

EFFICIENCY COMMITTEE WORKSHOP
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:)	
)	
2008 Order Instituting)	Docket No.
Informational Proceedings)	08-DR-01
and Rulemaking on)	
Load Management Standards)	
_____)	

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

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ORIGINAL

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Jackalyne Pfannenstiel, Associate Member

CEC ADVISORS PRESENT

David Hungerford

Tim Tutt

CPUC ADVISORS PRESENT

Andrew Campbell, Advisor to Commissioner Chong

STAFF PRESENT

Gina Fontanilla

Angelica Ramos

Gabriel D. Taylor

ALSO PRESENT

Douglas A. Ames, Transphase Co.

Andrew Bell, Pacific Gas and Electric Company

Rick Boland, e-Radio USA Inc.

Jana R. Corey, Pacific Gas and Electric Company

Edward Fong, San Diego Gas and Electric Company

Mark Gaines, San Diego Gas and Electric Company

Gregory Hood, GreenSwitch LLC

Jerry Jordan, California Municipal Utilities
Association

Robert D. Levin, California Public Utilities
Commission, Division of Ratepayer Advocates

Mark S. Martinez, Southern California Edison

Larry Oliva, Southern California Edison

Jim Parks, Sacramento Municipal Utility District

Dan Partridge, Pacific Gas and Electric Company

Klaus Schiess, KS Engineers (via telephone)

Gayatri Margaret Schilberg, JBS Energy, Inc.
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Craig Sherman, Sacramento Municipal Utility
District

Scott Tomashefsky, Northern California Power
Agency

Scarlett Liang-Uejio, California Public Utilities
Commission, Energy Division

Vikki Wood, Sacramento Municipal Utility District

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P R O C E E D I N G S

9:35 a.m.

PRESIDING MEMBER ROSENFELD: Good morning everybody. I am Art Rosenfeld. Welcome to the Efficiency Committee Workshop on Load Management Standards.

Let me first introduce everybody, not so many of us. On my left is our Chairman, Jackie Pfannenstiel, who is also the Associate Member of the Efficiency Committee under whose auspices this is going on. The empty chair will be occupied pretty soon we hope by Tim Tutt, her advisor. Unfortunately Commissioner Chong from the PUC can't be here but is going to be represented by Andrew Campbell on my extreme left. And on my right is David Hungerford, my senior advisor.

We have had, I think, six workshops on load management standards and produced the first draft of the proposed report with about seven chapters of history and justification and summary of the workshops, and Chapter 8, which we will mainly discuss today, is the first draft of the proposed standards.

I should, before turning the show over to Gabe Taylor, I should say that Gabe Taylor was

1 responsible for the production of this first draft
2 with the devoted help of Dave Hungerford and a
3 cast of willing -- I guess you thought they were
4 helpful, Gabe.

5 MR. TAYLOR: Very helpful.

6 PRESIDING MEMBER ROSENFELD:

7 Collaborators. Here comes Tim Tutt. And Jackie,
8 Chairman Pfannenstiel, do you have any remarks?

9 ASSOCIATE MEMBER PFANNENSTIEL: I do,
10 thank you, Commissioner Rosenfeld. This is a
11 proceeding that will eventually result in the
12 Commission using its standard-setting authority.
13 Which we, I think most people recognize, is
14 something we do on a regular basis for appliances
15 and buildings but we have not for a long time used
16 this authority for setting load management
17 standards.

18 So if it appears that this process is
19 sort of evolving for us it is because we really
20 have not gone here in awhile. But what we have
21 here today to discuss are some draft standards
22 that were put out in advance with the report.

23 But also on the back table I put out,
24 prepared an alternate set of standards for three
25 of the standards that were raised. And I did so

1 because I thought that they would be, I want to
2 say more to the point of what we can and should be
3 regulating.

4 The standards once we approve them, once
5 the Committee approves them and we send them to
6 the full Commission and the Commission approves
7 them, they get sent to the Office of
8 Administrative Law. Once OAL has approved them
9 then these standards have the force of law and
10 they are not easily changeable, they are not
11 flexible. They are, in fact, a law that OAL has,
12 has proved. So we want to make sure we get them
13 right, both in the sense of what we are trying to
14 accomplish and in the actual language.

