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COMMITTEE HEARING

BEFORE THE

ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA

In the matter of,)	
) Docket No. 16-0IR-0	3 (
Developing Regulations,)	
Guidelines and Policies for)	
Implementing SB 350 and AB 802)	

STAFF WORKSHOP ON TITLE 20 DATA COLLECTION REGULATIONS TO SUPPORT NEW ANALYTICAL NEEDS

CALIFORNIA ENERGY COMMISSION

FIRST FLOOR, ART ROSENFELD HEARING ROOM

1516 NINTH STREET

SACRAMENTO, CALIFORNIA

MONDAY, SEPTEMBER 26, 2016 10:00 A.M.

Reported By: Kent Odell

APPEARANCES

Commissioners

Andrew McAllister

CEC Staff Present

Elise Brown, Office Manager, Demand Analysis Office

Cary Garcia

Malachi Weng-Gutierrez

Jason Harville

Andrea Martine

Asish Gautam

Michael Nyberg

Leon Brathwaite

John Hingtgen

Public Present

Valerie Winn, Pacific Gas & Electric Company (PG&E)

Tim Tutt, Sacramento Municipal Utilities District (SMUD)

Mark Esser

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Lisa McGhee

INDEX

	Page
Introduction Elise Brown, Office Manager, Demand Analysis Office	5
Opening Comments Commissioner Andrew McAllister	21
Overview of Recent Data Workshops, New Legislative Responsibilities, and Demand Forecasting Needs Cary Garcia	6
Overview of Proposed Draft Regulatory Changes Malachi Weng-Gutierrez	9
Draft Administrative Regulatory Changes and Deletions Malachi Weng-Gutierrez Section 1302: Rules of Construction and Definitions Section 1305: Control Area Operator Reports Chapter 3, Article 6: Qualified Departing Load CRS Exemptions	14
Generation Regulatory Language Jason Harville Section 1304: Power Plant Reports: Updated	23
Cogeneration data Collection Andrea Martine Section 1304(a)(3)(B): Power Plant Reports: Biological Resources	26
Asish Gautam Section 1304(b): Power Plant Report: Revision of reporting threshold for UCDs	28
Michael Nyberg Section 1304(b): Power Plant Reports: Hourly Net Output	30
Leon Brathwaite Section 1308(e): Quarterly Gas Utility and	33
Electric Generator Tolling Agreement Reports John Hingtgen Sections 1382, 1383, and 1385; Wind Performance Reporting System: Update and clarify specific data collection requirements	35
Public Comments	40

INDEX

	Page
Draft Forecasting Regulatory Language Malachi Weng-Gutierrez Section 1306(c): LSE and UCD Reports, and Customer Classification Reports, Monthly Customer Energy Use and Billing Data Section 1307(c): Gas Utility Retailer Reports and Customer Classification Reports Section 1343: Energy End User Data: Survey Plans, Surveys, and Reports - Revisions to Existing Survey Implementation Section 1344: Load Metering Reports - Threshold	50
and Reporting Data Changes	6.5
Asish Gautam Section 1344(f): Load Metering Reports -	67
Behind-the-Meter Load Impact Estimates	
Malachi Weng-Gutierrez Section 1344(g): Load Research Reports, Hourly Electric Vehicle Supply Equipment Load Section 1344(h): Load Research Reports, Customer Interval Meter Energy Consumption and Peak Data Section 1353: Failure to Provide Information	76
Chapter 7, Article 2, Section 2505: Designation of	
Confidential Records Malachi Weng-Gutierrez	103
Public Comments	80
Closing Remarks	104
Adjournment	105
Reporter's Certificate	106
Transcriber's Certificate	107

1

2 SEPTEMBER 26, 2016

- 10:00 A.M.
- 3 MS. BROWN: Welcome to the workshop. My name's
- 4 Elise Brown. I'm the Manager of the Demand Analysis
- 5 Office, in the Energy Assessments Division.
- 6 This January, the Energy Commission adopted an
- 7 Order Instituting Rulemaking to Develop and Implement
- 8 Guidelines and Regulation in Support of SB 350, AB 802,
- 9 and other legislation.
- 10 One of the activities under this proceeding is
- 11 to consider amending regulations that specify data
- 12 collection and disclosure for load-serving entities
- 13 found in California Code of Regulations, Title 20.
- Today, you will hear from staff, who are expert
- 15 in the sections of regulations that we are considering
- 16 changing.
- Before we do that, a few housekeeping items.
- 18 Please silence your cell phones. If you are on the
- 19 WebEx, please also silent or mute yourself, just in case
- 20 there's a problem.
- 21 This workshop is being recorded and becomes part
- 22 of public record.
- 23 If you need the restrooms, you go right out the
- 24 door and they're to your left. We have a snack bar on
- 25 the second floor.

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- 1 And in the case of an emergency, please follow
- 2 Energy Commission staff out of the building, and we meet
- 3 across the street, at McKinley Park.
- 4 We have two public comment sessions this
- 5 morning. One in the morning, or today, one in the
- 6 morning, one in the afternoon. If you have questions or
- 7 comments, please wait until that time.
- 8 Public comment will be limited to three minutes,
- 9 each, to accommodate for as many people as possible.
- 10 And please, give your business card to the court
- 11 reporter.
- 12 Written comment will be taken until 5:00 p.m.,
- 13 on October 10th. And if you need instructions as to how
- 14 to do that, look for the Notice for this workshop.
- 15 And we are expecting Commissioner McAllister, at
- 16 some point, but we're going to go ahead and move on to
- 17 Cary Garcia.
- 18 MR. GARCIA: All right, good morning. We have
- 19 an exciting crowd it looks like today. Everybody's
- 20 really jazzed on a Monday.
- 21 (Laughter)
- MR. GARCIA: I'm tired, myself, actually. So, I
- 23 will be attempting to lead our forecast in this update
- 24 coming up and for the 2017 IEPR Demand Forecast. And
- 25 so, earlier in the summer, we had our June 23rd

- 1 workshop, where we discussed some of the changes that we
- 2 want to make to the forecast, getting a little more
- 3 granular, moving on towards an hourly forecast.
- 4 And in addition to that we've, with that hourly
- 5 forecast we also need to, you know, talk about hourly
- 6 energy efficiency, and hourly impacts of behind-the-
- 7 meter PV, and energy storage, and different types of
- 8 demand response.
- 9 So, we've all these little modifiers that we're
- 10 going to need to take into account. And it's
- 11 drastically, I'd say, different than what we've done in
- 12 the past. We've primarily focused on just an hourly
- 13 forecast, but there seems to be a need to look at
- 14 something more granular for planning purposes. And that
- 15 seems to be where we're heading to go.
- And I think that's what we're here for, today,
- 17 to kind of change some of these -- I mean, looking at
- 18 these, if you'd looked at these regulations, you'd see
- 19 they're slightly out of date. They haven't been touched
- 20 for a whole. So, we can -- I think it's worth our time
- 21 to kind of update these and get us into, you know, the
- 22 21st Century.
- 23 That might be a little bit of an exaggeration,
- 24 but I mean looking in there, I mean simple things, just
- 25 as, you know, electronic filing of these reports. You

- 1 know, it's worth just getting us up to date.
- 2 And so, back to what I mentioned about the
- 3 forecast, based on SB 350 and AB 802, there is a direct
- 4 need or we are directed to take these hourly assessments
- 5 of energy efficiency and these other load modifiers.
- 6 And I'll just mention, again, you know, electric
- 7 vehicles, hourly loads by sector, some of these things
- 8 are just going to get discussed today. And that's just
- 9 what we're trying to do. I feel like I'm repeating
- 10 myself over and over again, but I just feel like this is
- 11 -- this is an important effort and we need to work on
- 12 that.
- 13 And Malachi Gutierrez, who's here, he's been
- 14 working hard with us, trying to get us to give our
- 15 feedback, you know, from staff, to say, hey, what is it
- 16 we need and what do we need to change on these
- 17 regulations to match where we're going in the future?
- 18 And so, he's been really helpful to try to get all the
- 19 analysts together.
- You'll see these guys here, too, on the other
- 21 side of the forecast, as well. So, on the supply side,
- 22 you'll notice, in the agenda, we're also talking about
- 23 generation information that we just need to update and
- 24 get -- well, get up to date.
- So, hopefully, not rambling too much today, but

- 1 that's just kind of where I think we need to go. So, I
- 2 guess I'll let the -- I think we have Malachi up next,
- 3 so he can explain it far more better than I can.
- 4 MR. WENG-GUTIERREZ: Thank you, Cary. So, I
- 5 wanted to start out talking a little bit as an overview
- 6 of the Title 20 regs., and what we're anticipating
- 7 changing.
- 8 The Order Instituting Rulemaking, that Elise had
- 9 mentioned, that we adopted in January, had a specific
- 10 scope. We have sort of looked at that and almost
- 11 addressed every single element within that scope, that
- 12 we identified.
- The order, actually, the Order Instituting
- 14 Rulemaking was much broader. It not only covered our
- 15 data collection activities, but also the IRP activities,
- 16 as well as the 50-percent renewables. It was all under
- 17 that same OIR that was adopted.
- 18 So, what we're really focused on is just the
- 19 data collection element of it, which is really focused
- 20 on Title 20 Regs.
- So, what I wanted to emphasize at the very
- 22 beginning was this is sort of our first prerulemaking
- 23 meeting, and we're hoping to get feedback during this
- 24 workshop from members of the public, and obligated
- 25 parties, who might be affected by these changes. Since

- 1 it's sort of prerulemaking in nature, you know, we're
- 2 still developing the language, and we certainly will be
- 3 working with staff, throughout the Energy Commission, to
- 4 make adjustments to the language as we go forward, and
- 5 prepare a package to submit to OAL.
- And once we do submit that package, then it will
- 7 be -- it will have that formal rulemaking process, where
- 8 there is a 45-day comment period.
- 9 But for now, this is prerulemaking. This is an
- 10 opportunity for us to speak with obligated parties, and
- 11 others, and the stakeholders that might be interested,
- 12 and get feedback on how we might adjust the language
- 13 appropriately.
- So, we're really looking forward to having some
- 15 feedback today. And as Elise mentioned, there is an
- 16 open comment period, as well, that we would love to get
- 17 your written comments, as well, on the topics that we
- 18 discuss today.
- 19 That being said, some of the language that we're
- 20 going to be going over today is further along in the
- 21 process of drafting. Some of it's probably a little
- 22 more uncertain. And so, again, just recognize that.
- 23 There might be some sections that we go over, that may
- 24 be very early on in the process.
- 25 And I would actually say that even since posting

- 1 this document, internally we've talked about even making
- 2 some additional changes. So, it's very dynamic in
- 3 nature, and just letting you know that it is a draft
- 4 version, and it's a working copy. And we hope to get
- 5 your comments so we can improve it.
- So, the types of changes we're going to go over
- 7 today sort of are self-evident in the material that you
- 8 may have looked at. But in general, there are sort of
- 9 three types of changes that I recognized. One, where we
- 10 are either removing some outdated language, or striking
- 11 areas that are no longer applicable.
- The next is something where we might be updating
- 13 definitions, or update the language to reflect some
- 14 current needs.
- 15 And then there's the third sort of category
- 16 where we're actually introducing new regulatory language
- 17 to meet some needs that we've identified.
- 18 And so, those are just sort of the broad, the
- 19 three broad types of changes that you'll see throughout
- 20 the text.
- 21 The workshop is sort of organized in a way that
- 22 I hope made sense. The first was -- the first -- there
- 23 are four, basically, areas that I was thinking we would
- 24 cover today. And those are sort of outlined in how I
- 25 structured the document.

- 1 The first of which is purely looking at
- 2 administrative and deletions. And that, really, is just
- 3 looking at updated definitions, and some areas where we
- 4 need to delete the -- delete language that didn't really
- 5 work, or we didn't need anymore, or perhaps needed to
- 6 get adjusted.
- 7 And then, there are other -- in the
- 8 administrative sort of context there are other areas, or
- 9 other sections of the regulations that we actually
- 10 didn't insert. We're evaluating those right now and
- 11 those primarily deal with reporting methods and delivery
- 12 of data. And those are some things that we're going to
- 13 be looking at, making modifications to prior to the
- 14 submittal to OAL, but that's something that we're
- 15 looking at.
- 16 Cary mentioned modernizing our data collection
- 17 efforts, and those are some of the things we'll be
- 18 considering, and how best to handle those reporting
- 19 methods.
- The next section that I had outlined was dealing
- 21 with generation. I call it generation, but it's really
- 22 sort of supply side. Generation has some other elements
- 23 to it. But, really, thinking about who the obligated
- 24 party in those regulatory -- for that, those regulations
- 25 would be. Primarily, maybe generators, and others, who

- 1 would be interested in those regulations or be obligated
- 2 under those regulations to report to us. So that's -- I
- 3 thought that that might be a reasonable group of
- 4 participants to have in the morning session and focus
- 5 that discussion purely on those areas.
- In the afternoon, I want to start out talking
- 7 about those elements which I think would be more
- 8 relevant to forecasting. The demand side, at least on
- 9 our side, demand forecasting. And we'll focus on those
- 10 things where we're trying to characterize energy
- 11 consumption and load to assist in our forecast. And
- 12 that's partly what Cary spoke to, just a few moments
- 13 ago.
- 14 And then, lastly, there's a section that talks
- 15 about security. And primarily there -- in the Order
- 16 Instituting Rulemaking there was a section of code that
- 17 was identified as being under the OIR, that also
- 18 included security, automatic designation of
- 19 confidentiality, how we might aggregate. There's a
- 20 whole bunch of things under that regulation.
- 21 And so, we wanted to keep that in mind, when
- 22 we're going through the other regs., and see how we
- 23 might adjust that language to account for the requests
- 24 for new data, or how we might be handling data
- 25 differently in the new regs.

- 1 So, there is a minor change, currently, that
- 2 we've identified in that area, and I'll go over that in
- 3 the afternoon. But it's pretty minor at this point, and
- 4 I'll talk to it more in the afternoon, when we talk
- 5 about that specific section, 2505.
- 6 All right. So, with that, that's pretty much
- 7 the overview that I wanted to talk about. And I was
- 8 going to move, then, on to the administration and
- 9 deletions section. And I will pull that up, so just
- 10 give me one moment here.
- 11 All right. So, in this section, what is
- 12 primarily being presented here is Section 1302. It's
- 13 basically just, primarily, the definitions and the
- 14 construction for the entire section. It's actually
- 15 applicable to both Articles 1 and Articles 2.
- So, if you look at, broadly, at Title 20, Data
- 17 Collection, that chapter, there's a number of articles
- 18 in there. I think there's six or so. The first two --
- 19 the first one is actually the quarterly QFER data
- 20 collection, primarily focused on those activities. And
- 21 then the second -- it has power plant reporting and a
- 22 whole bunch of other stuff.
- 23 And then there's a second set, Article 2, which
- 24 actually has a bunch of the forecasting related
- 25 elements.

