hear some of
24 the audio. I know that we have at least a couple of
25 people, I think, who wanted to make comments who were

1 calling in. So if we have more comments in the room that
2 would be great, while we try and look at how we might get
3 them reconnected. Otherwise we can move on and once we get
4 the audio reconnected and they can hear, provide comment,
5 then we can have them either do that at the end or --

6 CHAIRMAN WEISENMILLER: Do we want to take, I was
7 going to say, a three-minute break just for AV issues?

8 MR. WENG-GUTIERREZ: Sure. Let's do that. Yeah,
9 let's take just a --

10 CHAIRMAN WEISENMILLER: And if anyone has
11 something in the room, raise your hand or something. But
12 again, often on these things if we just take a break it's
13 more likely to be fixed than if we try to muddle through.

14 MR. WENG-GUTIERREZ: Yeah, perfect. All right,
15 let's take a five-minute break then and we'll try and get
16 the WebEx session back up and running. And I appreciate
17 your patience with this.

18 (Off the record at 1:35 p.m.)

19 (On the record at 1:37 p.m.)

20 MR. WENG-GUTIERREZ: So actually if we could go
21 ahead and just get started again, so I appreciate everyone
22 online while we tried to resolve that audio issue. It
23 looked like for some reason the audio cut out, so hopefully
24 you didn't miss too much of the conversation. But we are
25 on the network public charging station topic. We've heard

1 from a couple of people in the room and we were hoping to
2 hear from anyone online who might have comments regarding
3 this.

4 So if there's anyone online, I know you won't
5 have the benefit of hearing what comments were already
6 made. So there might be some duplication of comments, but
7 if you would like to make a comment on this specific
8 section of the regulatory language please do so. I think
9 we have at least two people that might want to comment.

10 CHAIRMAN WEISENMILLER: That's good. I was
11 going to note we have a court reporter here. There will be
12 a transcript that people can listen to for that section,
13 but again I wanted to make sure people had it more in real
14 time.

15 MR. WENG-GUTIERREZ: Right, perfect.

16 MS. SMART: This is Anne Smart at ChargePoint. I
17 would like to comment?

18 MR. WENG-GUTIERREZ: Perfect, great. Thanks.

19 MS. SMART: Sorry, I'm really bummed out we
20 missed all of that, so apologies. I don't know what was
21 said after lunch at all, so ChargePoint we understand the
22 intention behind the tool. It's been helpful to hear,
23 particularly this morning, get a better sense of what this
24 purpose of collecting this data is.

25 However, we remain concerned that the way that

1 this is written it -- we have three concerns. One being
2 that it doesn't -- I'm now reading the screen that just
3 popped up real quick. Okay, one concern is that we don't
4 have all the capabilities required across all charging
5 stations to produce the data that is expected here,
6 particularly on a session-by-session basis. I think that
7 there needs to be some sub-groups or working groups that
8 include more of the charging station industry to tax
9 through where technology currently stands, particularly for
10 stations that will be already deployed when this rule goes
11 into effect. And then what technologies and capabilities
12 we're looking to have in the next few years.

13 Secondly, we remain concerned about the
14 competitive implications. We understand that there will be
15 some privacy protections, however in a market that the
16 value of our data and particularly for smart charging and
17 network stations, is really important to our company. And
18 I'm sure there are competitors. And so providing that type
19 of information free of charge to other competitors
20 potentially is something that our company is definitely
21 nervous about, particularly in an environment where we have
22 more and more utility programs coming out.

23 There was a comment earlier, I think was by Bill
24 at SMUD, that we'd like to see where stations are not being
25 used and then use that to plan where more stations should

1 be put out. I mean, that's the kind of thing that every
2 charging station network operator does on a competitive
3 basis on their own to keep their business running. So the
4 idea of having that regulated in the future is just a
5 little scary.

6 And then the third element, looking through the
7 slide that was just put up we definitely do not agree that
8 Open Charge Point Protocol shouldn't be used as a standard
9 for transferring data. I think that we are excited to have
10 the December 7th workshop on standards development under
11 the SB 350 transportation electrification side of things.
12 I think before we propose any specific standards here there
13 should be coordination across ARB, CEC and CPUC to make
14 sure that we are actually using standards that are real
15 standards that have been implemented by a standard-making
16 body.

17 And then the last question on here I see is what
18 amount of data is produced every day by a single EVSE with
19 one charging code. We've got lots of data. We have
20 utilization data, we have session data, we don't
21 necessarily have the data that would be specific to an
22 individual driver or the type of data that would allow us
23 to know what else is occurring on a customer's property
24 such as solar or storage. It's not tied directly to the
25 station itself, but we'd really like to sit down and go

1 through that with many other people from the charging
2 station industry to make sure that we're letting everyone
3 at the CEC know what technology is out there and what type
4 of data they could use, so that we can help address the
5 concerns that you have. Thank you.

6 MR. WENG-GUTIERREZ: Thanks, Anne, for that. And
7 I apologize again for you not hearing the other comments
8 before. I think there was some mention about the workshop
9 coming up, so we will be working to coordinate on that
10 workshop and the comments and issues that come up in that
11 workshop.

12 I did want to just say about the OCPP, that was
13 merely an item that I put on there. It's certainly not an
14 endorsement of any given protocol for the purposes of
15 actually transferring data. It was really an opening to a
16 conversation about what would be some reasonable sets of
17 standards. And so I think again that December workshop
18 coming up, should inform some of those topics.