15 Commissioner Rosenfeld and I have agreed
16 that what is in front of us today is between the
17 original draft of the standards and my proposed
18 alternatives are correct we believe in the
19 substance but we recognize that they need a fair
20 amount more word changes to get them up to the
21 level that OAL will require. So we are partly
22 here all today asking for your help in both making
23 sure everybody understands the substance and that
24 we are on the same page as the substance and then
25 help in the drafting. Ultimately the attorneys

1 will take over that role.

2 So with that we will get into in the
3 course of the workshop the specifics of each of
4 the proposed standards. And as I say, we are
5 looking for your help and then we will turn them
6 around again.

7 PRESIDING MEMBER ROSENFELD: Thanks.
8 What about Andy? Do you have any comments from
9 you or Commissioner Chong?

10 CPUC ADVISOR CAMPBELL: Sure, just a
11 brief comment. Commissioner Chong appreciates the
12 CEC soliciting our active, the PUC's active
13 participation in this process.

14 PRESIDING MEMBER ROSENFELD: And we
15 appreciate the fact that you have come up here
16 countless times, thank you.

17 CPUC ADVISOR CAMPBELL: Sure. And we
18 look forward to hearing, I look forward to hearing
19 from folks today. At the PUC in reviewing these
20 standards we have an eye toward wanting to be
21 consistent with our general law and policy
22 direction and the policies that the PUC already
23 has adopted so that's an important piece of this
24 for us. But thanks.

25 PRESIDING MEMBER ROSENFELD: Tim, Dave?

1 ADVISOR TUTT: (Nodded).

2 ADVISOR HUNGERFORD: No.

3 PRESIDING MEMBER ROSENFELD: Okay, Gabe,
4 tell us how you're going to run the day.

5 MR. TAYLOR: Good morning, everybody.
6 Thank you for coming out a little early today. I
7 think we'll have enough to talk about today. Real
8 quick a little housekeeping before we get started.
9 There's two exits to this room. There is a
10 restroom over on this side of the building and a
11 restroom over behind the security desk on this
12 side. There is a snack bar just on the second
13 floor. Most of you have been here before.

14 In the unlikely event that there is a
15 fire alarm it is very loud but don't panic. Just
16 follow the employees out of the building and
17 catty-corner across the street to the park and
18 everything should be fine. I have seen fire
19 alarms and fire drills during business meetings.

20 All right, let's get started. Thank you
21 for coming to this workshop, this Committee
22 Workshop on the load management standards. I
23 would like to emphasize real quick what the
24 purpose of the load management standards are.

25 The Energy Commission has the authority

1 to require cost-effective programs. And the
2 general goal of these programs is to lower the
3 long-term economic environmental costs of our
4 electricity generation and distribution system.
5 So the focus of these standards is really on this
6 purpose, although the details, of course, are
7 quite complex.

8 The proceeding was originally conceived
9 in the 2007 IEPR, Integrated Energy Policy Report
10 by the Energy Commission, which recommended that
11 we open this proceeding, the Commission open this
12 proceeding in close coordination with both the
13 Public Utilities Commission and the Independent
14 System Operator.

15 The proceeding, this OII informational
16 proceeding and rulemaking proceeding was started
17 in January of this year. Most of you participated
18 in the workshops we have had sense on these many
19 topics. Up until this point the workshops have
20 been focused on the general concepts of what the
21 Energy Commission can do with this authority and
22 what should be done with this authority. So it
23 has been a very general, kind of conceptual
24 process so far.

25 In November of this year, just a couple

1 of weeks ago, the Committee with the staff's help
2 published a draft proposed document that discussed
3 in some detail advanced meters, rate design with a
4 focus on dynamic electricity pricing, enabling
5 technologies with a focus on automated demand
6 response tools. The needs of customers and the
7 information that they need in order to respond to
8 these lofty goals that we have here. Smart Grids.

9 And based on those topics we came up
10 with some draft, conceptual load management
11 standards. Most of you are familiar with each of
12 these, I'll just list them here. There's seven of
13 these standards which we'll discuss today.

14 The agenda, as you might be aware, and I
15 know that some people were not aware of this until
16 today, I have tried to separate these load
17 management standards into topic areas so we can
18 discuss kind of the general topics. We have three
19 topic areas to discuss today so the standards will
20 be addressed out of order. And we will go through
21 each of the standards and I will ask each of the
22 stakeholders and possibly the Commissioners to
23 give us their informal comments on the standards

24 And again I emphasize that this is an
25 informational proceeding; this is a workshop. We

1 are intending here to try to work through some of
2 the differences we have and develop a better
3 rulemaking process so that when we finally go to
4 OAL there is a minimum of disagreement.