1 So, Section 1302, the definitions are	applicable
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- 2 to both sections. So, rather than duplicate them, we're
- 3 just basically focusing on the 1302 definitions and then
- those are applicable to all of the reporting 4
- requirements, and designations within those two first 5
- 6 articles.
- 7 So, one of the things in the definitions section
- 8 that's important to take note of, and that we've sort of
- 9 internally had some discussions about, are the NAICS
- 10 Code assignments. And those are fairly important in how
- we both model our forecasting, as well as how we 11
- 12 categorize all of the energy consumption data we get in.
- 13 And the references to those, throughout the
- 14 regs., are important to note. So, I'm going to --
- 15 that's the first element that I'm really going to talk
- 16 about.
- 17 There are basically three types of sort of
- 18 customer definitions within this section. One being the
- 19 -- well, customer classification code, the customer
- 20 sector, and then the customer groups.
- 21 And because NAICS Codes play such an important
- 22 role in both defining data that we get in, as far as
- 23 consumption from obligated parties, and also how we
- structure our models, and how we divvy up the demand 24
- responsibilities between staff, it's important to make 25

- 1 sure that those definitions are both consistent and
- 2 valid.
- 3 And so, we internally looked, reviewed all of
- 4 the customer sector definitions, which are based on the
- 5 NAICS Codes, and we've made some modifications to those
- 6 to make it consistent with what we're internally
- 7 identifying as these commercial sectors, or customer
- 8 sectors.
- 9 So, you'll notice that there are some strikeouts
- 10 for different NAICS Codes, moving, basically, from one
- 11 category to another. In addition, C here is -- this is
- 12 on, let's see, page 3. Under C, we've changed this from
- 13 "other commercial" to be consistent with the model that
- 14 we use, which is actually our Transportation,
- 15 Communication and Utility Model. So, we've defined that
- 16 sector as that, with the same name as our model, itself.
- 17 And we've made the definitions of all the energy
- 18 sectors, per the NAICS Codes, incorporated into that
- 19 sector are appropriate, and consistent, internally.
- 20 So, that was what our effort here is. And if --
- 21 you know, if there are comments about how we've
- 22 excluded, or included, or changed this, it would be --
- 23 it would be interesting to hear. And, you know, how --
- 24 what your interpretation of how difficult it might be to
- 25 implement this would be, and also interesting to hear

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	about.
	allull.

- 2 But internally, we want to make sure that we are
- 3 consistent with the models. Deviation from the data
- 4 we're getting in for a certain sector forces us to sort
- 5 of guess at what the numbers should be for our models.
- 6 And the NAICS, the data we collect is really important
- 7 for our modeling effort. So, we want to make sure that
- 8 we're as consistent as possible.
- 9 Then, in the next section, within 1302, is
- 10 really just the new definitions. And I put them all the
- 11 way down at the bottom. So, you know, obviously, when
- 12 we go and we submit to the OAL the actual package,
- 13 they'll be in alphabetical order, appropriately, you
- 14 know. But this is I just put them all at the end
- 15 because it would just be easier to go through them.
- There are a couple of new definitions. And in
- 17 these new definitions, primarily things like useful
- 18 thermal output, and energy storage systems, these
- 19 definitions that we've identified here, we tried to be
- 20 consistent with other statutes that existed already,
- 21 that define them. And we may be looking over them to
- 22 see whether or not that is perfectly applicable to our
- 23 situation. But we have tried to maintain a consistency
- 24 across regulations and statute in these definitions.
- So, we'd be interested to hear about if any of

- 1 these definitions cause issue with how you might be able
- 2 to report on something, or if it does expand the scope
- 3 of reporting, you know, in a way that would be difficult
- 4 for you.
- 5 So, I think these can -- there's nothing in here
- 6 that I think is too -- too controversial. I think, so
- 7 and the other is, you know, we included a couple of
- 8 things. So, obviously, where we have new language
- 9 coming in, we just need to make sure that we're defining
- 10 the terms within the new language appropriately.
- 11 And again, if there are elements within the new
- 12 sections, or any of the language that we have, that are
- 13 not clear, and the terms should be defined here, if you
- 14 feel that they need to be defined clearly, just let us
- 15 know and then we will try to incorporate those into the
- 16 definitions section.
- 17 So, then, I'm just going to move on. That's
- 18 basically 1302. We've added some new definitions, tried
- 19 to clarify, where we need to, the NAICS Codes. And,
- 20 hopefully, that covers most of what we've added.
- 21 The next section is 1305. It's the Control Area
- 22 Operator Report. In this section, the types of data we
- 23 are collecting oftentimes are going to be dealt with,
- 24 with new data collected elsewhere. So, we're actually
- 25 striking most of this section.

- 1 There's four different, or five different
- 2 sections. We're striking A, B, D, and E, and we're
- 3 keeping subsection C, which is this Quarterly Reports on
- 4 Interchanges. And that, we're just moving to Section A.
- 5 So, pretty much the other sections are all getting
- 6 removed and, basically, supplanted with other data we're
- 7 collecting elsewhere.
- 8 So, if you do feel like some of these sections
- 9 need to stay, or if they might still -- if you feel they
- 10 might still serve a purpose, instead of some other data
- 11 that we're asking for, then please let us know and that
- 12 would be good to hear. But it should be pretty straight
- 13 forward, it's just deletion of this whole section, most
- 14 of the section.
- 15 And then the next is this -- it's, basically,
- 16 the exemption, the CRS Exemption Section. I believe
- 17 that's the entire article that we're looking at is going
- 18 to get removed. It's the Cost Responsibility Surcharge
- 19 Exemptions for Departing Load.
- 20 And the reason why we're deleting this is that
- 21 we, I think, believe the cap has already been met on
- 22 those exemptions. And so, we're getting a letter of
- 23 confirmation of that from the CPUC. And then, upon
- 24 receipt of that letter, and once we've got sort of
- 25 agreement that this is no longer applicable, we'll just

- 1 remove the whole section and that will no longer be in
- 2 regs. It's just we've -- it won't be applicable
- 3 anymore. So, that was -- so, again, this is going to be
- 4 -- it's pretty self-evident. As long as we get
- 5 confirmation that, you know, the cap is met and it's no
- 6 longer applicable, then we're just going to strike it.
- 7 With that, that's pretty much all I have for the
- 8 administration and deletion components of the reg.
- 9 changes. As I said, we're going to probably be making
- 10 some modifications to a couple other sections that deal
- 11 with reporting. And so, if you do have comments --
- 12 hi -- if you do have comments on reporting methodologies
- 13 and how we -- you know, methods that we might want to
- 14 utilize to improve our data collection process, that
- 15 would be great to hear about.
- 16 So, that's the completion of my administration
- 17 and deletion components.
- 18 And, since Commissioner McAllister just walked
- 19 in at a perfect time, I think I will, if you're okay
- 20 with making a comment, briefly --
- 21 COMMISSIONER MCALLISTER: Yeah, that was a plan
- 22 and choreographed.
- MR. WENG-GUTIERREZ: Yeah, it's a perfect seque.
- 24 I just completed that one section and we're going to be
- 25 moving on to the generation elements. But if you want

- 1 to give a comment, that would be great.
- 2 COMMISSIONER MCALLISTER: Okay, great. Yeah,
- 3 sorry, everybody, for being late. I opted to take
- 4 advantage of early days of fall, and ride my bike in.
- 5 And, of course, my body would not respond as quickly as
- 6 I thought it should, so I'm running a little late.
- 7 But I'm sure you all appreciate having a fully
- 8 oxygenated Commissioner.
- 9 Okay, so this is a -- as I think many of you
- 10 know, this is a topic that I think is incredibly,
- 11 supremely, fundamentally important for the Energy
- 12 Commission. Data collection is something that really is
- 13 our life blood for many of the things that we do. And I
- 14 think we have a long -- well, I know, and you all know,
- 15 that we have a long, and august history of being a
- 16 central resource for the rest of the State and beyond,
- 17 actually, to -- for our energy-related data, for our
- 18 forecasting, certainly, but also for many other things
- 19 that the Commission does.
- 20 And the Title 20 Regulations are really the,
- 21 sort of DNA, on how that happens. And so, updating
- 22 those, and getting them right, and modernizing is really
- 23 something that's, I think, really of primary importance
- 24 for the Commission, as a whole, across all of our
- 25 divisions.

- 1 And we have been asked to do new things,
- 2 innovative things, through SB 350, AB 802, and
- 3 increasingly, sort of a litany of efforts that the
- 4 Legislature's asking us to do and making us responsible
- 5 for.
- 6 So, this is a core part of our evolution to do
- 7 those things properly, and have product that people can
- 8 use, that really has a basis in the best information
- 9 that's available.
- 10 So, certainly, forecasting is the core part of
- 11 that, but energy efficiency, you know, demand has many
- 12 components, now. And it's transportation, it's
- 13 efficiency, it's renewables. A lot is going on behind
- 14 the meter and in front of the meter. Our utilities are
- 15 being asked to do more in certain areas and, probably,
- 16 the market is going to have them do less in other areas.
- 17 And other people are going to step up into some of the
- 18 things that the marketplace is sort of coming up with
- 19 and innovating around.
- 20 So, our data collection needs to respond to
- 21 those realities, and our existing responsibilities, our
- 22 new responsibilities.
- 23 So, I want to thank Malachi and the rest of the
- 24 staff for putting this together. I want to thank my
- 25 Advisor, Brian, for -- Brian Early has been in the back

- 1 there, asking all the tough questions. Christine
- 2 Collopy is in the back. Chris (indiscernible), as well.
- 3 I think there are a number of staff that are really,
- 4 fundamentally involved with this, who are going to help
- 5 the Commission to do this right. As they learn, the
- 6 Commission's going to learn, as we sort of move forward
- 7 in concert we're going to create something new, and very
- 8 valuable.
- 9 So, I want to thank everybody for being here on
- 10 the panel. Looking forward to a good day. So, thank
- 11 you very much.
- Malachi, go ahead.
- MR. WENG-GUTIERREZ: Perfect. Thank you,
- 14 Commissioner McAllister.
- 15 So, with that, we will move directly on to the
- 16 Generation Regulatory Language discussion we had
- 17 scheduled. So, I think we're going to start out just
- 18 going straight down the line. I will move through the
- 19 language up here, but you can follow along in the
- 20 packets that you have.
- 21 We're going to start out with Jason Harville,
- 22 talking about the Section 1304. And if you want to
- 23 speak from there, or come up, either way is your choice.
- MR. HARVILLE: Sure. Here's fine, if everyone
- 25 can hear me.

- 1 MR. WENG-GUTIERREZ: Okay.
- 2 MR. HARVILLE: Hi, I'm Jason Harville. I work
- 3 our Supply Analysis Office, on our Distributed
- 4 Generation team, and my emphasis is on cogeneration.
- 5 So, I'll be speaking to the few items, here, with
- 6 regards to useful thermal data from co-generators.
- 7 And the purpose of these changes is pretty
- 8 straight forward. For anyone who's unfamiliar with
- 9 cogeneration, it's a facility that produces both thermal
- 10 energy and electrical energy from a single fuel source.
- 11 And so, this is great for these facilities
- 12 because they can meet some sort of industrial or
- 13 commercial need for thermal energy, whether it's heating
- 14 or, I don't know, drying something, or smelting
- 15 something, whatever requires a lot of heat energy.
- 16 While, at the same time, efficiently producing
- 17 electricity.
- 18 However, the current regulations, these
- 19 facilities report their electrical generation, but the
- 20 thermal side of it is only reported in sales. So, if
- 21 they happen to sell thermal energy to somebody, it's
- 22 currently reported in the QFER. But if they use that on
- 23 site, for their own purposes, which is the main way that
- 24 these facilities usually function, that's invisible to
- 25 us.

- 1 And this is important because, if you want to
- 2 look at the total efficiency of a plant, and how this
- 3 fuel is being used which, itself, directly translates to
- 4 the greenhouse gas intensity, say, of the fuel use, in
- 5 terms of how much energy, total energy, electrical and
- 6 thermal, you're getting for your fuel input, then you
- 7 need to know how much of the thermal side is being
- 8 generated, and not just the electrical.
- 9 So, the purpose of these edits is pretty
- 10 straight forward. We're just trying to close that blind
- 11 spot off so that we can see the thermal and the
- 12 electrical.
- And up front, I just want to say that we're well
- 14 aware of two primary concerns with this. The first
- 15 being that there are concerns that having both types of
- 16 these data would allow competitors to possibly back out
- 17 pricing or production cost information on a specific
- 18 business. And so, we are sensitive to that. We don't
- 19 want regulations in place that are going to be damaging
- 20 the competitiveness of particular businesses,
- 21 unnecessarily. And so, we're sensitive to that and are
- 22 looking to have language that protects that, while still
- 23 allowing access to the thermal side of this data.
- 24 And the second part of this, excuse me, is we're
- 25 also aware in some instances this could implicitly

- 1 create some sort of metering or regulatory burden. And
- 2 so, we'd also like the language to be in a way that we
- 3 aren't imposing some sort of stringent, new metering
- 4 standards on these business. Which, I think is less of
- 5 a concern. I think any business, putting so much effort
- 6 into generating this thermal energy, knows what they're
- 7 getting and what they're doing with it.
- 8 But if that is a concern, then we're definitely
- 9 interested in hearing about how that can be mitigated,
- 10 as well. Thank you.
- 11 MR. WENG-GUTIERREZ: Great, and then we'll go to
- 12 Andrea Martine.
- MS. MARTINE: Good morning. My name is Andrea
- 14 Martine. I work in Siting and I cover Biological
- 15 Resources.
- 16 The current scope of the language covers the
- 17 take of Federally and State endangered and threatened
- 18 species, as well as marine mammals, Bald and Golden
- 19 Eagles. And the purpose, currently, is to report on the
- 20 take of these species.
- 21 The reason for the change is to broaden the
- 22 scope and to, based on data that we're getting now, that
- 23 we've learned through the Renewable Energy Projects,
- 24 that we now know there's Avian and Bat mortalities that
- 25 have shown up. Some of these species include waterfowl,

- 1 and shore birds that don't normally occur in a desert
- 2 environment.
- 3 We also see this, also, in annual reports for
- 4 our gas power plants, during compliance. We see
- 5 mortality of other species.
- 6 The new language would -- the purpose behind it
- 7 would be to broaden the list of species that we would be
- 8 reporting on, to include the mortality and injury of
- 9 fully protected species, as well as migratory birds.
- 10 And this data, we will be able to use it during
- 11 the power plant siting cases. It would allow us to
- 12 provide some idea of what species are using and are
- 13 attracted to these facilities, as well as which part of
- 14 the facility they may be interacting with.
- 15 And we can, during the siting process, provide
- 16 suggested changes to help minimize these injuries and
- 17 mortalities. And that's all I have.
- MR. WENG-GUTIERREZ: Okay, great. Thank you,
- 19 Andrea. So, that was actually a discussion, I think, of
- 20 -- let's see, what was that? The section of the Code
- 21 there was, I think it's 1304(a)3)(B).
- 22 And so, I think with Asish, he's going to go to
- 23 the next section, which would 1304(b), and it would be
- 24 just this section right here, that I have up. So, if
- 25 you're following along at home, that's the section we're

- 1 talking about.
- 2 Go ahead, and Asish Gautam will be talking about
- 3 that -- or Gautam.
- 4 MR. GAUTAM: Good morning, my name's Asish
- 5 Gautam, in the Demand Analysis Office. I'm involved in
- 6 tracking behind-the-meter generation.
- 7 As Malachi pointed out, this we're proposing to
- 8 make specific changes to Section 1304(b). This is the
- 9 report that collects power plants interconnected in the
- 10 utility service area.
- 11 Currently, this report has a reporting threshold
- 12 of 100 kilowatts. And so, it misses all the
- 13 installations occurring on the residential and small
- 14 commercial segments.
- And so, we have not really used this data at
- 16 all. We have access to other sources, such as the
- 17 utility rebate programs, and the PUC's Net Energy
- 18 Metering Interconnection Database.
- 19 We still see value in these other sources and we
- 20 still will be taking a look at them. But given our
- 21 focus on having a statewide picture of what's happening
- 22 with DG, we would like to address getting this data --
- 23 not being able to get this data in-house.
- 24 And so, we are proposing to remove the 100-
- 25 kilowatt reporting threshold. Again, the focus is on

- 1 having a statewide data on installations. And so, you
- 2 know, the PUC stuff does not cover up POUS, which we do
- 3 forecast for. So, it's very important that we start
- 4 having accurate data.
- 5 We've noticed discrepancies in the past between
- 6 rebate program data and interconnection data, and we've
- 7 found interconnection data to be more reliable. And so,
- 8 that's why we see this as the best avenue for getting
- 9 access to data that can give us the more accurate
- 10 picture of what's happening with DG.
- 11 You know, the 100-kilowatt threshold, I believe
- 12 came from, in part, when not much was expected. But DG,
- 13 especially from residential customers, that is not the
- 14 case anymore. And so, we have to address this issue.
- 15 We've taken a look at how this reporting
- 16 threshold -- what it does in terms of access to data.
- 17 Again, if we were to keep the 100-kilowatt, we'd miss
- 18 about 99 percent of the installations.
- 19 If we drop it from 100-kilowatt to 10-kilowatt,
- 20 we still miss about 93 percent of installations. Again,
- 21 this is just the growth in PV installations from the
- 22 residential sector. So, to really address it, we
- 23 decided, well, what if we dropped it down to 5-kilowatt,
- 24 kind of an average system size for residential
- 25 customers.