19 MS. SMART: Great.

20 MR. WENG-GUTIERREZ: So with that I'm not sure if
21 there are any other comments or questions to Anne? It
22 doesn't look like it.

23 Is there anyone else online who have any other
24 comments on this item?

25 (No audible response.)

1 So I'm not seeing that there is anyone. The
2 other thing I wanted to say to Anne was that as with many
3 of the other topic areas we're talking about this afternoon
4 we are going to have a continued engagement with
5 stakeholders. And certainly this particular topic area is
6 one that we need to have another set of meetings. I know
7 you've suggested that we need to have a broader engagement
8 by EVSE service providers, and certainly that's something
9 that we want to do going forward.

10 MS. SMART: Great, thank you.

11 MR. WENG-GUTIERREZ: Of course.

12 So if there are not any other comments online or
13 in the room, on this topic area -- one second -- then we'll
14 go ahead and move on to the next item. And that is the
15 Load Research Reporting element that's really talking about
16 the thresholds. So when I say thresholds, in Section 1344
17 which again is this load research area, many of the
18 requirements for the reporting have associated thresholds
19 with them. So in some instances there might be a 1,000-
20 megawatt per year threshold or 200 megawatt per year
21 threshold. And we've actually made modifications to those
22 thresholds to lower them. In some cases, as I think I
23 mentioned in September, the intent here is to try and true
24 up to other reporting and analyses that we're performing.
25 So we have given some thought to what data we think is

1 reasonable to collect at different threshold levels.

2 But through our conversations with stakeholders
3 it certainly became apparent that we probably wanted to
4 provide some more flexibility in the language to allow for
5 sort of a differentiation of reporting. So in some
6 instances, we might have entities that are fully capable of
7 providing many of the data that we're requesting. And in
8 some other instances they may not have all the resources or
9 the actual infrastructure to provide that.

10 So as I alluded to earlier, one of the elements
11 that we tried to resolve that issue with was by including
12 this new Section 1344(a), which basically creates a
13 framework by which a plan can be submitted if it's
14 infeasible to produce the estimates in this section based
15 on actual metered data. And the intent there obviously, is
16 to open the door to other methodologies to make these
17 estimations. And we hope that that language gives the
18 flexibility to potentially obligated parties to be a little
19 bit more creative in how they want to estimate these load
20 shapes and provide the data to us.

21 So I wanted to highlight it in this particular
22 section, because this is expanding the obligated parties
23 under many of these sections. And I think we did hear
24 about instances where alternatives or some flexibility
25 would be valuable to parties. So I wanted to get a sense

1 of whether or not the inserted language addressed some of
2 those concerns, maybe to what extent they have, and whether
3 or not additional revisions or changes need to be made to
4 that specific section.

5 And then also if you have additional outstanding
6 concerns about, say a specific threshold level in reporting
7 a specific section, that might be also invaluable to hear
8 about. So if anyone has a comment on that I'd appreciate
9 it.

10 MR. CHANGUS: Hi, Jonathan Changus with the
11 Northern California Power Agency.

12 Quickly just I think we want to express some
13 appreciation for the recognition that some of the smaller
14 entities may not have the same capabilities. We'll be
15 taking a closer look, and will provide if we have more
16 specific comments in written, but at least want to
17 acknowledge that it's a good step in the right direction.
18 And if there's suggested edits we'll make those in the
19 written comments. Thank you.

20 MR. WENG-GUTIERREZ: Great, thank you.

21 CHAIRMAN WEISENMILLER: Yeah, one of the things
22 to think about too, Jonathan, is that I suspect some of the
23 POUs that are say -- you know, Modesto might not have that
24 many electric vehicles where others like say Palo Alto or
25 Silicon Valley -- could have lots of and so, you know, in

1 fact they might be coming up to finding impacts on the
2 distribution system right now.

3 So it'd be good to think a little bit too, about
4 which of the POU's might be the most prone to have impacts
5 in this area.

6 MS. TAHERI: Good afternoon, Sarah Taheri with
7 the Southern California Public Power Authority.

8 I just wanted to echo Jonathan's comments, but
9 also raise that our members do still have a few concerns
10 with this language. We do appreciate the added flexibility
11 here and look forward to working with staff on seeing if we
12 can come up with some proposals for improvement.

13 (Audio feedback muted on the line.)

14 I was just going to raise that we have had some
15 members share that in the past, looking at load research
16 studies, has been not feasible from a business perspective
17 for them. So again, we do appreciate the flexibility here
18 and will look into that in more detail and look forward to
19 working with staff on that.

20 MR. WENG-GUTIERREZ: Great, thank you.

21 So if there are no more comments in the room I
22 wonder if there's anybody online who might want to comment
23 on this specific topic?

24 I believe we had a couple of the POU's, in our
25 conversations with the stakeholders, and --

1 Okay. So again is there anyone online who would
2 like to provide a comment on the load research reporting
3 element that's talking about the thresholds and the newest
4 insertion of 1344(a) giving sort of a flexible compliance
5 alternative?