- 1 Dropping it to 5-kilowatt helps, but we're still
- 2 missing 55 percent of all the installations. And so,
- 3 just looking at the trends here, we decided the only way
- 4 to go forward, and have meaningful data come from this
- 5 report, was to just completely remove the reporting
- 6 threshold.
- 7 Some other changes we added here is to also make
- 8 it clear that we are also requesting interconnection
- 9 data on energy storage, just kind of given the
- 10 expectations surrounding storage going forward.
- 11 That's about the bulk of what I have to say
- 12 about this change.
- MR. WENG-GUTIERREZ: Great, thank you, Asish.
- 14 All right. So, next we're going to go to
- 15 Michael Nyberg, and I believe he's going to talk to the
- 16 last section in 1304, 1304(c). Go ahead, Michael.
- MR. NYBERG: Not 1304(b)?
- MR. WENG-GUTIERREZ: Oh, is it?
- 19 MR. NYBERG: I think. Sorry. My name's Michael
- 20 Nyberg and I'm an Analyst in the Supply Analysis Office.
- 21 And as part of our data collection, I collect power
- 22 plant data.
- 23 And so, in working with Malachi, he's pointed
- 24 out that Section 1305, we've modified the Control Area
- 25 Operators' Reports, retaining some information on

- 1 quarterly interchanges. But this section, the Balancing
- 2 Authority, we're really fine tuning it from what we've
- 3 established the past several years, with the California
- 4 ISO, where we had a subpoena in place to collect hourly
- 5 generation from resources within the ISO.
- 6 And what we are essentially doing is formalizing
- 7 that process and enacting it across all the Balancing
- 8 Authorities. As the interest in forecasting and
- 9 renewable integration really demands that we have a
- 10 deeper slice into the data, than what monthly generation
- 11 data would provide, say, under the 1304 Power Plant
- 12 reporting.
- So, essentially, we are looking to collect
- 14 similar data, as I mentioned, that we collect under
- 15 subpoena with the ISO, from the State's other four
- 16 Balancing Authorities, TID, IID, LADWP, and BANC.
- We are asking for hourly data on meter
- 18 generation to be submitted quarterly, within 60 days of
- 19 the end of the quarter. And we are seeking advice on
- 20 the characterization of the data, if there is any
- 21 ambiguity.
- 22 By that, I mean it's not uncommon for resources
- 23 to be rolled together, if they're very small. So, you
- 24 could have a case where you have multiple, different
- 25 fuel type generators feeding into a single meter within

- 1 a control area, or a Balancing Authority. And that's
- 2 fine. We're looking for, you know, keeping it simple,
- 3 if you will. But if there are issues like that, we can
- 4 work them out.
- As proposed, we'd be willing to solicit the data
- 6 from the utilities, but we feel that getting it from the
- 7 Balancing Authorities just makes sense and would,
- 8 potentially, be easier. So, if we can work with the
- 9 utilities to see if they would provide us this hourly
- 10 data, or if they would sign off on having the Balancing
- 11 Authority that is -- is sort of the overarching control
- 12 area, if you will, if they would provide it, instead,
- 13 and that would be fine.
- So, essentially, and then the -- sorry, the last
- 15 thing is that the data submitted, we'd be looking for a
- 16 look-up table, if you will, on identifying what the
- 17 generators or resources are, on a one-time basis, and
- 18 just updated, as necessary.
- 19 We're rather following the model that the
- 20 California ISO has right now, where on a somewhat
- 21 regular basis they produce a master control area
- 22 generating capability list, that we can download from
- 23 their website. And that just provides us with an
- 24 overview of all the resources within the ISO.
- 25 So, if there was a similar process for that,

- 1 under this, that would be fine. And that's it.
- 2 MR. WENG-GUTIERREZ: Great, thank you, Michael.
- 3 And next, we have Leon, who's going to be
- 4 talking about a new section in 1308. And I believe
- 5 that's 1308, and I think it's -- let's see, it's D.
- 6 MR. BRATHWAITE: It's E.
- 7 MR. WENG-GUTIERREZ: Oh, E. All right, E. Go
- 8 ahead, Leon.
- 9 MR. BRATHWAITE: Thank you. Thank you, Malachi.
- 10 Good morning, Good morning, Commissioner. My
- 11 name is Leon Brathwaite. I work in the Supply Analysis
- 12 Office. I have some very brief comments about a new
- 13 activity that we are about to engage in.
- 14 On January 6th, 2016, Governor Brown issued an
- 15 emergency proclamation. In that proclamation, the
- 16 Governor called on the Energy Commission, the CPUC,
- 17 CALISO to work together, to take all necessary action to
- 18 ensure continued reliability of natural gas and
- 19 electricity supplies, during the moratorium on gas
- 20 injection, into Aliso Canyon. As you know, we had a
- 21 major problem at Aliso Canyon with gas leakage.
- The principles of the proclamation were codified
- 23 in a budget finance letter, this budget just completed.
- 24 After due consideration, the Energy Commission
- 25 thought it best to serve our role we should acquire an

- 1 hydraulic model. With this model, we can simulate the
- 2 natural gas distribution system in each utility service
- 3 territory. With this model, we can monitor the
- 4 interaction between each city and natural gas. With
- 5 this model, we can ensure reliability, working with the
- 6 other agencies.
- 7 However, with the acquisition of such a model,
- 8 we do have new data needs. And our data needs come in
- 9 two areas. We want to know something about the pipeline
- 10 characteristics of the natural gas distribution system.
- 11 And we need to know something about the flow
- 12 characteristics of the fluid flowing through the system.
- 13 The fluid, in this case, is natural gas.
- 14 At this time, there are no regulations in place
- 15 for us to collect the needed data. As a result, staff
- 16 is proposing changes and additions to Section 1308(e) of
- 17 the California Code of Regulations.
- 18 If these regulations go into effect, we will be
- 19 collecting data in two particular areas. Number one, we
- 20 will be looking at the natural gas characteristics.
- 21 That is composition, the specific gravity, maximum
- 22 molecular flow rate.
- We also will be looking at the second area,
- 24 which would be the pipeline segment characteristics.
- 25 That is the pipeline, itself. And we will be collecting

- 1 monthly averages and maximum inlet pressure, monthly
- 2 averages and maximum outlet pressure. And, monthly
- 3 average and maximum flow volumes on each of the pipeline
- 4 segments. We are still working out the definition as to
- 5 what, exactly, constitutes a pipeline segment.
- 6 Any data collected under these changes will be
- 7 automatically designated as confidential. As such,
- 8 precluding any disclosure.
- 9 That concludes my remarks. And if there are any
- 10 questions, I'll be happy to take them at the appropriate
- 11 time. Thank you very much.
- 12 MR. WENG-GUTIERREZ: Great. Thank you, Leon.
- Next, we have John Hingtgen, who's going to talk
- 14 about the wind performance data. I believe at 13 --
- 15 three different sections, 1383, 1384, and 1386. Go
- 16 ahead, John.
- MR. HINGTGEN: Good morning, my name is John
- 18 Hingtgen and I work with the Wind Performance Reporting
- 19 System. And this regulation applies to wind plants,
- 20 generating wind energy in California. And,
- 21 specifically, to the operators of those plants.
- 22 It requires periodic reporting of parameters,
- 23 like capacity, energy, rotor area, manufacture and model
- 24 of the turbines.
- 25 The existing language is limited in that it

- 1 refers to project energy production, rather than actual
- 2 production. It refers only to quarterly reporting of
- 3 quantities, which are changing continually, for example
- 4 energy generation. It omits certain sufficient contact
- 5 information, which we need. And it omits some important
- 6 data, such as hub heights.
- 7 The new language, that we're proposing, would
- 8 refer to actual production. It would require monthly or
- 9 quarterly reporting of data. It includes additional
- 10 contact information to allow us to verify reported data.
- 11 And it adds new data types for analyzing generation.
- 12 With this new data, we plan to analyze the
- 13 generation in more depth to better understand time
- 14 variations in production, to better understand the
- 15 generator equipment, and the sites, to evaluate
- 16 productivity and efficiency in production, and to
- 17 support other State energy goals.
- 18 COMMISSIONER MCALLISTER: John, can I ask a
- 19 quick question? So, what's our role in understanding
- 20 curtailment?
- 21 MR. HINGTGEN: Yeah, we don't have a specific
- 22 role on that particular question. But the data that we
- 23 collect, you can use that to infer curtailment by
- 24 looking when production is occurring, and when it's not
- 25 occurring. So, we can make certain conclusions about

- 1 that. But we don't specifically collect that type of
- 2 data.
- 3 COMMISSIONER MCALLISTER: Okay, so the ISO,
- 4 really, is the one who sort of runs that. But we could,
- 5 actually, do some analysis based on the actual wind and
- 6 production, because we know where it is and we can do
- 7 those calcs?
- 8 MR. HINGTGEN: Yes.
- 9 COMMISSIONER MCALLISTER: Okay, great. Thanks.
- 10 MR. WENG-GUTIERREZ: All right. So, with that,
- 11 then, if there are no further questions from the dais,
- 12 we're going to go with, I think, a public comment
- 13 period. We're pretty much an hour ahead of schedule.
- 14 (Laughter)
- MR. WENG-GUTIERREZ: So --
- 16 COMMISSIONER MCALLISTER: I can ask more
- 17 questions.
- MR. WENG-GUTIERREZ: Yeah, please, feel free.
- 19 We have plenty of time.
- 20 COMMISSIONER MCALLISTER: The main one, actually
- 21 was, so, you know, Asish, we've been having these
- 22 conversations in the IEPR for a couple years, now, about
- 23 the solar data and sort of making sure that it's -- that
- 24 we have the best data to look at small-scale adoption,
- 25 you know, behind-the-meter, NEM, and all that.

- 1 So, with -- so, and I support the just getting
- 2 all the data. I mean, I think the -- you know, when the
- 3 CSI was pretty much the only game in town, every system
- 4 that went in got an incentive, and it kind of wasn't an
- 5 issue. But now that we're beyond that, we really need
- 6 to make sure that we're rigorous in collecting that
- 7 data, and having it come to the Commission.
- 8 Is there -- as far as you know, are any
- 9 utilities actually keeping that data? I mean, I know
- 10 the PUC has made some effort to have the utilities sort
- 11 of shift over from the program database over to, you
- 12 know, a similar, or maybe even using that same tool to
- 13 just, at interconnection keep populating it.
- Is that a fairly routine practice or do we have
- 15 to sort of work with the POUs, particularly, to sort of
- 16 make sure that they -- in particular, to make sure that
- 17 they are collecting the information in a format that we
- 18 can get and use?
- 19 MR. GAUTAM: So, I believe in the fall of 2015,
- 20 the PUC moved to publishing interconnection data,
- 21 online, to have Consulting Utility Solutions, that
- 22 manages the data, I believe from all the three IOUs. I
- 23 believe it comes straight from the interconnection
- 24 request from the customer generators. It's updated
- 25 monthly. So, you know, right now we have access to June

- 1 of 2016. So, it's fairly current. So, it's an ongoing
- 2 process and more populated so --
- 3 COMMISSIONER MCALLISTER: Okay.
- 4 MR. GAUTAM: And as far as the POUs, right now,
- 5 we have requested interconnection data from the IEPR
- 6 Forms Instructions. And then, most of the POUs also
- 7 report what they have installed as part of their SB 1
- 8 requirements, to our Renewable Energy Division.
- 9 And so, you know, we've taken -- merging the
- 10 different data sources together. But, hopefully, with
- 11 these changes, the revision, we'll have a single source
- 12 of going to take -- tracking what's going on in terms of
- 13 PV, and other forms of DG.
- 14 COMMISSIONER MCALLISTER: Okay, great. And
- 15 there are, you know, as you know, a few sort of
- 16 discussions going on about forced standardized
- 17 formatting, and kind of what the data dictionary terms
- 18 look like, and all that. So, I just want to make sure
- 19 that everybody is just, ad nauseam, thinking about those
- 20 issues, and working forward, and networking across the
- 21 different divisions. Because I think that's going to be
- 22 critical to getting this right in the long term. But I
- 23 really appreciate your dilemma. And I also very much
- 24 appreciate what you're doing to get past it.
- MR. GAUTAM: Okay, thank you.

- 1 COMMISSIONER MCALLISTER: You bet. So, I think
- 2 that's it for me.
- 3 MR. WENG-GUTIERREZ: Okay. So with that, I
- 4 think we can go to public comment in the room. If
- 5 there's any questions or comments, please go ahead and
- 6 come to the podium here, and ask a question, if we have
- 7 anybody. And if not, we'll check online and see if we
- 8 have any comments or questions online. It looks like we
- 9 have somebody.
- 10 And, again, we're going to limit the comments to
- 11 a three-minute period. And if you would like to submit
- 12 written comments afterwards, we would appreciate that,
- 13 as well.
- MS. WINN: Good morning, Valerie Winn with
- 15 Pacific Gas & Electric Company.
- 16 There's a lot of information to digest in these
- 17 draft regulations, and they are very wide ranging. I
- 18 guess my general comment, as I'm just reviewing this for
- 19 the first time, now, I think your e-mail was -- got
- 20 snagged by my spam filter on Thursday.
- 21 Was that having just two weeks to really digest
- 22 this, given the scope of the information, from my
- 23 company, in particular, that that might not provide
- 24 quite enough time to provide really robust comments, and
- 25 to actually work with staff, if we need to, to

- 1 understand what, exactly, is being requested.
- 2 So, don't know about the thoughts on a little
- 3 bit more time. I think, as we get into some of the
- 4 electric vehicle things, and things that we don't even,
- 5 I think, gather right now, there could be some issues we
- 6 need to work through in those areas.
- 7 I'm also a little concerned about the
- 8 elimination of the 100-kilowatt threshold. I don't know
- 9 that the utilities even gather some of that data. And
- 10 so, we may have some data quality issues that we need to
- 11 address, as well.
- 12 So, just looking for a little flexibility in how
- 13 we work through these issues. Thank you.
- 14 COMMISSIONER MCALLISTER: Thanks, Valerie.
- 15 Yeah, I assume you talked about the timeline before I
- 16 sat down?
- MR. WENG-GUTIERREZ: Yeah, we briefly talked
- 18 about it. We do have a -- I mean, we did put in there
- 19 that we have 10 days for public comment. But this,
- 20 again, is a prerulemaking activities. So, we are not
- 21 anticipating actually submitting the package for a
- 22 number of months, still. So, there's plenty of
- 23 opportunity, if you reach out to staff to talk about it,
- 24 and to -- I mean, I think we have, in some instances,
- 25 reached out to some parties and tried to discuss the

- 1 ramifications of these proposed language, and that sort
- 2 of thing. So, we're open to more conversation. And I
- 3 understand, of course, that two weeks, even, to really
- 4 think about it in-depth is, perhaps, a little short.
- 5 COMMISSIONER MCALLISTER: Yeah, and there are
- 6 some pretty in-depth conversations that have been going
- 7 on for quite a while about, say, the 100-kilowatt, the
- 8 gathering of the behind-the-meter PV data, for example.
- 9 So, I think there are advance conversations. Not to say
- 10 that, you know, all the details are worked out, but I
- 11 think that there are -- there's a pretty good base of
- 12 knowledge there, in general.
- 13 MR. GAUTAM: Just a quick note. So, Section
- 14 1304(b) is requesting, really, interconnection data.
- 15 So, there is a formal process --
- 16 COMMISSIONER MCALLISTER: Yeah.
- 17 MR. GAUTAM: -- for customer generators to
- 18 interconnect. So, in theory, the data should exist.
- 19 But again, we're open to working with the utilities to
- 20 have to figure out, you know, what they have and where
- 21 we can go forward.
- 22 COMMISSIONER MCALLISTER: Yeah. Okay, great.
- 23 So, duly noted.
- 24 Tim?
- MR. TUTT: Good morning, Tim Tutt, from SMUD.

- 1 And I guess I would just echo PG&E's request for
- 2 flexibility on the timing for comments. This did come
- 3 up kind of suddenly, at least it seems to me. And I
- 4 don't -- I'm not aware of any substantive discussions
- 5 among SMUD staff and others about some of these issues.
- 6 There's a lot of changes here.
- 7 And a specific question on the Balancing
- 8 Authority component, where you're asking Balancing
- 9 Authorities to report data for generating units. There
- 10 doesn't seem to be any lower limit on that, necessarily.
- 11 I'm just asking if you're looking for Balancing
- 12 Authorities to actually go down to the residential PV
- 13 level, as well?
- 14 MR. NYBERG: Thank you, Tim. That's a good
- 15 question. And in my experience with the -- using the
- 16 ISO data, as an example, I believe all of the resources
- 17 identified there are -- sorry -- are at the -- on the
- 18 utility side, not on the distributed generation side.
- 19 So, you would not actually have hourly profiles for
- 20 that. I mean, in the sense of if we're keeping it
- 21 similar in how we've collected for the past years, for
- 22 the ISO. So, typically, the smallest units I see are a
- 23 quarter of a megawatt, something like that. And there's
- 24 quite a few at 1 megawatt, and then they go on up from
- 25 there, of course.

- I do not -- I do not anticipate getting the
- 2 profiles from residential PV under the Balancing
- 3 Authority aspect of these regulations.
- 4 COMMISSIONER MCALLISTER: Well, these would --
- 5 so, just to be clear. So, the kind of information
- 6 you're asking for, if I understand, and I might be
- 7 wrong, is procured energy that's dispatched by the
- 8 Balancing Authority, right?
- 9 MR. NYBERG: That's correct.
- 10 COMMISSIONER MCALLISTER: Yeah, so, I mean, if
- 11 it's a net meter installation, then that doesn't apply.
- 12 I mean, there may be small, you know, very small systems
- 13 that have some kind of an agreement like that, then, you
- 14 know, I don't know how far down, you know, some of the
- 15 systems that a Balancing Authority might, you know,
- 16 dispatch directly. But the vast majority of those
- 17 systems are going to be net metered, behind-the-meter on
- 18 the demand side, really, functionally, right? The
- 19 small, rooftop.
- MR. NYBERG: That's correct.
- 21 COMMISSIONER MCALLISTER: So, I think there
- 22 probably is a clearly discernible line between the kind
- 23 of information you're asking for --
- MR. NYBERG: Yes.
- 25 COMMISSIONER MCALLISTER: -- and that that's

- 1 going to Asish about the -- you know, and I guess it's a
- 2 separate question about whether the small-scaled, net
- 3 metered PV load, or production curves, say, you know,
- 4 how those are developed and used in the demand forecast.
- 5 But those are pretty, two different, different
- 6 activities, I would imagine, right?
- 7 MR. GAUTAM: Yeah, that would be for the next
- 8 section, on the demand forecast.
- 9 COMMISSIONER MCALLISTER: Oh, okay.
- MR. GAUTAM: And we'll go over that.
- 11 COMMISSIONER MCALLISTER: Yeah, okay. So, I
- 12 think that's an answerable question, with a little bit
- 13 of conversation. Okay, thanks.
- 14 MR. WENG-GUTIERREZ: Okay, great. Any other
- 15 comments or questions in the room? Then, if not, I
- 16 would just recommend -- or just remind, if, Valerie and
- 17 Tim, if you could give the court reporter your card, or
- 18 just make sure he spells your names correctly, that
- 19 would be great.
- 20 Are there any comments, then, from WebEx? Any
- 21 questions, comments? Nothing, okay. Okay, so if
- 22 anybody has comments or questions online, if you could
- 23 please raise your hand by clicking the little, raise
- 24 hand button, and then we can unmute you, and you can go
- 25 ahead and make a comment, or ask your question. So,

- 1 please do so. It looks like we do have one person so --
- Okay, Mark, go ahead and --
- 3 MR. ESSER: Yes. Hi, Mark Esser, with Megawatt
- 4 Consulting. I tried to submit my question via WebEx, as
- 5 well, but I think it may not have gone through.
- 6 My question is about Section 1308(d). It's
- 7 highlighted in its entirety, entirety in the document.
- 8 So, it appears that it's completely new, but it was not
- 9 on the agenda, it was not discussed at all.
- I was wondering if it is, indeed, new, or if
- 11 it's merely a highlighting error? And if it is new, if
- 12 it could perhaps be addressed as part of the discussion?
- 13 Thank you.
- 14 MR. WENG-GUTIERREZ: Sure. Let me go to that
- 15 section. I had thought that was what Leon had talked
- 16 to, but let me -- is this 1308(d)?
- MR. BRATHWAITE: I spoke on 1308(e).
- 18 MR. WENG-GUTIERREZ: Right, I know. I remember
- 19 you correcting me on that one, Leon.
- MR. BRATHWAITE: Okay.
- 21 (Laughter)
- MR. WENG-GUTIERREZ: Okay, yeah, so this is --
- 23 let's see, this is actually something we're going to
- 24 talk about next, in the demand side. So, I'm sorry
- 25 about that. So, yeah, just because of the sequencing of

- 1 the presentations, I wanted to focus on the generation
- 2 and supply side elements in the -- at the first panel.
- 3 And then, we would then move on to those demand
- 4 elements. Just because 1308 covered both sections,
- 5 there is the 1308(d) that we are going to talk to in,
- 6 maybe, a few minutes. So, we will be addressing that,
- 7 Mark.
- 8 Are there any other questions or any comments
- 9 online? Okay.
- 10 With that, then that really did finish up with
- 11 what I had thought we would cover in the morning. It's
- 12 only 11:00. We could probably get through the
- 13 forecasting element, p probably in the next hour or so,
- 14 I would imagine. So, we could proceed with that, if
- 15 you'd like?
- 16 COMMISSIONER MCALLISTER: Are there any
- 17 stakeholders that we were -- that maybe aren't here,
- 18 that would have shown up in the afternoon, because of
- 19 the agenda you had in the afternoon?
- MR. WENG-GUTIERREZ: Right, that was --
- 21 COMMISSIONER MCALLISTER: I don't want to leave
- 22 anybody out.
- 23 MR. WENG-GUTIERREZ: Right. That was sort of
- 24 the concept that I had about dividing them that way. I
- 25 just don't know if anybody -- you know, there would be

- 1 no way for me to know --
- 2 COMMISSIONER MCALLISTER: Yeah.
- 3 MR. WENG-GUTIERREZ: -- whether or not they
- 4 would attend. We could certainly break for lunch, and
- 5 come back at 1:00, or we could just proceed. Either
- 6 way.
- 7 COMMISSIONER MCALLISTER: Well, the flip side of
- 8 that would be if there are people who need to --
- 9 MR. WENG-GUTIERREZ: Yeah, exactly.
- 10 COMMISSIONER MCALLISTER: -- would like to
- 11 actually get on with their lives.
- MR. WENG-GUTIERREZ: Exactly, exactly. So, I'm
- 13 happy to proceed. And, actually, we have a comment
- 14 here.
- 15 COMMISSIONER MCALLISTER: Yeah, go ahead, Tim.
- 16 MR. TUTT: Yeah, Commissioner, I -- at least to
- 17 my knowledge, the exact agenda wasn't posted earlier
- 18 than sometime maybe this weekend, or this morning. So,
- 19 I don't know if people know exactly when different
- 20 sections came up.
- 21 COMMISSIONER MCALLISTER: Yeah, okay. I'm
- 22 inclined to just plow on through. But, yeah, great.
- MR. WENG-GUTIERREZ: Okay. Okay, great.
- 24 All right. Well, then with that, if we could --
- 25 maybe, if we just take a few minutes, then, like a five-

- 1 minute break, and we'll -- I don't think the panel needs
- 2 to sit there for the next hour, or so, as I speak to
- 3 anything. So, if they want to -- if staff wants to
- 4 adjourn their portion, you're welcome to -- to meet with
- 5 those in the audience, or later, if you want.
- 6 MR. TUTT: Thank you.
- 7 MR. WENG-GUTIERREZ: And I'll just cue up the
- 8 next section, then. Thanks, Jason.
- 9 All right, so, yeah, I'll go sit down. All
- 10 right. So, in the afternoon, again, we are going to be
- 11 talking about forecasting-related elements. And the
- 12 first of which. For most of these, I'm going to be
- 13 talking about it. Asish has one section that he's going
- 14 to talk about. So, I'll run through each of the
- 15 different sections that I was going to discuss.
- 16 And then, again, at the end of that time we can
- 17 have public comment on any of the sections that I have
- 18 talked about. So, the first section that I was going to
- 19 talk about is --
- Oh, yes, I'm sorry. So, let's continue with our
- 21 five-minute break and then we'll -- yeah, and then we'll
- 22 just get back started in, how about, 3 minutes.
- 23 (Off the record at 11:03 a.m.)
- 24 (On the record at 11:09 a.m.)
- MR. WENG-GUTIERREZ: All right, so if we could

- 1 take our seats again, we'll go ahead and get started
- 2 with the next section. Which, again, is focusing on the
- 3 forecasting regulations and changes.
- 4 So, I'm going to go ahead and talk about the
- 5 first component, which is -- or, the first section,
- 6 which is 1306.
- 7 And I believe the primary change we are making
- 8 in this section is to add a -- let's see, add the
- 9 language that basically identifies the monthly data at a
- 10 more disaggregated level than we have, in the past,
- 11 collected.
- 12 So, typically, right now, in 1306 we collect
- 13 data as part of our QFER data collection, and we've been
- 14 doing this for many years. We have set forms and
- 15 instructions for the data collection. But in general,
- 16 the data that we're collecting is pretty aggregated in
- 17 nature.
- 18 We get customer, the number of customers by the
- 19 sector, and by NAICS, but we have large values. I mean,
- 20 the sectors or the customers are all aggregated in these
- 21 zones. So, we have, really, no accurate way of
- 22 determining whether or not there are -- the NAICS codes
- 23 are necessarily assigned correctly, or if there is the
- 24 aggregation -- within the aggregated elements, whether
- 25 or not the -- we don't have any visibility into whether

- 1 or not what is it comprised of.
- 2 So, as we go forward in trying to develop new
- 3 methods for validating the data, as well as determining
- 4 and checking the NAICS Code assignments, by the
- 5 forecasting models and the forecasting data, we're
- 6 looking at trying to get higher resolution data at the
- 7 NAICS Code.
- 8 So, it's one of the things we want to be able to
- 9 do with the monthly data, which we're asking for, is to
- 10 validate the NAICS Code assignments, and really get a
- 11 better sense of out that, the energy associated with
- 12 those sectors are growing, and then account for it,
- 13 appropriately, in our demand forecasting models.
- 14 So, the NAICS Codes, themselves, as I talked
- 15 about in this morning, with the definitions are pretty
- 16 important. We use these values, that we get out of the
- 17 OFER data, to calibrate our models into -- to look at
- 18 how the consumption is distributed across customers and
- 19 across the models. So, we really want to make sure that
- 20 we can clearly identify and validate that, those
- 21 assignments.
- So, the new data that we're asking for is to
- 23 increase the level of data resolution from aggregated
- 24 customers to individual customer values. And then, that
- 25 would actually provide us with some pretty important

- 1 information that we would need, also, to produce our
- 2 surveys. We would be using this data as the population
- 3 from which we would draw our sample frame across the
- 4 different utilities, as we move forward with
- 5 implementing surveys, as well.
- 6 So, it's important in many other areas, as well,
- 7 but we're looking at primarily supporting our
- 8 disaggregation efforts. And we've had a sort of
- 9 continued emphasis on disaggregation over the last few
- 10 IEPR cycles, and we're hoping this will help us do that
- 11 with both the regional and time disaggregation.
- 12 And we don't envision -- because of the
- 13 threshold values that are involved, I don't think we
- 14 have really expanded any obligated parties. Of course,
- 15 the amount of data that would be provided is different,
- 16 and more detailed, but we aren't asking any new
- 17 obligated parties to provide us data.
- 18 And I think that the other thing is I wanted to
- 19 highlight as being -- what this would be important to
- 20 is, in addition to improving the forecast precision, our
- 21 ability to disaggregate the forecast, but it also could
- 22 provide us some opportunities to link with PV, and Zero
- 23 Emission Vehicle adoption impacts on a regional basis.
- 24 And so, that's one of the things we're trying to look at
- 25 is creating the ability to connect data throughout the

- 1 data collection process, so we can better -- get a
- 2 better understanding, and better characterize, energy
- 3 consumption changing as new things are adopted into the
- 4 population. So, that's one of the key elements is we
- 5 need more resolution at the monthly level in order to
- 6 tie it to other data sources we're trying to collect.
- 7 And that's everything that I had for the 1306
- 8 addition.
- 9 And then, going, moving on to 1307 and, really,
- 10 1308, as well, that discussion that I just had was
- 11 primarily focused on the electricity side. 1306 is
- 12 really focused on electricity. 1307 and 1308 both talk
- 13 about monthly -- obtaining the same monthly data, but
- 14 for natural gas. And so, the same arguments apply.
- In general, we're looking at trying to increase
- 16 the resolution of our demand forecast, and looking at
- 17 opportunities for us to improve our models, and the
- 18 calibration, and the baseline from which we model and
- 19 forecast from.
- 20 So, really, looking at the monthly data is sort
- 21 of the basic level at which we want to collect the data
- 22 is important. And it would, obviously -- we have a
- 23 system in place for our QFER data, and this would just
- 24 provide us with much more detailed information that we
- 25 could then use to improve our modeling effort and the