6 UNIDENTIFIED SPEAKER: (Online) Yeah, excellent
7 (indiscernible) --

8 MR. WENG-GUTIERREZ: So it sounds like it's
9 excellent and --

10 CHAIRMAN WEISENMILLER: Would you please identify
11 yourself if you mean to be talking to us, otherwise please
12 mute your phone? It seems like there's a conversation
13 going on that I don't think we need, but again we're
14 looking for --

15 MR. WENG-GUTIERREZ: I think you're right, it's
16 probably not associated with this proceeding.

17 All right, well it doesn't look like we have any
18 other commenters on this specific topic. So I know, again
19 we certainly anticipate having further conversations on
20 this area. So we'll certainly look forward to written
21 comments on the topic, how we might improve the language,
22 and then we'll have additional stakeholder discussions
23 about this as well.

24 So I'm going to move right along then to the next
25 item, which is the Load Research Reporting Section. This

1 is Section 1344(i) now as it's been renumbered, and it's
2 found on page 55.

3 I know that we've certainly talked about this in
4 our discussions. There's not really any -- we didn't make
5 any revisions to this language as of yet, but it was
6 something that we internally were discussing. So we just
7 never came to any sort of resolution as to how best to
8 adjust the language, so hence there's not real proposed
9 changes to the Regulations.

10 But we certainly are interested in hearing, again
11 some of the concerns associated with providing this
12 interval metered data at this aggregation level, you know,
13 whatever the concerns might be.

14 So with that I'm just going to open it up again
15 for comment on this specific topic area. Given that we
16 haven't made any specific changes I know you can't say we
17 agree with the changes that have been made. But if there
18 are things that you would like to see perhaps changed in
19 the regulatory language to address some of the concerns
20 that we've raised or that have been coming up, that would
21 be great. And that would be useful to hear about.

22 UNIDENTIFIED SPEAKER: (Online) (Indiscernible)

23 CHAIRMAN WEISENMILLER: Again, if you're having a
24 conversation, please don't share it with us. Mute your
25 line.

1 COMMISSIONER MCALLISTER: Can we tell on this end
2 who is talking, so we can see the little speaker icon going
3 off when somebody's talking on that end? Is that possible
4 to mute it specifically?

5 MR. WENG-GUTIERREZ: It is. I'm not sure how
6 many people are on, so it might be one of those. But
7 usually you can see whether or not they are talking and --

8 COMMISSIONER MCALLISTER: Right, pick off the
9 person who's talking and mute them?

10 MR. WENG-GUTIERREZ: It sounds like we just muted
11 everyone, so we can open it up for --

12 CHAIRMAN WEISENMILLER: Well, let's only open up
13 when we get to the point of asking people if they have
14 comments.

15 MR. WENG-GUTIERREZ: Exactly.

16 COMMISSIONER MCALLISTER: So and then if anybody
17 on the Web or on the phone could shoot us a question or
18 type us a question or type us a -- raise their hand or
19 whatever they have to do -- that would be helpful too.

20 CHAIRMAN WEISENMILLER: That'd be helpful, but
21 again if you're having a conversation just mute the line.
22 I mean, you know, it's not that hard.

23 MS. WINN: Technology has advanced.

24 CHAIRMAN WEISENMILLER: So right, yes.

25 MS. WINN: Gee, it takes me back to when I was a

1 kid and we had open lines, five people could be on there.
2 I'm telling you how old I am, anyway Valerie Winn for PG&E.

3 And certainly we had filed some written comments
4 on the interval meter energy consumption data certainly
5 recommending that consumer-specific energy use data be
6 eliminated, because we do have concerns about privacy. And
7 I'm sure that we will continue to talk about some of these
8 things through the working group meeting about whether
9 there is some appropriate level of aggregation that could
10 meet your needs and still protect customer information.
11 And I know we've talked about energy upgrade programs
12 previously where we had anonymized data or are there other
13 tools that we could use rather than customer-specific data.

14 And then one of the other items discussed during
15 the working group meetings had to do with the dates for our
16 reporting requirements. And certainly first and second
17 quarters we have a multitude of reporting requirements and
18 something in mid-March. I think a lot of the data are
19 still being reviewed and analyzed at that time and we may
20 seek to have some of those dates delayed to a little bit
21 later in the year. Like for example, a lot of load data
22 and customer data are provided in FERC Form 1. That's due
23 May the 1st, so something that gives us adequate time to
24 review the data for accuracy would be helpful. Thank you.

25 MR. WENG-GUTIERREZ: Great. Thank you, Valerie.

1 And I do believe that I commented on the schedule
2 change, so I think that's something that we want to look at
3 across this whole section. So just being cognizant of all
4 the reporting that does occur at the beginning of the year
5 and what would be a reasonable timeframe. So that is
6 certainly something we're looking at as well.

7 And I know that you have brought up in our
8 discussions the aggregation, the appropriateness of the
9 aggregation level, and so that's something we can certainly
10 continue to talk about and see what might meet our needs.
11 So I'm sure that'll be an ongoing conversation that we
12 have.

13 COMMISSIONER MCALLISTER: I did just want to
14 point out that AB 802 does specifically call out customer-
15 level data. And Martha's presentation did highlight what
16 that could and would be used for, so this is a new kind of
17 approach. We're moving forward into the present as we
18 talked about in our preambles here. So I don't want to
19 lose sight of that, because there are very specific needs
20 that we have and we're fully committed to assembling the
21 ecosystem that we need to confront those challenges.

22 MR. WENG-GUTIERREZ: Yeah, and I would agree
23 certainly Martha's presentation as well as many of the
24 others as well, did touch on the benefits of having this
25 level of disaggregation. So I think we see lots of

1 opportunities and we see some need for it through many
2 different areas across the Energy Commission.

3 MR. TUTT: Tim Tutt from SMUD again. And yes, 802
4 did specify that the Energy Commission may get customer-
5 level data and the needs were laid out well this morning.
6 There's still some privacy concerns that we need to work
7 through in working groups. And I guess --

8 COMMISSIONER MCALLISTER: Agree on that, I don't
9 want to imply that I don't agree with that.

10 MR. TUTT: Okay. I think one of my questions is
11 if we do go down this path, you guys do go down this path
12 and get this 15-minute data for every customer, do you
13 still need as much load research data? Do you still need
14 some of the other data? It almost seems duplicative,
15 because you can just sort of add up and get to a load shape
16 and that kind of thing.

17 COMMISSIONER MCALLISTER: Yeah, thanks. That's
18 the kind of creative discussion we need to have about
19 seeing how all the new pieces fit together, but they will
20 fit together I'm confident.

21 MR. WENG-GUTIERREZ: Right, so I would agree with
22 you. There might be instances where we can eliminate then
23 other requirements. And I think we have eliminated some of
24 the sections that we didn't really touch on. But we have
25 deleted them, because again with this new information we

1 will then be able to provide -- you know, get it. So some
2 of the sections in 1344 though, we might need to expand the
3 amount of data that we'd be asking for in order to
4 aggregate it appropriately and understand where to -- that
5 sort of thing. But we're completely -- we understand that
6 if we were to get to this level of detail then yeah, it
7 could supplant some of the other requirements for
8 reporting.

9 All right, any other comments in the room on this
10 specific topic? No other concerns or comments that want to
11 be shared today?

12 (No audible response.)

13 Anybody else online, is anybody?

14 CHAIRMAN WEISENMILLER: So unmute the lines.

15 MR. WENG-GUTIERREZ: Do you want to unmute all
16 the lines and then we'll see --

17 CHAIRMAN WEISENMILLER: We'll have them wade
18 through it, yeah.

19 MR. WENG-GUTIERREZ: All right, so if anyone --

20 CHAIRMAN WEISENMILLER: Let's try it and if this
21 doesn't work then mute and have people raise their hands or
22 note.

23 MR. WENG-GUTIERREZ: So we are talking about the
24 load research reporting interval metered data component of
25 the Regulations. And we're looking for a comment from

1 anybody online that would like to provide comments?

2 (No audible response.)

3 It doesn't sound like it. All right, so go ahead
4 and mute them again.

5 So again if there are any other concerns or
6 comments that want to be made we certainly have the written
7 comment period and you can provide comments during that
8 section. And again, we'll have continued conversations
9 about this topic area as well through our discussions.

10 All right, well then I'm going to move on to the
11 last section I think.

12 COMMISSIONER MCALLISTER: Malachi, can I just ask
13 one question on this?

14 MR. WENG-GUTIERREZ: Sure.

15 COMMISSIONER MCALLISTER: There is a question in
16 there about Green Button and maybe I'm not sure if -- I
17 mean I'm happy to wait for that discussion until written
18 comments come in. I guess I'm kind of wondering, sort of
19 at a high level how utilities are or are not implementing
20 that and kind of why? So if there's anybody who wants to
21 jump up and give a high-level answer to that, that'd be
22 great. But I think there is an infrastructure there that
23 exists and it's not perfect. But it's there and so not for
24 everything that we're talking about, but there is a --
25 okay.

1 But it does have its usefulness particularly --
2 well, I won't elaborate. But I'm curious really, as to how
3 the utilities see the Green Button Tool and Green Button
4 Connect in going forward and their interactions with
5 customers.

6 MS. WINN: Right, and Valerie Winn for PG&E. And
7 I know that we've had many discussions on the multitude of
8 platforms customers can access their data through. But I
9 don't have up-to-date information on how the implementation
10 of that is or where it is today. I can offer to provide an
11 update on that through our written comments. Okay, thank
12 you.

13 COMMISSIONER MCALLISTER: Thanks.

14 MR. CHANGUS: Jonathan Changus with NCPA again.
15 I know there's definitely amongst our membership, some
16 folks that are farther along at looking into Green Button
17 as a solution. There is a variety of customer data,
18 customer interface questions going on as far updating
19 customer information systems, getting the billing system
20 into a more up-to-date model. There's still a lot of our
21 membership that is rolling out smart meters in AMI and so
22 that kind of critical base infrastructure is the first
23 step. And so once that's in place, and along the same
24 lines, starting to think about the portal that the customer
25 is going to use going forward is definitely on the horizon.

1 But there's a few steps that need to be taken
2 first before we get there, so I think we're always looking
3 at ways to improve the customer experience. It's figuring
4 costs and what are the resources necessary on our end at
5 the individual utilities, which don't always have a proper
6 IT Department within the utility. The city will have
7 something to do some of that, so there's some resource
8 constraints there. But a lot of it has more to do with
9 larger customer information system upgrades that need to
10 occur first.

11 COMMISSIONER MCALLISTER: Thanks.

12 Okay. I think that's it. Thanks for bearing
13 with me there, Malachi.

14 MR. WENG-GUTIERREZ: No, no. That's good.

15 All right, so then we're going to move on to the
16 last topic area that I wanted to focus on this afternoon,
17 which is the Natural Gas Distribution Data. Again, Leon
18 touched on and actually described and showed the explicit
19 language that's associated with it. And it sounded like
20 this morning people recognized that we probably need to
21 have some further discussions on this specific topic area
22 and bring in some other individuals from the utilities and
23 stakeholders to talk about what data might be available and
24 what data is collected.