- 1 QFER data, as well.
- 2 So, that's all I had for, actually, those three
- 3 sections, 1306, 1307, and 1308.
- And that puts me, then, at 1343. So, this one
- 5 is a pretty significant change. This is the survey
- 6 section. So, this is where the CEUS, and the RASS, and
- 7 all the other surveys that we've collected in the past,
- 8 this is the regulations that dictate that activity.
- 9 So, traditionally, this has been one of the,
- 10 sort of the backbones to our forecasting activities. It
- 11 helps us to characterize saturations of appliances, and
- 12 energy consumption at the regional level. It's a
- 13 sample. And so, obviously, what we're trying to do is
- 14 characterize energy consumption, broadly, across these
- 15 categories that are appropriate for our models, and then
- 16 incorporate the results into the models, so that they
- 17 are representative.
- 18 The challenge, of course, becomes if we don't
- 19 know what the population looks like to begin with, we
- 20 can't know that we are, in fact, pulling representative
- 21 samples.
- 22 And then, the sporadic nature of the surveys,
- 23 themselves, leads to these large gaps in data that we
- 24 have, in trying to draw from for improving our
- 25 forecasts. And that's a fairly significant problem, if

- 1 we have things that are changing rapidly in the near
- 2 term, and we haven't performed any sort of energy
- 3 characterization surveys in 15 years, or 10 years, or
- 4 whenever.
- 5 So, I know that each of the sector surveys has a
- 6 different timeline for production, and we've certainly
- 7 done a few surveys in the past, as well, that help
- 8 characterize this energy consumption.
- 9 But having a broad, consistent, representative
- 10 survey, implemented statewide, really provides us with a
- 11 basis from which we can both measure trends, assess the
- 12 introduction of new technologies, understand the
- 13 adoption behavior of consumers, and then make changes to
- 14 our demand forecasts, appropriately.
- 15 So, there's a great deal of value in the
- 16 surveys. And, again, because of the sporadic nature of
- 17 their implementation in the recent couple of decades,
- 18 we've made some modifications to this section that are
- 19 trying to create a process that's a little bit more
- 20 regular in nature.
- 21 So, and partially, the reason why some of this
- 22 is happening in a sporadic way is that, I think, the
- 23 needs of the Energy Commission don't necessarily align
- 24 with the needs of others within the industry. So, we
- 25 have some pretty, like, specific end-use data needs that

- 1 -- in order to support our forecasting effort. And that
- 2 doesn't necessarily align with everyone out there.
- 3 So, in the traditional regulations, the
- obligated parties had been the utilities who were, 4
- 5 supposed to, on a regular basis perform these surveys,
- 6 and then provide us with the data every four years.
- 7 I think, because after restructuring, the roles
- 8 and objectives of the utilities changed, and it wasn't -
- 9 - the purpose of the surveys had less of a bearing on, I
- 10 think, what the utilities needed to do.
- 11 It obviously plays a role in, now -- it
- 12 obviously plays a role in energy efficiency measurement,
- 13 and baselining, but it seems that many of those
- 14 activities of goals, potential and goal studies, still
- 15 rely upon the Energy Commission's CEUS and RASS Surveys
- 16 as some of the basis of those activities.
- 17 So, there have been other surveys that have been
- 18 produced, that focus on specific measures, energy
- 19 efficiency measures, but they're not broad in nature.
- 20 The Energy Commission, on our forecasts, have to
- 21 forecast all end uses, not just specific forecasts or
- 22 end uses. So, it's important for us to have a broad
- 23 characterization of energy consumption across all end
- 24 uses.
- 25 And that's sort of the objective of why we're

- 1 making a change to this regulation, that section.
- 2 So, I'm just going to move -- and so, what we're
- 3 suggesting -- so, currently -- let me just explain,
- 4 briefly. So, currently, the utilities have to provide a
- 5 survey plan to the Energy Commission, and then I think
- 6 it's a year before they actually have to submit the
- 7 data. And then, we approve the plan and then they
- 8 implement the survey. And then, a year after they
- 9 submitted their survey plan, they provide us with the
- 10 data.
- 11 What we're -- how we're changing that is that
- 12 the Energy -- okay, so then, as an alternative to that
- 13 primary compliance mechanism, or procedure, they can --
- 14 the Energy Commission can perform a survey, and the
- 15 utilities can opt in, to participate in that survey as
- 16 part of the Title 20 compliance alternative. So, they
- 17 can be compliant with Title 20, if they participate in
- 18 the survey that we implement.
- 19 So, what we're suggesting, in the language
- 20 that's written, is to sort of spin that around in that
- 21 they -- we would have an interest, the Energy
- 22 Commission, would then be the primary implementer of the
- 23 surveys, themselves.
- 24 As an alternative, the utilities could opt out
- 25 and implement their own surveys, and then just provide

- 1 us the data. And the idea there, again, is we want a
- 2 consistency across all the data that's collected.
- 3 So, if we were to go out, and the Energy
- 4 Commission started a commercial survey, and we only
- 5 focused on, say, two or three utility service
- 6 territories, and then a third or a fourth utility had
- 7 their own surveys, we'd want to make sure that the
- 8 actual questions were the same, that, you know, the
- 9 methods were similar, and that the data we collected is
- 10 the same quality.
- 11 So that when we did, in fact, have to integrate
- 12 it with our survey data, that it would be consistent and
- 13 we could in fact do that, and not have big gaps in
- 14 knowledge.
- So, beyond, there are some changes in the
- 16 language. Obviously, by changing that, we have to
- 17 change how we approve different things, different plans,
- 18 and the option to opt out of the Energy Commission-led
- 19 activities. And we would appreciate any comments on
- 20 those changes because it is sort of a significant change
- 21 from what was in there, already.
- 22 And, of course, it changes the roles of the
- 23 utilities and the Energy Commission in implementing the
- 24 surveys, as well. So, it would be great to get some
- 25 comments back on that.

- 1 I think the frequency, we've maintained the
- 2 frequency of the survey implementation to be the same
- 3 four-year cycle. We've updated the dates for all those
- 4 four-year cycles, so you'll notice that in the updated
- 5 language.
- 6 And that's pretty much what we have changed in
- 7 that section. All right, so that completes my
- 8 discussion for Section 1343, on surveys.
- 9 And now, I'm going to go on to Section 1344,
- 10 which is basically dealing with load research topics.
- 11 COMMISSIONER MCALLISTER: Malachi, can I ask
- 12 about the survey?
- MR. WENG-GUTIERREZ: Yes, please do.
- 14 COMMISSIONER MCALLISTER: So, I mean I hear, you
- 15 know, and I'm sure you hear, you know, much more than I
- 16 do. You know, there's some, frankly, some frustration
- 17 out there in the world like, gosh, you know, the CEUS is
- 18 so old. When are you guys going to redo it? And now,
- 19 you're doing it. And it's like fantastic, it's a big
- 20 lift. I mean, it's incredible what you've been able to
- 21 do to get it moving forward, and I'm happy to -- really
- 22 looking forward to, you know, getting it accomplished
- 23 and having access to the data.
- 24 You know, it's been more than a decade and I
- 25 think people -- you know, what is sort of driving this

- 1 episodic sort of the -- I quess, just the uncertainty
- 2 with respect to how we get this forward? I mean, it's
- 3 resources, I know there's some of that. It's sort of
- 4 the program plans, there's just a lot of sort of -- you
- 5 know, I think in the Building Standards we sort of went
- 6 through something similar where it's like, boy, we're
- 7 supposed to be doing this every three years, and we
- 8 really need to sort of get down to brass tacks and make
- 9 that happen. So, I'm really glad you're moving this
- 10 forward.
- I guess, will these changes, for the most part,
- 12 try to -- I mean, do you think they'll accomplish that
- 13 regularization, to get it sort of more routine, and let
- 14 it be more of a baselining resource?
- 15 MR. WENG-GUTIERREZ: I think so. That's the
- 16 objective of the revisions. I mean, we're hoping that,
- 17 again, if the Energy Commission is sort of the primary
- 18 mechanism through which the surveys are implemented,
- 19 that given that we have sort of staff on hand, you know,
- 20 we have a Data Analysis and Survey Unit that we have
- 21 been staffing up, and are sort of on point for
- 22 implementing these surveys. So, we are hoping to be
- 23 able to have them implemented on a regular basis.
- 24 There's still a resource issue associated with
- 25 implementing them, as we obviously need contract funds.

- 1 We're not going to have our staff go out and do on-
- 2 sites, and things. But to the level that we can support
- 3 a regular implementation of the surveys, I think we're
- 4 well on our way to do that, so --
- 5 COMMISSIONER MCALLISTER: Yeah, great. I mean,
- 6 I see this as a -- you know, before restructuring,
- 7 right, in the mid-90's, when we restructured, and it was
- 8 a whole, completely different world back then, right.
- 9 MR. WENG-GUTIERREZ: Right.
- 10 COMMISSIONER MCALLISTER: And a lot of this was
- 11 done, actually, at the utilities. I mean, sort of
- 12 before -- a lot of the complementary work, that gathered
- 13 a lot of the data, was funded by the utilities because
- 14 they had a stake in it, too, and the restructuring kind
- 15 of changed that. And a lot of that just went away for
- 16 more than a decade. You know, and sort of the market
- 17 was going to solve all these problems, right.
- MR. WENG-GUTIERREZ: Right.
- 19 COMMISSIONER MCALLISTER: So, I think what we're
- 20 involved in here is a hugely necessary effort that will
- 21 generate an incredible amount of sort of public good.
- MR. WENG-GUTIERREZ: Uh-hum.
- 23 COMMISSIONER MCALLISTER: Because it used to be
- 24 done. It got jettisoned. And now, we need to sort of
- 25 recreate it in the modern context. And, luckily, we

- 1 have a lot more -- I think we have a more advanced
- 2 society, generally, in terms of technology, information
- 3 technology, you know, data gathering, automation, and
- 4 all that kind of stuff. And so, I'm hopeful we're going
- 5 to get to a place where we bring those tools to bear and
- 6 end up with a modern version of, you know, what we kind
- 7 of had in the past. Which was sort of, look, we had
- 8 good resources that people could use to make better
- 9 decisions.
- 10 So, anyway, I see CEUS, and all the surveys as
- 11 part of that, and also what you're going to talk about
- 12 next. So, thanks.
- MR. WENG-GUTIERREZ: Right. Yeah, and you're
- 14 absolutely right. I think this is a great opportunity
- 15 for us not only to look at the regulations, but also how
- 16 we might leverage new technologies to help the surveys,
- 17 as well as to maybe, you know, shrink the surveys.
- 18 Maybe we don't need to do surveys for all of this.
- 19 Maybe we can get some of that data we need from some
- 20 other method.
- 21 And so, and I think it's -- as far as having it
- 22 be regularly implemented, I think this structure allows
- 23 it to do that. Again, there's still a resource
- 24 constraint on the funding element but, I mean, I think
- 25 this is a good step forward in implementing it on a

- 1 regular basis.
- 2 COMMISSIONER MCALLISTER: Yeah, it seems like,
- 3 actually, if we look at the broader ecosystem, then you
- 4 talked about the framing and how, you know, the broader
- 5 data collection will enable us to frame. I think that's
- 6 something we need to sort of not understate, right.
- 7 Because if you have, if you know your universe, then you
- 8 can be very, I think, much more savvy and efficient in
- 9 how you do your sampling. And there's also, I mean, you
- 10 know, far be it from me to talk about, you know,
- 11 sampling techniques, but I think you can target
- 12 questions that you might have, specific questions that
- 13 are helpful for policy much more effectively, if you
- 14 have that broader resource available.
- 15 MR. WENG-GUTIERREZ: Yeah, absolutely. And I
- 16 would agree with you, even to the extent of how we
- 17 created our sample frames in the past, and whether or
- 18 not it's representative. I mean, I think we had some
- 19 limits to what we could do in the past.
- 20 And, ideally, the new data that we could bring
- 21 to bear here would actually allow us to get a much
- 22 better picture about the population, and to know whether
- 23 or not we are, in fact, representing them in the survey
- 24 by polling. And we can do cluster analysis, we can do
- 25 different levels of -- are the climate zones that we're

- 1 disaggregating to appropriate? You know, are we seeing
- 2 behaviors across climate zones that we hadn't been able
- 3 to see before. And so, there's a whole new, sort of
- 4 level of analysis we can bring to bear to understand
- 5 whether or not our surveys are, in fact, characterizing
- 6 consumption appropriately. And again, targeting and
- 7 understanding what the potential might be out there for
- 8 different policies and measures.
- 9 COMMISSIONER MCALLISTER: Yeah. I mean, one of
- 10 the conversations that we're having in the context of
- 11 the Barriers Report is how we do better segmenting, and
- 12 better -- you know, how to just understand, better, the
- 13 low-income populations across the State. And they're
- 14 incredibly diverse.
- So, you know, doing that segmentation for
- 16 purposes of low-income programs would be more effective,
- 17 with the limited resources we have, I think is a huge
- 18 policy imperative. I mean, it's just a massive thing,
- 19 but it's top of the priority list right now, I think, in
- 20 getting our heads around how we go forward with that.
- 21 MR. WENG-GUTIERREZ: Right.
- 22 COMMISSIONER MCALLISTER: So, anyway, I'm sort
- 23 of riffing on some other things, but I --
- MR. WENG-GUTIERREZ: Right.
- 25 COMMISSIONER MCALLISTER: -- just want to

- 1 highlight why, you know, why we're doing this. I think
- 2 it's just really important.
- 3 MR. WENG-GUTIERREZ: Right. And in the context
- 4 of SB 350, and the targets that we'll be setting up for
- 5 AAEE --
- 6 COMMISSIONER MCALLISTER: Yeah,
- 7 MR. WENG-GUTIERREZ: -- you know, the energy
- 8 efficiency targets that we're going to be having to deal
- 9 with, I mean that's something we'll be working on,
- 10 obviously, over the next year or so.
- 11 But again, getting that understanding about low-
- 12 income communities, disadvantaged communities, what is
- 13 the usage in these areas and, you know, how can we --
- 14 what are the opportunities and how do we, then, move
- 15 forward with sort of getting the challenges, and getting
- 16 this out to those populations.
- 17 COMMISSIONER MCALLISTER: Right.
- MR. WENG-GUTIERREZ: So, I think, yeah, it's
- 19 broadly necessary, in my mind, sort of as a base
- 20 dataset.
- 21 COMMISSIONER MCALLISTER: Yeah.
- MR. WENG-GUTIERREZ: So, again, I hope that we
- 23 can regularly sort of implement surveys so that we can
- 24 have -- again, start seeing trends, and so some sorts of
- 25 assessments that we haven't been able to do in the past.

- 1 COMMISSIONER MCALLISTER: Great. All right,
- 2 thanks.
- 3 MR. WENG-GUTIERREZ: Of course.
- 4 All right, so I was going to move on, next, to
- 5 Section 1344, which is, again, getting into load
- 6 research elements. There are a significant number of
- 7 changes in this section, including numerous new sections
- 8 that are requiring new data.
- 9 So, I'm going to -- for the most part, I'm going
- 10 to move through each of the elements, and then I'll let
- 11 Asish talk to one of the topics in this section.
- 12 And then, just broadly speaking, there are these
- 13 reporting thresholds that we have modified throughout
- 14 this section. The reporting thresholds are defined for
- 15 obligated parties and, typically, what we've done is
- 16 lowered them. I think in every situation we've lowered
- 17 them slightly. And many of the times what we've done is
- 18 reduced them in order to be consistent with things like
- 19 the IRP submittals.
- 20 So, in our strategy for IRPs, I think we have
- 21 sort of a designated list of people that are going to be
- 22 needing to submit IRPs to us. And we wanted to make
- 23 sure that we had the same data collection on this side,
- 24 as well. So, we have made an effort to see, where
- 25 necessary, to be consistent with IRPs submittals.