25 And although we haven't necessarily made any

1 modifications or changes again to this regulatory language,
2 I know it's something that we haven't really focused on.
3 And that it does involve some interesting data, perhaps a
4 large quantity of data as well. So again, I wanted to open
5 the door on the possibility to talk about this specific
6 topic. And if there are any additional concerns or
7 comments that want to be made on this specific topic, I'd
8 like to hear those.

9 MR. TUTT: Tim Tutt from SMUD again. And I think
10 our issue here is just that we do have over 200 million
11 therms a year of natural gas throughput in our system. But
12 we just get it from Valerie and then give it to our four
13 power plants. So we don't think this really fits us and
14 we're looking for some clarification or maybe an exemption
15 to get out on this area.

16 CHAIRMAN WEISENMILLER: Do you guys still do a
17 pipeline to local gas or do you only buy gas from Valerie
18 or when you get a chance import it by Valier?

19 MR. TUTT: Only from Valerie as far as I know.

20 CHAIRMAN WEISENMILLER: Okay.

21 MS. WINN: Thank you, Tim, for buying our gas.
22 PG&E did raise in its comments on October the 17th a number
23 of questions on the request for natural gas information.
24 And as I noted earlier today we don't collect a lot of data
25 at the distribution level that we might have at the

1 transmission level. So certainly we need some discussions
2 on what do you mean by distribution pipeline segment?

3 We have more than, I think it's 40,000 miles of
4 distribution pipe in our service territory. So how we
5 define things can help us better explain what data we might
6 or might not have that can inform the analysis that you're
7 looking for.

8 There are also a number of other things that I
9 think will be better pursued through the working group
10 discussions, so we can just better understand what
11 information is needed.

12 CHAIRMAN WEISENMILLER: No, I think the PG&E gas
13 system as you know, is sort of very unusual thinking back
14 to when PG&E under bankruptcy proposed to FERC it's
15 backbone system. And at that point if you look elsewhere
16 in the country there's an interstate pipeline backbone
17 system, a city gate, and typically the gas distribution
18 company deals with the city gate. I remember back at FERC
19 on Mojave looking at a Commissioner and realizing he
20 thought of a gas distribution company as the City of
21 Arkansas. And trying to explain that PG&E was different in
22 nature than the City of Arkansas, you know?

23 But your distribution system in some respects is
24 similar, some parts of it are used similarly to backbones
25 elsewhere, and others it's totally different. So it'll be

1 a good conversation for you to have with the staff. There
2 might be a certain pressure or size pipe that might be a
3 good breakpoint. But as I said it's certainly one of the
4 more complicated gas systems in figuring out. And
5 certainly, if you say you don't measure below a certain
6 pressure or size, then obviously we're not going to get
7 that data.

8 MS. WINN: Right, but yeah I agree, happy to have
9 the discussions with staff. And also if it's one of those
10 -- I know we've taken you on a tour of our gas operation
11 center -- if that's something that's helpful for staff to
12 better understand how we're managing our system and some of
13 the issues we look at in the management of our system, or
14 how we model our gas flows, that might be helpful as well.

15 CHAIRMAN WEISENMILLER: That might be good,
16 because certainly that is an opportunity to see what you
17 are measuring or monitoring. And also certainly getting a
18 better sense of what you do model. You know, again I don't
19 think we expect we're going to go past what you measure or
20 model now, but just trying to understand that.

21 MS. WINN: Okay. Thank you.

22 MR. WENG-GUTIERREZ: Yeah, and actually I just
23 wanted to comment on that as well. We had multiple
24 conversations internally about what would be an appropriate
25 threshold level for the reporting requirement. I

1 certainly, when I read the language, recognized that as the
2 other elements in 1344 had threshold levels that were sort
3 of cutting off intentionally about who needs to be the
4 obligated party in what we're looking for. So we had
5 conversations internally.

6 And so I think as I recall, some of the results
7 of those conversations were well, they could vary across
8 different utilities and obligated parties. And so getting
9 a sense of how that might -- how best we might implement
10 something in the Regs to consider variations across
11 utilities would be helpful. So I think that would
12 certainly be something we can talk about, but I just wanted
13 to let you know again we were cognizant of that issue,
14 thought about it, and talked about it internally. Just we
15 don't have a solution yet for it, so looking forward to
16 those conversations.

17 CHAIRMAN WEISENMILLER: Well, okay. But to make
18 things more complicated, when you look at the California
19 topology we do have some interstate pipelines serving in
20 California who may or may not be prepared to cooperate with
21 us. We do have some local gas distribution companies, the
22 City of Long Beach is an example. But again, I don't know
23 if they know that you might be knocking on their door.

24 And I know there are some private pipelines,
25 Calpine (phonetic) is an example, that again is somewhere

1 in the mix. And I guess if you really scratch deep enough
2 there's a lot of exchange gas going on among gas producers
3 and ultimately either their users. But anyway I would
4 assume at some point again we're making progress in this
5 direction, but we need to figure out what's the most
6 important data we're trying to get?