- 1 That being said, we also are trying to get more
- 2 disaggregated in nature, so we are also lowering some of
- 3 those thresholds to support our regional and
- 4 disaggregation activities.
- 5 So, you may notice that, again, if you look at
- 6 the thresholds for some of the early sections, you'll
- 7 notice that they have been reduced. And that's
- 8 primarily the reason why, we're trying to be consistent
- 9 across program areas here, at the Energy Commission, and
- 10 it's to support our disaggregation efforts.
- 11 Let's see, so now I'm going to hand it off to
- 12 Asish to talk about 1344(f), which is the Load Metering
- 13 Reports.
- MR. GAUTAM: Good morning, everyone. My name is
- 15 Asish Gautam. I'm in the Demand Office.
- So, Section 1344(f) is requesting hourly load
- 17 estimates by the different load modifiers, mainly
- 18 looking at PV and some of the non-PV technologies. And
- 19 Malachi will talk, later on, about the energy efficiency
- 20 and the electric vehicle impacts.
- 21 So, earlier, we had talked about interconnection
- 22 data, which only gives us the installed capacity. At
- 23 the end of the day, we have to translate that installed
- 24 capacity to the energy and peak impacts. And, you know,
- 25 we've mainly stayed with the static. For example, for

- 1 PV, we have static PV shapes.
- In the earlier IEPR years we used outputs from
- 3 the New Solar Homes Calculator, PV watts, and recently,
- 4 we've had access to some data from the PUC's study of
- 5 the CSI Program.
- 6 You know, these static profiles fill a gap, but
- 7 it's not enough given the variability, and weather that
- 8 you can have, and also just the amount of installed
- 9 capacity you have. You have to --
- 10 COMMISSIONER MCALLISTER: Asish, are there --
- 11 sorry for butting in here. Are there still -- so, back
- 12 in the day, when there was this performance-based
- 13 incentive in the CSI --
- MR. GAUTAM: Yeah.
- 15 COMMISSIONER MCALLISTER: -- right, so there was
- 16 actually -- there were meters installed on at least some
- 17 of the net metering system, a small proportion. And
- 18 that proportion gets smaller. It used to get smaller,
- 19 at least in the early parts of the program. The smaller
- 20 the systems got, there were fewer systems that actually
- 21 had that metering in place.
- MR. GAUTAM: Yeah.
- 23 COMMISSIONER MCALLISTER: But anybody on a PBI
- 24 payment, on a production-based incentive, was getting,
- 25 like there was some data being collected to measure

- 1 their energy production in real time, or on an interval
- 2 basis.
- 3 So, I guess, is that data still flowing? Do you
- 4 have any idea? I mean, are there some meters out there
- 5 that could be brought in as a sample of actual
- 6 production across the State?
- 7 MR. GAUTAM: Yes. My recollection is, first,
- 8 started out requiring PBI payments for systems 30-
- 9 kilowatt and larger --
- 10 COMMISSIONER MCALLISTER: Yeah.
- 11 MR. GAUTAM: -- and in that period. One of the,
- 12 I think, issues, that it only required five years' of
- 13 possession data. We really have not looked at that as
- 14 much. Because one thing was that, you know, it was
- 15 monthly owing --
- 16 COMMISSIONER MCALLISTER: Oh, right. Okay.
- 17 MR. GAUTAM: -- so, we're missing out on the
- 18 hourly impacts. And so, we really did not look at that
- 19 dataset.
- 20 COMMISSIONER MCALLISTER: There were some
- 21 services that were looking -- that were getting interval
- 22 data.
- MR. GAUTAM: Yeah.
- 24 COMMISSIONER MCALLISTER: And honestly, it's
- 25 been a while, so I can't remember if they were

- 1 associated with the PBI data collection, itself, or
- 2 whether it was just sort of an add on that, you know,
- 3 Itron or somebody did as a study.
- 4 But there was some -- there was some, you know,
- 5 production, interval production data being collected at
- 6 some point.
- 7 MR. GAUTAM: Yeah, so, let's see, as part of the
- 8 2010 EM&V Study for the CSI Program, Itron was hired to
- 9 do the study.
- 10 COMMISSIONER MCALLISTER: Okay
- 11 MR. GAUTAM: And they installed meters in just a
- 12 little over 500 systems, that they individually were
- 13 monitoring.
- 14 COMMISSIONER MCALLISTER: Yeah.
- 15 MR. GAUTAM: And we have looked at that data.
- 16 And for the 2016 IEPR update, one of the topics were
- 17 involved in the idea of a shift in the system peak, due
- 18 to these behind-the-meter resources. So, for this
- 19 exercise, we relied on that data source.
- 20 COMMISSIONER MCALLISTER: Uh-huh.
- 21 MR. GAUTAM: One of the things we've noticed is
- 22 that the number of systems is very small. When we take
- 23 those 500 systems and map it to our different climate
- 24 zones, you know, some zones have less than 10 systems, 5
- 25 systems. And so, the question of how representative

- 1 that data is, I mean, as an aggregate you could probably
- 2 rely on it. But we have a more granular need that we
- 3 build up on, so --
- 4 COMMISSIONER MCALLISTER: Oh, okay. And that's
- 5 really -- you're not aware of any other sort of data,
- 6 like that, that we could --
- 7 MR. GAUTAM: At this point, no.
- 8 COMMISSIONER MCALLISTER: Okay, great. That was
- 9 my question. Thanks very much.
- 10 MR. GAUTAM: So, as I was mentioning in the
- 11 earlier part of this, you know, we have interconnection
- 12 data that needs to be translated to the energy impacts.
- 13 And we've relied on static shapes, which fill a gap, but
- 14 we need to do a better job.
- 15 Again, as I mentioned, we're involved in this
- 16 whole peak shift analysis, where we're overlaying actual
- 17 electricity sales by the different zones, for the
- 18 utilities, and overlaying actual PV generation from this
- 19 Itron data. And we can see differences in PV production
- 20 due to weather.
- 21 But as I mentioned, there is an issue with the
- 22 sample size being small, to use that going forward.
- 23 We're hoping to address that need with this requirement,
- 24 here.
- 25 We've had a number of discussions with staff in

- 1 different utilities and, right now, I'm only aware of
- 2 SDG&E, and SMUD, having any kind of metering for PV.
- 3 But with respect to the other utilities, it seems we're
- 4 kind of all in the same boat. There's a lot of PV out
- 5 there, but not much access to actual metered data. And
- 6 we're --
- 7 COMMISSIONER MCALLISTER: Could there -- okay,
- 8 so I wonder, so a lot of the inverters going in, these
- 9 days, have interval data that can be generated.
- MR. GAUTAM: Right.
- 11 COMMISSIONER MCALLISTER: Maybe you're going
- 12 there and I'm -- am I taking your punchline here?
- MR. GAUTAM: No.
- 14 COMMISSIONER MCALLISTER: Okay, sorry. But I've
- 15 got a Solar Edge, on my house, and it gets interval
- 16 data, and I can go in and look at it any time I want.
- 17 I've got an app on my phone where I can like look at the
- 18 load, at the production shape.
- 19 So, is there any opportunity to work with them,
- 20 with those companies, to, you know, get a sample, or get
- 21 sort of a structure sample of interval data, interval
- 22 production data for, you know, Sunny Boy, and Solar
- 23 Edge, and a few of the other main inverter companies?
- MR. GAUTAM: You know, as part of the 2016 IEPR,
- 25 we reached out to Solar City, and to get access to some

- 1 shapes. We're still kind of hashing things out there.
- 2 But, really, this is kind of on a voluntary kind of
- 3 basis.
- But you're correct, it's not that there's a lack
- 5 of data, it's just how to get access to it. And one of
- 6 the reasons for this requirement is that we're hoping
- 7 that the utilities are in a much better position to get
- 8 access to this data, than the Energy Commission.
- 9 One reason is due, for example, there's a lot of
- 10 Phase 2 projects, within the RP, where they're looking
- 11 at how the different distributed energy resource can
- 12 phase in, in terms of being remotely dispatched by the
- 13 utilities. So, there's avenues going forward that I
- 14 think the utilities will have to getting access to this
- 15 data. And we're hoping that that data can feed into
- 16 this hourly load estimate, for the load research that we
- 17 do.
- 18 COMMISSIONER MCALLISTER: That sounds great.
- MR. GAUTAM: Yeah.
- 20 COMMISSIONER MCALLISTER: I mean, and to the
- 21 extent that Smart inverters will come in, and there will
- 22 be a much more robust relationship between the solar
- 23 company and the utility, and they'll be able to sort of
- 24 reach inside, and with some agreement in place, right,
- 25 to do that, then I think that could be great.

- 1 MR. GAUTAM: You know, there's something Valerie
- 2 mentioned earlier, you know, that a lot of -- you know,
- 3 we have to figure out where we can start from, you know,
- 4 what kind of access issue there is in terms of customer
- 5 privacy, and being able to sort the different details
- 6 out.
- 7 COMMISSIONER MCALLISTER: Yeah.
- 8 MR. GAUTAM: But we've discussed -- you know,
- 9 we've had some preliminary discussions with utility
- 10 staff about this, and there seems to be some movement
- 11 that we need to get ahead of this data gap going
- 12 forward.
- 13 COMMISSIONER MCALLISTER: Yeah.
- MR. GAUTAM: So, that's -- that's what we're
- 15 trying to address with this.
- The other thing, with this requirement, we're
- 17 also asking for shapes on energy storage. We added two
- 18 break outs, storage that's powered up, uses on-site
- 19 generation, and then storage with -- that draws energy
- 20 from the grid.
- 21 So, you know, we'd like to get some feedback on
- 22 kind of the feasibility of requiring that kind of
- 23 segregation. A lot of it is new, so we hope that the
- 24 feedback we get can help improve these hourly estimates
- 25 going forward --

- 1 COMMISSIONER MCALLISTER: Great.
- 2 MR. GAUTAM: -- in terms of having it in the
- 3 load research requirement.
- 4 COMMISSIONER MCALLISTER: Great. I might
- 5 actually ask the utilities. I mean, it's not totally --
- 6 you know, we know storage is coming at some level. We
- 7 have no idea what scale.
- 8 We also, as far as I know, there are no
- 9 standards on how it gets charged and dispatched, right?
- 10 So, and the system, you know, in Number 1 Main Street
- 11 could be identical to the one at Number 2 Main Street,
- 12 but operate in a completely different way.
- So, I guess that seems like a pretty different
- 14 question from the solar question. So, let's try to sort
- 15 of move forward on the ones we can move forward with
- 16 productively. But the utilities may have some more
- 17 insight on those issues, so I'm happy to hear from them,
- 18 as well.
- 19 MR. GAUTAM: Again, this requirement goes kind
- 20 of hand-in-hand with the interconnection data, so that's
- 21 why we need both sides of the -- both pieces, really, to
- 22 do our job here, and in terms of being able to support
- 23 the demand forecast on the hourly scaled, that Cary had
- 24 mentioned. You know, that's where we're going, so there
- 25 is a need for this data.

- 1 That is all I have for this session.
- 2 COMMISSIONER MCALLISTER: Great, thanks a lot.
- 3 I think I asked all my questions. Thanks, Asish.
- 4 MR. WENG-GUTIERREZ: Great. So, one of the
- 5 other elements that Asish may have mentioned, briefly,
- 6 for the behind-the-meter modifier estimates that we're
- 7 looking at getting information about is residential
- 8 electric vehicle charging behind-the-meter, as well.
- 9 So, in the next section of the Code, that we're
- 10 looking at, Regulatory Code Section 1344(g), what we're
- 11 trying to get there is hourly electric vehicle charging
- 12 load shapes outside -- basically, public.
- So, the behind-the-meter elements, I think,
- 14 should characterize some of the residential electric
- 15 vehicle charging.
- And then, as a separate set of regs, we would be
- 17 trying to get characterization of networked electric
- 18 vehicles at public charging stations, to try and fill in
- 19 the gap between what the charging behaviors are at home,
- 20 and what are charging behaviors outside, at public and
- 21 workplace charging.
- So, this is building off of some of the work
- 23 that INL, and others, NREL, have done to characterize
- 24 electric vehicle consumption patterns, their charging
- 25 behaviors. Some of those programs, the EV Project data

- 1 is no longer active, but they still are getting some
- 2 data. We are leveraging that data to better
- 3 characterize peak impacts, using California-specific
- 4 data to generate -- potentially, to generate some peak
- 5 impact analyses in the future.
- 6 As Asish mentioned, briefly, we have, in some
- 7 instances, had to rely upon sort of standard values
- 8 throughout the forecast to measure these impacts. And
- 9 with electric vehicles, that's one of those areas where
- 10 we have sort of relied upon sort of a standard rule of
- 11 thumb as the basis of the peak impact.
- We're looking to get this new data, and leverage
- 13 it, so that we can get much better understandings about
- 14 regional impact variations, as well as how the different
- 15 types of vehicles might impact people's behavior in
- 16 charging, and what that would be -- how that would then
- 17 impact the grid.
- 18 Because, obviously, if you have a Leaf, or a
- 19 Volt, it might charge differently than a Tesla, or
- 20 something, where you have a much larger battery.
- 21 So, this Section (g) is basically focused on
- 22 that, the characterization of electric charging at
- 23 public charging stations, only for those charging
- 24 stations which are networked in nature. So, we're
- 25 excluding some obligation by, say, multi-unit dwellers,

- 1 owners, who have installed charging stations at their
- 2 facility, to have their renters charge, because it might
- 3 be a disincentive for them to adopt, if they have to
- 4 then report back to us. And they might not have all
- 5 that data accessible to them, as well, to report.
- 6 So, the EVSE data requirements, within 1344(g),
- 7 are again trying to just get at the public component of
- 8 the electric vehicle charging behavior, to better
- 9 characterize those impacts.
- 10 One of the largest growing demand sections, in
- 11 our forecast, is electric vehicles. And so, that's
- 12 something that we really want to better characterize and
- 13 see how that could change in the forecasts that we have
- 14 in the future.
- 15 Then, the next section -- so, that's basically
- 16 1344(q).
- 17 1344(h), this is where we're asking, we're
- 18 expanding -- it's a new section, as well as 1344(f) and
- 19 (g), those are both new sections.
- 20 This is a new section where we're looking at
- 21 trying to get customer interval measure data. Again,
- 22 the focus here is to get a better understanding about
- 23 the peak load shapes. We're looking at trying to better
- 24 characterize the population, as well.
- 25 So, when we talked about getting our sample

- 1 frame, for our surveys, from the population, this data
- 2 would actually allow us to do sort of clustering
- 3 analysis. Again, to see whether or not there are
- 4 differences across climate zones, differences among
- 5 different customers. And so, we're hoping that this
- 6 data will closely align with where we're heading for our
- 7 forecast.
- 8 To get to an hourly sort of forecast, we
- 9 definitely need to have a good sample of interval
- 10 measure data, as well as other data, at an hourly basis
- 11 to support our work. So, that's that primary section.
- 12 And then the last section, we're getting close
- 13 to lunch here. The last section that I was going to
- 14 talk about, in the forecasting area, is this 1353. It's
- 15 a failure to provide information. It's basically, it
- 16 has language in there that's fairly simple. It's not
- 17 very long. But it is consistent with other data
- 18 submittal sections, or regulations, in other sections
- 19 within the Data Collection Chapter, Chapter 3.
- 20 And so, we've inserted it into this section to
- 21 be applicable to everything within this section, just as
- 22 for, you know, giving us options and actions to try and
- 23 obtain data that are required under the regs.
- 24 And that is it for the forecasting regulatory
- 25 language drafts that I have. If there are any questions