7 MR. WENG-GUTIERREZ: Right. Exactly and again, I
8 don't know if Leon wants to jump in and comment on that,
9 but I would expect that the needs of the model and how we
10 want to inform the model will also play a role in what we
11 go after and what we're trying to ask for. Excellent, I
12 just wondered if the --

13 COMMISSIONER MCALLISTER: Why are you talking so
14 much about the natural gas piece?

15 MR. TUTT: I just wanted to correct one
16 statement, we do have one local source of gas. It's biogas
17 from the digester facility at the county.

18 COMMISSIONER MCALLISTER: I guess I was going to
19 ask a question too on that front. So how are we treating
20 the flavors of gas in this? I mean, biogas is set up to be
21 a big deal, right, potentially? So I just want to make
22 sure --

23 CHAIRMAN WEISENMILLER: But the quantities are so
24 small --

25 COMMISSIONER MCALLISTER: Well, I guess if we're

1 updating our --

2 CHAIRMAN WEISENMILLER: The quantities right now
3 are small enough that it's not going to affect our
4 analysis, but certainly in the future they could --

5 COMMISSIONER MCALLISTER: Yeah, they could.

6 CHAIRMAN WEISENMILLER: -- assuming, well
7 actually I'll --

8 COMMISSIONER MCALLISTER: (indiscernible) is not
9 here, but --

10 CHAIRMAN WEISENMILLER: Actually, if PG&E ever
11 decided to do a gathering system for biogas, similar to
12 what it used to do before it got rid of that puppy -- I
13 think you got rid of it?

14 MS. WINN: Well, I worked on some of those early
15 CalPower contracts for PG&E. And so certainly when we were
16 doing dairy biogas if folks are injecting into our system
17 and we have a contract with them, then it would be metered
18 how much they're injecting so that we would know how much
19 to pay them. So that sort of information, if they're
20 injecting into the pipeline, would be captured through some
21 of those contractual reporting tools. Maybe not
22 necessarily through the gas monitoring, because I mean it's
23 got to be cleaned up to have certain constituents removed
24 before it's injected.

25 COMMISSIONER MCALLISTER: Yeah, I'm thinking sort

1 of long term. If we take SoCalGas at its word then it's
2 really amp up to some significant percentage of bio, then
3 we need to make sure we're putting the different sources in
4 the right buckets.

5 MS. WINN: Right. And some of that may come
6 through in the Low-Carbon Fuel Standard Reporting, because
7 if it's being used for transportation you would capture it
8 there. And if it's being used for renewable generation,
9 because right now we get to claim that, that's going to
10 show up through your RPS reporting as well.

11 COMMISSIONER MCALLISTER: Yeah, okay. So that's
12 a good conversation to have.

13 MR. WENG-GUTIERREZ: Right, so I didn't -- Leon,
14 did you want to weigh in? You looked like you were going
15 to step up and make a comment?

16 MR. BRATHWAITE: For the record I'm Leon
17 Brathwaite, I work here at the California Energy
18 Commission.

19 A couple of things, number on the biogas issue, I
20 do not believe that the model that we are trying to acquire
21 requires us to distinguish between gas say from a normal
22 regular gas as opposed to biogas. What we will be
23 assuming, and I think going forward, is that all gas that
24 enters the system, the distribution system, will be gas
25 that -- "pipeline quality gas." And whether it is biogas

1 or any other kind of gas that is the assumption we probably
2 will be making.

3 And also about the issue about data, we do
4 recognize that we are requesting at this point and time,
5 very large metrics of data. And we recognize the potential
6 problems or difficulties that we placed upon the utilities
7 or any of the people who are affected by any new
8 Regulations. And I think Malachi is correct, and Valerie
9 is correct, that during the course of our conversations as
10 we go through this process, we can find ways to trim down
11 the data requirements. So that we can fulfill our needs as
12 laid out in the BCP and the utilities and other parties
13 will not be too burdened by our needs and our desires to
14 get this work done, because it is important that we do it.
15 It is required by law and we will be glad to work with the
16 utilities and try to limit the scope as long as it can
17 fulfill both their needs and our needs.

18 And that's all I wanted to add to this.

19 COMMISSIONER MCALLISTER: Thanks, Leon.

20 MR. BRATHWAITE: Right.

21 MR. WENG-GUTIERREZ: Okay. So I guess I'm going
22 to check on the phones again, if there's any comments on
23 this specific topic area, if you can unmute them. And then
24 is there anyone on the phones that would like to comment on
25 the natural gas distribution topic?

1 (No audible response.)

2 It doesn't sound like it. Okay.

3 So again there are certainly plenty of
4 opportunities for written comments to be submitted. We
5 will certainly be having additional discussions on this
6 topic as well with the stakeholders going forward, so again
7 plenty of opportunities to engage on the topic.

8 If there are no further comments on these
9 specific topic areas then I was going to move along to have
10 Caryn come up and talk about Next Steps for the Regulation
11 -- Next Regulatory Steps -- an important distinction.

12 MS. HOLMES: I'm Caryn Holmes. I'm with the
13 Energy Commission, also in the Legal Office.

14 I think most people are probably pretty familiar
15 with the rulemaking requirements, but Malachi asked me to
16 summarize them here. As we've talked about, we're in the
17 pre-rulemaking phase. It's informal, you've seen drafts,
18 the drafts can change, it doesn't trigger additional
19 requirements.

20 We're hoping that as we work through these topics
21 and continue to meet with people we're able to come up with
22 a formal rulemaking package. Most of you again are aware
23 that when we start that process there's four documents.
24 There's the Express Terms, which is what we're talking
25 about here today. There's a Statement of Reasons in which

1 we talk about the justification for why we ask for the data
2 that we're asking for. There's the Notice itself, which
3 gets mailed and posted to people that are on our mailing
4 list and in the *California Regulatory Notice Register*. And
5 then there's a Fiscal and Economic Impact Analysis that's
6 prepared that's submitted.

7 At the same time when those documents -- it's
8 actually the publication in the *California Regulatory*
9 *Notice Register* that starts a 45-day public comment period
10 -- we may or may not have a workshop or hearing within
11 those 45 days. The answer to that question would probably
12 depend upon how close we can get to consensus or agreement
13 over the next couple of weeks.

14 Once the 45 days is up, the Energy Commission can
15 choose to go ahead and adopt this proposed package at the
16 Business Meeting or it could issue 15-day language, because
17 it gets 15 days notice instead of 45 days notice. But
18 eventually at some point there will be formal adoption at
19 the Business Meeting.

20 After that happens the staff put together a
21 series of documents, updates to any information, all of the
22 comments that were submitted. Puts them into a package for
23 purposes of public participation, probably the most
24 important part of that is there will be a response to every
25 single comment that's made during the rulemaking process.

1 When that package is complete it goes to the
2 Office of Administrative Law. They have 30 working days or
3 six weeks roughly to review it. When it's approved by the
4 Office of Administrative Law it goes to the Secretary of
5 State. There's a complicated formula that I will spare you
6 about when the Regulations become effective. We are
7 obviously hoping that we can have them become effective
8 January 1st, 2018 so that all of the data that we collect
9 on a calendar year basis, starting in 2018, is the new
10 data.

11 So if anybody has any questions about that
12 process, I'd be surprised but I'd be happy to answer them.

13 COMMISSIONER MCALLISTER: Thanks, Caryn.

14 CHAIRMAN WEISENMILLER: Yeah, thanks.

15 MR. WENG-GUTIERREZ: So I think with that then we
16 can open up to general public comment. We've already heard
17 many of the comments on the specific topic areas, but again
18 giving people the opportunity maybe online or in the room,
19 to comment on anything in general that we've talked about
20 today.

21 CHAIRMAN WEISENMILLER: One thing I was going to
22 suggest people either now or in writing, or both, think a
23 little bit is about process next steps. And again realize
24 that we're trying to move towards a consensus, but we're
25 not going to take forever.

1 MR. TUTT: That was going to be my one comment
2 here is that we had talked yesterday in a call about
3 potential for extending the comment deadline, so I just
4 wondered if there's been any thought and discussion going
5 into that. And if that can be provided to us today?

6 CHAIRMAN WEISENMILLER: Do you have a specific
7 date that you or any of your colleagues are going to
8 propose for the deadline? Again, I would just as soon here
9 specific suggestions.

10 There goes Valerie straight for the mic, no
11 that's good.

12 MS. WINN: I'll charge forward, Valerie Winn with
13 PG&E. Given next week is Thanksgiving holiday and I'm
14 already losing folks, December the 12th might be a good
15 date to give me adequate time to get my experts engaged on
16 the latest draft and may give us some time to perhaps have
17 another discussion on some of these other issues to see if
18 we can narrow those down.

19 But certainly I just wanted to again express our
20 appreciation for the team who's working on this. They've
21 been very available. What we would like to see, I think to
22 help move this process forward, because we are very
23 invested in participating and helping to shape this would
24 be kind of a schedule. Maybe for the next three weeks or
25 through the end of the year for when and what topics we

1 want to discuss, so I can make sure I have my experts in
2 the room to be the most helpful.

3 CHAIRMAN WEISENMILLER: And again, now to make
4 life a little more complicated for you on the spot, is if
5 you were to identify say the top three or four targets for
6 working group discussions in that period of time what would
7 they be?

8 MS. WINN: Well, certainly the natural gas one
9 for us. I think the EV and the storage questions coming up
10 with something that works today based on what we have
11 available, would be good to talk about. And then I think
12 talking about the level of aggregation of some of the
13 interval data would be also a priority for us.

14 CHAIRMAN WEISENMILLER: Thanks.

15 Jonathan?

16 MS. CHANGUS: Yes. The first one was asking
17 about the extension on comments and if -- December 12th
18 would be fantastic, give us a chance and we'll really dive
19 in and provide specifics, that would be really helpful.

20 The second piece was December 7th was mentioned a
21 couple of different times as a joint workshop. I didn't
22 see that yet on the CEC or CPUC website, so part of going
23 forward is we're trying to get more folks in too that
24 aren't maybe on a specific listserv. Is where are we
25 supposed to go to find out about a working group that's

1 created or other things that aren't necessarily part of the
2 formal rulemaking. I'm on most of the listservs, so that's
3 fine for me but --

4 CHAIRMAN WEISENMILLER: Well, it sounds like
5 you've managed to put a firewall up between you and the PUC
6 listservs is my guess.

7 MR. CHANGUS: I wish.

8 CHAIRMAN WEISENMILLER: Go ahead.

9 MR. CHANGUS: Yeah, they keep asking us to
10 participate, so there you go. So just clarity on what is
11 the December 7th workshop?