- 1 from Commissioner McAllister, on any of this?
- 2 COMMISSIONER MCALLISTER: No, I think I'm good.
- 3 Thanks a lot.
- 4 MR. WENG-GUTIERREZ: Okay. Are there any
- 5 questions in the room? And I know, again, this is
- 6 obviously preliminary and there's lots of changes here,
- 7 so we're open to comments.
- 8 COMMISSIONER MCALLISTER: Go with Tim?
- 9 MR. TUTT: Hey, Malachi, good afternoon -- or,
- 10 good morning, still. Tim Tutt, from SMUD.
- 11 I'm looking at some of the detailed data that
- 12 you're asking for, in Section 1306, and wondering if you
- 13 can help me with how we might know the identifier for a
- 14 PV, an identifier for a PEV, and identifier for EVSE?
- In some cases, customers might not even have a
- 16 quote/unquote, EVSE.
- MR. WENG-GUTIERREZ: Right.
- 18 MR. TUTT: In the other cases, I have a Clipper
- 19 Creek at home, for my electric vehicle. I don't know
- 20 that PG&E knows what it is, or has any information about
- 21 it.
- MR. WENG-GUTIERREZ: Right.
- MS. WINN: Right.
- MR. TUTT: And so, there's that question. And
- 25 then, in terms of the EVSE information back in the load

- 1 research, you say that the EVSE supply equipment
- 2 information is for public network chargers, only. But
- 3 the word "network" doesn't show up until Item 3. So, I
- 4 was a little confused, before I went through that,
- 5 thinking you were looking for that kind of information
- 6 even from our, you know, our residential customers that
- 7 have chargers at home.
- 8 And finally, on the interval metered customer
- 9 energy consumption, on Section (h), I mean, SMUD has put
- 10 in Smart Meters for all our customers, so we have that
- 11 data for every customer, except for those that opted
- 12 out, of course.
- 13 You're asking for us to provide all of our
- 14 interval metered data? And this is a new thing, of
- 15 course. We haven't done that in the past. So, that's a
- 16 big, that's a huge amount of data, as you know.
- MR. WENG-GUTIERREZ: Right. So, yes, to the
- 18 1306 guestion, I agree with you. The utilities,
- 19 themselves, may not have all of that information. We're
- 20 still trying to figure out like which -- which pieces
- 21 of information they would have. Obviously, we were
- 22 having meetings with utilities, I think it was April,
- 23 and it became apparent that they were not really even
- 24 tracking who the electric vehicle owners necessarily
- 25 were. They may not even know if there was one in a

- 1 location or not.
- 2 That's something that I think we would -- we
- 3 would be able to fill in the gap to, and so we can make
- 4 it evident there, though, that if the utilities do know
- 5 that there is an EV in a location, it would be helpful
- 6 for that to be communicated to us. So that when we do
- 7 get the data, I mean we can do that cross-check. But it
- 8 would be great to have. If that's already in your
- 9 dataset, that you have, then we can know that there's an
- 10 extra draw in this load, this monthly load, that we'd
- 11 have to consider segmenting it. We don't want to roll
- 12 it all into one and just assume that these are all --
- 13 this lower -- this higher demand is attributed to, say,
- 14 an extra refrigerator or something.
- 15 So, we'd have to be able to sort of get at what
- 16 those other load modifiers might be, and what the
- 17 population might look like.
- 18 So, that's -- I realize, of course, yeah, that
- 19 the utilities aren't going to have all of that
- 20 information. But, to the extent that they do, it would
- 21 be helpful for us that they can provide it.
- 22 COMMISSIONER MCALLISTER: Let me ask you a
- 23 question on that, too. So, we talked earlier about the
- 24 CSI. You know, life was good when there were -- when
- 25 there were rebates, and pretty much all of the PV

- 1 systems were in their database, that got rebates.
- 2 So, where are we in sort of the evolution of the
- 3 EV marketplace, in that same way, right? Like, you
- 4 know, the minute the ARB Program, and our programs, we
- 5 know sort of where those funds are going. Certainly,
- 6 you know, the retail vehicle rebate program I have
- 7 believed, and maybe it is the case, that most, you know,
- 8 almost all residential-based EVs are getting a rebate.
- 9 Is that a fair statement? How long will that continue
- 10 to be the case, if it is?
- 11 You know, that we're sort of in that same kind
- 12 of question, where the database that we have from the
- 13 program, how useful is it? And how long will it last,
- 14 you know, with that level of utility?
- 15 MR. WENG-GUTIERREZ: Right. So, the California
- 16 Vehicle Rebate Program, that's implemented in ARB, is a
- 17 fairly decent database of people who are purchasing EVs.
- 18 It's not totally comprehensive, because many people
- 19 won't, necessary -- they don't want \$2,500, or \$2,000,
- 20 or whatever the amount is. They might be less price
- 21 sensitive, or less -- and there might be a less of
- 22 awareness. So, they have -- it's not completely
- 23 comprehensive.
- 24 But at the same time, internally, we do have --
- 25 we have access to the DMV database, so we know when a

- 1 vehicle is purchased and registered in California, and
- 2 so we should have a pretty comprehensive picture of who
- 3 -- you know, what they are purchasing, and who, and that
- 4 sort of thing.
- 5 COMMISSIONER MCALLISTER: Okay, go it.
- 6 MR. WENG-GUTIERREZ: It's just cross-referencing
- 7 that with all of the other consumption date, and getting
- 8 a better picture about how that's rolling out through
- 9 time is the challenge. And so, so that's where there is
- 10 a gap.
- 11 COMMISSIONER MCALLISTER: Okay.
- MR. WENG-GUTIERREZ: So, we'd certainly look at
- 13 the CVRP data.
- 14 COMMISSIONER MCALLISTER: Okay.
- 15 MR. WENG-GUTIERREZ: And I think it's valuable,
- 16 it's interesting, and it's good data. It's just the --
- 17 COMMISSIONER MCALLISTER: The PMP database seems
- 18 like it's going to be the best, the best data, then.
- 19 MR. WENG-GUTIERREZ: Yeah, exactly.
- 20 COMMISSIONER MCALLISTER: Great, yeah. Got it.
- 21 MR. WENG-GUTIERREZ: To the extent that there's
- 22 not entry errors, or something like that.
- 23 COMMISSIONER MCALLISTER: Sure.
- MR. WENG-GUTIERREZ: But it's, yeah, it's our
- 25 sort of go-to database for anything transportation

- 1 related on the light-duty side.
- 2 COMMISSIONER MCALLISTER: Okay, thanks.
- 3 MR. WENG-GUTIERREZ: The second question --
- 4 sorry, Valerie -- so, Tim had mentioned the networked
- 5 element, where it says in (g), you know, it's only the
- 6 networked EVSE. So, I will look at that language,
- 7 again, and try to modify that in an earlier description,
- 8 or segment of that regulation, to highlight the fact
- 9 that we are only talking about networked EVSEs. And so,
- 10 that is something that, internally, staff has
- 11 highlighted as being important to make sure that it's
- 12 focused, and that those are the obligated parties to
- 13 provide that data. And so, I'll make sure that that's
- 14 updated. Thank you for that comment.
- 15 And then the third is I agree it is this -- the
- 16 IMD data, the interval metered data, is something huge.
- 17 It's not something we've asked for in the past.
- 18 However, we do see it as something that we should try
- 19 and leverage, and look at implementing, and using for
- 20 our forecast purposes.
- 21 So, it's something that we would -- we're open
- 22 to talking about and would -- and would enjoy more
- 23 conversations on it. So, it's something that we're
- 24 looking at and trying to figure out how to leverage it,
- 25 appropriately, for our needs.

1 All	right,	Valerie?
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- MS. WINN: Hi, Valerie Winn, with PG&E. I guess
- 3 I am curious, as I look at these requests for really
- 4 detailed interval data, and the like, and I understand
- 5 your desire to use them for forecasting, if there is
- 6 perhaps an opportunity to have a more detailed
- 7 discussion around that as part of, say, the demand
- 8 analysis working group.
- 9 That's a group that's been working on
- 10 forecasting issues, here at the CEC, for a number of
- 11 years. And so, it could really help inform how we shape
- 12 this regulation. As to, you know, how are people doing
- 13 and what are they doing?
- I think there will be a concern that, you know,
- 15 the Investor Owned Utilities, who've had Smart meters
- 16 for a number of years, and we may actually be moving,
- 17 you know, to the next generation of those, just how much
- 18 detail do we actually use? I'm not sure if we're using
- 19 interval level data to do our forecasting.
- 20 And then, of course, our POU colleagues, they
- 21 may not even have Smart meter interval data, yet. And
- 22 so, it's going to be how do you, you know, pull all of
- 23 these disparate datasets together to make them work
- 24 efficiently, in your process.
- 25 COMMISSIONER MCALLISTER: Valerie, I just want

- 1 to chime in there. So, this is a conversation that has
- 2 a lot of analytical detail and I think -- you know, and
- 3 we have a lot of analytical challenges, right.
- 4 MS. WINN: Uh-hum.
- 5 COMMISSIONER MCALLISTER: We're being asked to
- 6 do a tremendous amount, in SB 350, of disaggregation, of
- 7 mapping categories of savings to different efforts and
- 8 different programs.
- 9 You know, we have a big State, with a lot of
- 10 climate zones. You know, but your -- the whole litany,
- 11 I could go on, and on, and on here, right. And, we're
- 12 trying to continue the conversation, in a productive
- 13 way, with our sister agencies, about the forecast set,
- 14 taking all of their concerns into account.
- 15 Like, the timing of solar. Like, you know,
- 16 going increasingly local with the kinds of reliability
- 17 assessment, and all of that.
- So, this is a -- you know, we know we have to go
- 19 far down this road. And I think the question is, sort
- 20 of in practical terms, what this looks like. And, you
- 21 know, again, we have a lot -- it's -- I think it's fair
- 22 to say, it's uneven across the State in terms of the
- 23 resources, you know, the data that's even available, and
- 24 just the level of sophistication in manipulating data,
- 25 and in automation, et cetera.

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- 2 that do this. We have a fairly high expectation, now, I
- 3 think, built into our society, in the way we live, that
- 4 there is quite a bit of IT infrastructure available to
- 5 be used for this effort.
- 6 So, I'm hopeful we're going to be able to -- and
- 7 I know the Chair is also tuned into this challenge. I
- 8 won't speak for him, but I definitely -- you know, I
- 9 think we all appreciate the, well, the challenge and
- 10 opportunity, right, that we have ahead of us.
- 11 And I very much appreciate the Legislature's
- 12 leadership on this. I mean, they're asking us to do
- 13 things that are difficult, but necessary.
- So, you know, this is one of the proceedings,
- 15 one of the kind of -- you know, we're in prerulemaking,
- 16 but this is one of the forums for really pushing this
- 17 forward. I think California is going to be way better
- 18 for it. And, hopefully, we're going to stir up a lot of
- 19 attributable savings for the utilities, as well.
- 20 MS. WINN: Great, great. And then, I guess the
- 21 one other question, I mean, I noticed, you know, we were
- 22 talking about PV, and you were talking about, you know,
- 23 the inverters and the amount of data we had. And I know
- 24 that, you know, those PV systems, and the metering
- 25 requirements for them have gone through a number of

- 1 changes over the years. So, you know, I'm not certain
- 2 that some of those early generation customers have
- 3 revenue quality meters that, you know, we even have that
- 4 inside invisibility into.
- 5 So, these are just some things that we will --
- 6 and then, the other question, or the other concern I may
- 7 have is having us, having utilities map data to the
- 8 Energy Commission's, like sub-areas, or climate zones.
- 9 I think we've had some concerns about that in the past
- 10 because how we do things may not match up with how you
- 11 do things.
- 12 And so, I would question, you know, how can we
- 13 develop flexible, relational databases that could take
- 14 the information that we provide you, and then map it the
- 15 way that you want to map it, as opposed to requiring the
- 16 utilities to do those sorts of things.
- 17 COMMISSIONER MCALLISTER: Yeah, that's a
- 18 perfectly valid observation. I mean, we had those sort
- 19 of snafus in the IEPR, you know, both early and late in
- 20 the process.
- MS. WINN: Yeah, yeah.
- 22 COMMISSIONER MCALLISTER: So, hopefully, we can
- 23 avoid that.
- 24 MS. WINN: And I think we've had some of those
- 25 discussions around some of the Prop. 39 data, as well.

- 1 It's like, should utilities be performing calculations,
- 2 or is that something that comes on the Energy
- 3 Commission's back end that gets -- you know, that
- 4 informs that discussion.
- 5 COMMISSIONER MCALLISTER: Yeah, all good stuff,
- 6 thanks.
- 7 MR. WENG-GUTIERREZ: Yeah, great. Thank you.
- 8 So, yeah, and I think we are open. You had
- 9 mentioned the DAWG Working Group, and I think we are
- 10 open to, you know, discussing some of these topics
- 11 within the DAWG context.
- 12 Certainly, I think we've had -- again, I
- 13 mentioned that April meeting. We've met with the group,
- 14 you know, with the group. I think it was maybe a sub-
- 15 DAWG, or a PUP, or something like that, that we talked
- 16 about some of these issues.
- 17 And they have been, even the load shape
- 18 modifiers, and other things, have been sort of
- 19 continually discussed. But we're open to having more
- 20 conversations within the context of the DAWG, on these
- 21 matters, certainly.
- 22 And then, yeah, and then the sub-area, again, if
- 23 we can work towards some sort of flexible solution, that
- 24 meets our needs, then I think that would be great if we
- 25 could come up with that.

- 1 MR. TOMASHEFSKY: Thank you. I guess I could be
- 2 the first one to say good afternoon, since it's 12:01.
- 3 So, good afternoon. Appreciate the chance to talk for a
- 4 minute or two. Scott Tomashefsky, the Northern
- 5 California Power Agency.
- A couple things that just kind of flagged as you
- 7 were talking earlier. You were mentioning, in 1344, you
- 8 were trying to tie the threshold to IRP reporting
- 9 requirements. I would at least suggest that that number
- 10 is probably a little bit low in terms of what that peak
- 11 electricity demand number is.
- 12 So, if you're referring to, in terms of the list
- 13 of 16 POUs that are subject to IRP reporting, that
- 14 number's probably going to need to have a bit of an
- 15 adjustment, because that will actually pull in a couple
- 16 that are probably not part of that list. So, we can
- 17 talk about that further, but it certainly should be
- 18 higher than 50. I'd keep it as close to 200 as
- 19 possible, but that's my own personal opinion.
- With respect to 1353, my concern, just in terms
- 21 of the language that's in there right now, is it's just
- 22 a little bit too open-ended. And in terms of the
- 23 Commission can do whatever it wants to go ahead and
- 24 secure that information, I think we've established some
- 25 precedent in other proceedings that deal with some of

- 1 the approaches towards, I quess progressive discipline,
- 2 if you will, for lack of a better term.
- 3 And I know, in the RPS enforcement regulations,
- 4 there's some language in there that talks about the
- 5 various iterations that you would have with respect to
- 6 the Energy Commission and the utilities that are
- 7 providing that information.
- 8 And so, to the extent it can be expanded upon, I
- 9 think that would be also somewhat helpful.
- 10 Two other things. Just I think, as Valerie was
- 11 talking a couple minutes ago, the notion of flexible
- 12 compliance and alternative compliance options. Again,
- 13 there's a lot of precedence that shows up in other
- 14 regulations, and this one hasn't been updated for a long
- 15 time. So, the notion of alternative compliance options
- 16 has really not been a marquee portion of what you'd find
- in a data collection proceeding.
- In fact, actually, I was talking to Andrea,
- 19 earlier. I mean, there are actually aggregated
- 20 approaches that we have, where NCPA provides to the
- 21 Energy Commission. And it's really not in the
- 22 regulations, but it's sort of there. It's helpful to
- 23 have those things built in.
- One final point, I would also suggest October
- 25 11th, even though there's plenty of time for other