12 CHAIRMAN WEISENMILLER: Please.

13 Please come up to the mic and explain that as we
14 again, try to build that into our process, going forward.

15 MR. CRISOSTOMO: Hi, this is Noel Crisostomo from
16 the CEC, formally at the CPUC.

17 So the December 7th workshop on Vehicle Grid
18 Integration was announced through the R13-11-007 Service
19 List. It hasn't been posted on the CEC's website, but it's
20 essentially going to be a joint workshop with my position
21 at the CEC taking a lead in sort of previously as a PRA
22 (phonetic) or a Regulatory Enlist in the Energy Division.
23 So it's the 7th, no agenda has been posted yet. But it
24 will be held at the CEC.

25 CHAIRMAN WEISENMILLER: Okay. Can we post both

1 the Notice and ultimately the Agenda on this part of our --
2 under this docket?

3 MR. CRISOSTOMO: Sure.

4 CHAIRMAN WEISENMILLER: Is that -- please.

5 MS. TAHERI: I'll just stretch for it, Sarah
6 Taheri, Southern California Public Power Authority. I did
7 want to raise one topic that wasn't explicitly addressed
8 today, which for SCPPA and I believe some other utilities,
9 is a concern. And we'll definitely be keeping tabs on this
10 one, but the current proposed Regulation has some language
11 linking to CEC's enforcement authority. Of course, we
12 understand why that would be in there.

13 We did just want to make sure that as we are
14 going through and rolling up our sleeves, trying to develop
15 solutions here that we aren't exposing utilities to
16 penalties for not being able to provide data that they
17 cannot collect. So definitely understood that we need to
18 engage in this discussion and help identify some of those
19 areas, but just something that we are certainly keeping an
20 eye on as well.

21 CHAIRMAN WEISENMILLER: The good news is our
22 attorney was nodding her head yes, so I think she probably
23 agrees with you.

24 MS. TAHERI: And then the last bit, also support
25 for the extension on the comment deadlines, I think

1 December 12 would be great.

2 CHAIRMAN WEISENMILLER: Anyone else in the room?
3 Anyone on the line?

4 MR. WENG-GUTIERREZ: Seran, is anybody on the
5 line that wants -- yeah that's fine.

6 So is there anyone on the phone that would like
7 to make a final public comment on the Regulations?

8 (No audible response.)

9 All right, it sounds like we are getting no
10 comments from participants online.

11 CHAIRMAN WEISENMILLER: Okay. Let's go --

12 MR. GOLDMAN: Hi.

13 CHAIRMAN WEISENMILLER: Go ahead.

14 MR. GOLDMAN: I have one comment. This is Brian
15 Goldman from ORA at the CPUC and because I was unable, and
16 I'm sure others were unable to hear a majority of the
17 afternoon conversation, I was just wondering what the
18 timeline was for the release of the transcript. So that
19 I'd be able to have some background as to what the
20 conversation was.

21 CHAIRMAN WEISENMILLER: Okay. Court reporter?

22 Okay. So do we need -- it's about two weeks for
23 the transcript. I guess part of the question is in terms
24 of can we post it.

25 COMMISSIONER MCALLISTER: Were you able to record

1 the conversation on WebEx even though folks couldn't hear
2 us on the outside?

3 MR. WENG-GUTIERREZ: We're going to have to check
4 with IT on that.

5 COMMISSIONER MCALLISTER: Okay.

6 MR. WENG-GUTIERREZ: My understand is that we
7 were able to record it, though when we reset it I think the
8 meeting ended and I don't think that would have gotten
9 recorded.

10 MR. WENG-GUTIERREZ: So we missed about five
11 minutes worth of conversation in the recording.

12 CHAIRMAN WEISENMILLER: Well, I was going to ask
13 both of you to get back to this gentleman on the timing on
14 that. And part of it obviously, I think the 12th is going
15 to happen, I'm just trying to figure out how the transcript
16 part -- if we can do something that facilitates
17 participation and allows us to keep that date. And allows
18 us to keep that date or at least work out an arrangement
19 with him on it.

20 And I guess the one thing I let everyone off the
21 hook a little bit easier on, but Valerie did volunteer
22 where she thought we needed some additional work between
23 now and --

24 COMMISSIONER MCALLISTER: Yeah.

25 CHAIRMAN WEISENMILLER: And so looking out at

1 Tim, does anyone else -- do you agree with Valerie's list?
2 Or do you have additions or do you want to basically hold
3 that off until you do the 12th?

4 UNIDENTIFIED SPEAKER: (Indiscernible)

5 CHAIRMAN WEISENMILLER: Okay. That works. And
6 again but certainly at this point assume that the December
7 7th event is sort of folded into this, but trying to get
8 people's feedback on the process, suggestions,
9 particularly. But I definitely encourage conversations to
10 continue, the idea wasn't by this workshop to put an end to
11 that but facilitate moving forward in a way and do continue
12 the conversations.

13 COMMISSIONER MCALLISTER: Yeah, no I think we've
14 surfaced with some more details, some additional details,
15 issues we need to keep talking about. And just to
16 reiterate what the Chair said, this is meant to enhance the
17 conversation, not to corral or monopolize the conversation.
18 So staff is more than happy to continue this engagement and
19 I think -- in fact, I think that's critical -- about sort
20 of getting it right and moving forward.

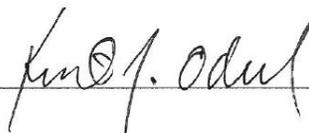
21 I mean, this is a substantive conversation that
22 if we don't have some basis for the details, then it's not
23 going to be very usable going forward. So we just want to
24 avoid that and have it be very clear what the expectations
25 are in going forward.

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