- 1 conversations, I also think it's helpful for the agency
- 2 to have, actually, written documentation that gives
- 3 perspectives that can be looked at, as opposed to just
- 4 having a series of continuing, open-ended conversations
- 5 on where you get from pre-regulations to actually a
- 6 formal package.
- 7 So, given the various things that have been
- 8 going on post-legislative session, and other areas with
- 9 respect to cap and trade, RPS enforcement, and other
- 10 things like that, it would likely be a good idea to have
- 11 some additional time to deal with that. I think, having
- 12 until October 11th, just doesn't really give us an
- 13 opportunity to give it real thought.
- 14 But I don't think you're in a situation where
- 15 you have a specific time frame in mind to deal with
- 16 releasing the 45-day language, at least that would be
- 17 impacted by having a couple additional weeks to respond
- 18 to some of our initial thoughts on it. That's it.
- 19 MR. WENG-GUTIERREZ: Great. Thank you, Scott,
- 20 for those comments.
- So, to your first comment, about the 200, the
- 22 threshold levels, so I agree. Obviously, 50 megawatts
- 23 is going to go lower than the 16. There are -- there
- 24 were some situations where we did lower it to include
- 25 just those 16, to be consistent. But in other areas, we

- 1 lowered it even further, or lowered it from 200 to 50,
- 2 or something, to account for how we might want to
- 3 disaggregate the forecast in the future.
- 4 So, we can certainly take a closer look at those
- 5 and, again, see whether or not if we can stay at 200, or
- 6 wherever. But, you know, it was -- you know, in staff
- 7 conversations, it was, you know, thoughtful
- 8 conversations around what would be the appropriate
- 9 level. So, we can -- but we'll look at it, again.
- 10 And, certainly, if you have specific instances
- 11 where you feel like it should be 200 versus 50, if you
- 12 could include those in your written comments, that would
- 13 be appreciated.
- 14 In 1553 -- or, 1353, sorry, that language, again
- 15 that's language which was consistent with other data
- 16 collection req. language, and it's very, very section to
- 17 another section, I think, that is dealing with the --
- 18 maybe it's the PYRA Data Collection Regs. But it's
- 19 basically consistent within that Data Collection
- 20 Chapter.
- 21 So, I would be certainly interested in seeing
- 22 some alternative language that you might suggest, or
- 23 some other mechanisms through which you can have, as you
- 24 just characterized, progressive discipline areas, sort
- 25 of activities that would get to the same result. Right,

- 1 so I'm certainly open to that, as well, so would like to
- 2 hear about that.
- 3 Compliance alternative updates, I think you were
- 4 sort of talking about how that might -- it sounded like
- 5 you wanted some more alternatives or --
- 6 MR. TOMASHEFSKY: Well, I think what you find in
- 7 a lot of the other proceedings is that if the -- if the
- 8 objective is to have everyone be successful, as opposed
- 9 to being punitive --
- MR. WENG-GUTIERREZ: Uh-hum.
- 11 MR. TOMASHEFSKY: -- the idea is, to the extent
- 12 that there are not straight paths to get from Point A to
- 13 Point B, that there's other approaches that will
- 14 effectively get you the same type of information.
- 15 And we've had those -- you know, we haven't had
- 16 those conversations. But we've had those conversations
- 17 with the Commission, in the past, and have been
- 18 reasonably successful in looking at it in a lot of
- 19 different ways in, you know, the proceedings.
- 20 And so, to the extent that it can be built into
- 21 some of the data collection, there may be some areas
- 22 where you do get into the situation where maybe the
- 23 metering isn't quite what you want. And rather than
- 24 force feed that into a utility that may not be going
- 25 that direction, you can certainly have some alternative

- 1 that gets you in the same -- you know, the same final
- 2 result that you want to have.
- 3 MR. WENG-GUTIERREZ: Okay. Well, and again, I
- 4 think, you know, hearing some ideas about how that would
- 5 be appropriate in specific language that we're
- 6 proposing, would be great. I'd love to hear about the
- 7 alternative suggestions you have.
- 8 And then, as far as the deadline or the dates
- 9 that we have in there, you know, that was just the sort
- 10 of typical comment period. You know, after a workshop,
- 11 we usually have this typical comment period.
- We are going to be actively working on this for,
- 13 again, months to come. So, you know, if you want to
- 14 have other conversations around the regulations, and how
- 15 we're developing, I think we may have some other
- 16 workshops coming up, as well.
- 17 And, you know, even if there are no workshops
- 18 prior to the actual submittal, I mean, we can have a
- 19 workshop afterwards. I mean, those are all sorts of
- 20 things that we're in conversations about, figuring out
- 21 like when should we have workshops, when do we get
- 22 input, and that sort of thing.
- So, if you have some suggestions, as well, to
- 24 that, we would love to hear about that, as well.
- 25 COMMISSIONER MCALLISTER: Malachi, let me just

- 1 sort of chime in. Let's think about sort of -- I mean,
- 2 I hear what's kind of being asked for is, you know, some
- 3 advice about what sort of level of expectation for these
- 4 comments, you know, that will be due relatively soon.
- 5 Or, you know, I definitely don't think that we're
- 6 talking about comments that go to every level of detail.
- 7 You know, okay, you have this one bite of the apple and
- 8 that's it. That's not the case. I mean, Malachi's
- 9 saying that's not the case.
- 10 But maybe we can sort of have some back and
- 11 forth about expectations in the near term, and then the
- 12 long term for, you know, what level of comment. You
- 13 know, if it's we're looking at this through that issue,
- 14 we don't have it figured out, yet, and that's your
- 15 comment in a week.
- Or, whether it's, you know, more detailed than
- 17 that, and then what the back and forth is going to look
- 18 like. Really, when are we going to dig into, you know,
- 19 the specific issues of concern that are, you know,
- 20 starting to be brought up?
- 21 MR. TOMASHEFSKY: It makes your process better,
- 22 if it --
- 23 COMMISSIONER MCALLISTER: Absolutely, we need --
- 24 MR. TOMASHEFSKY: -- if you take care of some of
- 25 those concerns early on, and then you build it in the

- 1 45-day language, then we don't have much to say.
- 2 COMMISSIONER MCALLISTER: Yeah, and you're all
- 3 panicked -- you know, if you're all panicked, and like
- 4 having to focus on your highest priorities, then who
- 5 knows what else doesn't get talked about? So, I think
- 6 we just have to, you know, sort of tag each issue as we
- 7 can, but manage the discussion so that we're picking up
- 8 everything and not forcing -- not sort of going too
- 9 fast. Yeah, so thanks.
- MR. WENG-GUTIERREZ: Great. All right, and then
- 11 I think the only thing I had, if there are any more
- 12 comments online or anything?
- Okay, so if there's any comments or questions
- 14 online, if someone, if you would like to make a comment,
- 15 please raise your hand by clicking on the little raise
- 16 hand option in WebEx.
- Go ahead, Elise [sic], yeah.
- MS. MCGHEE: Hello?
- 19 MR. WENG-GUTIERREZ: Yes, you're on, go ahead.
- MS. MCGHEE: Okay, hi. My name's Lisa and I'm
- 21 actually from the San Diego Territory, and I'm actually
- 22 a PV, electric vehicle fleet operator.
- 23 And my comments would be about 1344(g), relating
- 24 to the data being lost or only specific to public
- 25 charging. My concerns would be is that, certainly,

- 1 fleet users, like myself, I've gone from 3,000 kilowatt
- 2 hours, to half of my fleet, which is EV right now, using
- 3 another 6,000 kilowatt hours per month.
- And, certainly, my characteristics are very
- 5 different from that of work charging. And that, if
- 6 we're going to be successful with EV transportation, and
- 7 some of the new regulations, we certainly need to find a
- 8 cost-per-mile incentive, and with some of the demand
- 9 rates, and reduce your energy rates, as well as lack of
- 10 sub-metering. All of these things are contributing to,
- 11 I think, some of the results that will allow us to
- 12 either be successful or not successful. As well as
- 13 ratchet demand.
- 14 The other thoughts were what we're doing about
- 15 data relating to what is some of the infrastructure
- 16 that's actually available on sites that will support
- 17 charging?
- 18 There are limitations relating to what can be
- 19 done and which will play a part in how we can continue
- 20 to adopt, and provide charging on site.
- 21 COMMISSIONER MCALLISTER: Those are great
- 22 comments. I want to just ask, actually, so in the
- 23 Transportation Forecast we're breaking fleets out, we're
- 24 trying to break fleets out, I would assume?
- MR. WENG-GUTIERREZ: Yeah. So, obviously,

- 1 fleets are different than -- commercial fleets are
- 2 totally separate from the regular fleets of consumers,
- 3 that they have.
- 4 COMMISSIONER MCALLISTER: Yeah.
- 5 MR. WENG-GUTIERREZ: So, yeah, as you mentioned,
- 6 Lisa, the duty cycles, the charging behaviors, even the
- 7 acquisition of those vehicles is -- the decisions being
- 8 made are totally separate and different.
- 9 And so we handle those, internally, as separate
- 10 items.
- 11 COMMISSIONER MCALLISTER: Yeah, good.
- 12 MR. WENG-GUTIERREZ: And I think I'll -- again,
- 13 I can look through that section, again. I thought the
- 14 focus had primarily been on, again, public charging
- 15 stations, or there might be some overlap between
- 16 commercial fleets that might use public charging
- 17 stations. But it wouldn't, certainly, be targeted
- 18 towards commercial fleet charging behaviors. Because
- 19 again, I think those are sort of depending upon the
- 20 fleet makeup, and their duty cycles, and what their
- 21 business is, they're going to have their own sort of
- 22 patterns, which we couldn't necessarily generalize.
- Which I think is the objective here is to look
- 24 at public charging stations and how can we generalize
- 25 that in the future, as we forecast more, and consumers

- 1 adopting EVs?
- 2 COMMISSIONER MCALLISTER: So, if the Forecast
- 3 Team looking at -- looking at fleets, and trying to get
- 4 data about the usage patterns of fleets, to sort of
- 5 incorporate into the Demand Forecast, or is that a
- 6 separate activity? Is that something that's not as much
- 7 in our purview, or what?
- I mean, I guess this conversation we're having
- 9 about regulations, are there elements of this that are
- 10 relevant for, you know, a manager, like Lisa?
- MR. WENG-GUTIERREZ: Yeah, so we do have data
- 12 collection in transportation. It's outside of what
- 13 we're talking about, really, here.
- 14 COMMISSIONER MCALLISTER: Okay.
- MR. WENG-GUTIERREZ: So, they have their own
- 16 sort of methods for doing surveys, and characterization,
- 17 and data collection.
- 18 COMMISSIONER MCALLISTER: Okay.
- 19 MR. WENG-GUTIERREZ: What we were really focused
- 20 on is what are the charging behaviors? You know, what
- 21 is the -- in the analysis of what is the peak impact, we
- 22 need to characterize that.
- 23 And so, to the extent -- I mean, I guess we
- 24 really haven't taken a look at the fleet characteristics
- 25 versus the, you know, public characteristics in real

- 1 detail, but it might be something we want to look at if
- 2 there are some pretty significant, regional, commercial
- 3 fleets that impact the peak loads. But that's not
- 4 something that we've taken a look at, yet, to my
- 5 knowledge.
- 6 MS. MCGHEE: Just to reiterate, you know, the
- 7 HFIPS are part of the vouchers that are available,
- 8 helping us incentivize the climate goals. And so, as we
- 9 relate to the hourly load estimates, and forecasting
- 10 peak demand, you know, 20 percent of my use is peak
- 11 demand. And I'm the equivalent, with just half of my
- 12 fleet, of 18 vehicles.
- 13 And so, in order for us to continue to be
- 14 successful, it is a deal breaker for me, as I've never
- 15 been having to deal with demands. I'm aggregated in
- 16 demand, my property is being aggregated with my
- 17 transportation use. I never used to have a demand bill
- 18 before. I've been in business for 25 years.
- 19 And so, my concerns is just these
- 20 characteristics are really changing the cost-per-mile,
- 21 which is a load factor that is, when I look at some of
- 22 the impacts of what I'm dealing with, and what should be
- 23 considered, because the use is considered to be a load
- 24 that's significant.
- 25 COMMISSIONER MCALLISTER: So, thanks.

- 1 Absolutely, I think we understand the dilemma that you
- 2 face, certainly, and you've got to make business
- 3 decisions and, you know, you're facing an electric
- 4 tariff that you have to pay.
- 5 So, I think part of what you're talking about
- 6 really is in a rates discussion with the utility, at the
- 7 local level. And then, but certainly, I think the fleet
- 8 behavior is something that we want to look at from an
- 9 analytical perspective, in the forecasting process. In
- 10 the transportation forecast, and particularly in places
- 11 where there are going to be large fleets that are a
- 12 significant load, you know, in aggregate.
- So, I really appreciate your input. And I
- 14 think, probably, it's relevant, you know, not just here,
- 15 but also at the local level, with the utility
- 16 conversation that you would have.
- MS. MCGHEE: Thank you.
- 18 MR. WENG-GUTIERREZ: No more comments online?
- 19 Okay, great.
- 20 So, I think I did -- I did skip over, I guess,
- 21 the Section 2505 which, again, just briefly, is the
- 22 insertion of the natural gas pipeline data, that Leon
- 23 had mentioned, earlier. Just creating the automatic
- 24 confidential designation on that topic area, under the
- 25 Section 2505.

1	So,	beyond	that,	I	think	that'	S	pretty	much

- 2 everything we had to cover today. Again, I think,
- 3 unless you have any closing comments or anything?
- 4 And if there are no more comments in the room,
- 5 or anything online, then I think it was a productive
- 6 conversation today. I think, hopefully, you have an
- 7 opportunity to look at the proposed language a little
- 8 bit in more detail.
- 9 I'm looking forward to comments back on all of
- 10 those elements. I know it's a lot of stuff and a lot of
- 11 material.
- 12 As I said at the outset, we are actively working
- 13 on this, so we are making changes and modifications, you
- 14 know, every day. And so, we're hoping to progress and
- 15 develop some pretty substantive regulations that will
- 16 help us in our analytical work. And with that, it's to
- 17 you.
- 18 COMMISSIONER MCALLISTER: So, thanks everybody
- 19 for coming. We wrapped up early, which doesn't always
- 20 happen, so that's good. Thank you for managing a very
- 21 productive and substantive workshop.
- 22 So, again, I think the conversation -- this is a
- 23 conversation starter. So, I want to thank staff for all
- 24 the work and all the thought up to now.
- In some ways, I feel like this is a conversation

- 1 that we've been having a little bit, not ad hoc. I
- 2 mean, we have legislation backing it up. But there are
- 3 a lot of people with good ideas about how California
- 4 should move forward, and information is sort of the life
- 5 blood of what we're all trying to do. Whether you're a
- 6 utility or, you know, a private enterprise out there, or
- 7 the Commission, or any of the State agencies that really
- 8 need to kind of understand what's going on out there, in
- 9 the world.
- 10 So, this is an exciting time. I think it's
- 11 something that's a bit overdue. We're kind of under the
- 12 gun to get this done. But at the same time, we have
- 13 some time to really move forward in 2017-2018. So, you
- 14 know, I want to invite everyone to just give it their
- 15 best, most thoughtful effort. I know you will. I,
- 16 certainly, am very dedicated to this topic, and feel
- 17 like it's just going to produce tremendous value for the
- 18 State, and help us reach the Clean Energy Goals that we
- 19 have.
- 20 So, you are all a fundamental part of that. And
- 21 I want to just thank you for coming. And then, looking
- 22 forward to all your participation in the future. So,
- 23 thank you. And we're adjourned.
- 24 (Thereupon, the Workshop was adjourned at
- 25 12:18 p.m.)

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

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