5 I am going to discuss real quick the
6 future. After the workshop today we have about a
7 week and a half to get in written comments. These
8 are, again, informational comments. These are
9 suggestions to the Committee on where we should
10 take this.

11 Over the next month or month and a half
12 I hope to meet individually with any of the
13 stakeholders who are interested and discuss their
14 comments in detail and provide that information
15 back to the Committee to help influence the next
16 draft of this document.

17 In late January hopefully, that's an
18 optimistic schedule, this is a proposed schedule,
19 we hope to issue a final version of the document
20 that we are here to review today. And that should
21 contain much clearer language and better
22 background, including an economic analysis of the
23 standards that the Committee chooses to put forth.

24 And then shortly thereafter we will
25 convert that over into a full rulemaking. That's

1 something I do want to emphasize again and this is
2 something I think some people are a little unclear
3 on. We have not yet started the rulemaking
4 process. This process so far has been an
5 informational proceeding. We are collecting
6 information and building hopefully a consensus on
7 where the Energy Commission should exercise its
8 authority.

9 When we start that rulemaking process we
10 will send a full rulemaking package, including a
11 Notice of Proposed Action and Initial Statement of
12 Reasons and all the ensuing CEQA and economic
13 analyses to the Office of Administrative Law.
14 Once it is approved by them and published in the
15 State Register then we will have a formal 45 day
16 comment period.

17 During that 45 day comment period that's
18 when things get very formal and I think most of
19 you are familiar with it. But just in case,
20 during that 45 day comment we will likely have
21 another workshop near the end. Any comments that
22 are submitted by stakeholders during that period
23 we are required to respond to in writing. We will
24 respond to them and the Office of Administrative
25 Law is the final adjudicator on whether or not we

1 have responded sufficiently.

2 After that 45 day comment period if we
3 make any changes to our express terms then there
4 will be further 15 or 45 day comment periods,
5 depending on the significance on the level of
6 changes.

7 So with that I would like to move
8 directly into our discussion today. We have about
9 two hours before lunch and hopefully we can get
10 through the initial set of discussions. First I
11 would like to just go around the table here at the
12 front and have a quick discussion of the
13 standards. I am just going to go through them in
14 the order that I've presented in the agenda.

15 So we'll start out with Load Management
16 Standard number 2, that's the dynamic electricity
17 rates. and I do want to, I do want to highlight
18 that we have alternative language presented by the
19 Chair in the handout in front. If anybody did not
20 receive that handout please let me know, I will
21 make you additional copies.

22 PRESIDING MEMBER ROSENFELD: Gabe, why
23 don't we have our panel members get up and say
24 hello and introduce their names.

25 MR. TAYLOR: I'm glad somebody is being

1 polite this morning. Good morning everybody,
2 thank you for coming. Please, I would like to go
3 around the table starting over here with Jana from
4 PG&E and introduce yourselves.

5 MS. COREY: I'm Jana Corey and I am with
6 Pacific Gas and Electric Company. Can I make like
7 a two second remark?

8 MR. TAYLOR: Of course.

9 MS. COREY: Okay. First of all I think
10 we really thank you for the opportunity to comment
11 on this and we really like what you are trying to
12 accomplish here, which is making these programs
13 and technologies and products available to all
14 California consumers.

15 We have a number of these things that
16 are moving down the path under the CPUC
17 jurisdiction but we appreciate the opportunity for
18 all Californians to take advantage of the
19 information that is going to be available for
20 energy management. And we will make our other
21 remarks specific to each of the items as they come
22 up for discussion, thank you.

23 MR. MARTINEZ: Hi, I'm Mark Martinez
24 with Southern California Edison. I am sitting in
25 for Larry Oliva who is in route.

1 I'll reserve our comments specifically
2 for each of the load management standards but I
3 would also like to reiterate Jana's point that we
4 are glad to be here and glad to participate.
5 Thank you.

6 MR. FONG: I'm Ed Fong from San Diego
7 Gas and Electric and I'm a familiar face in this
8 proceeding.

9 We also appreciate the opportunity to
10 speak today, thank you.

11 MR. PARKS: I'm Jim Parks with the
12 Sacramento Municipal Utility District.

13 We also appreciate the opportunity to
14 provide comments. We are supportive of demand
15 response and we will have comments on each of
16 these issues.

17 MR. JORDAN: Thank you. Jerry Jordan
18 with the California Municipal Utilities
19 Association. We came today prepared to outline
20 two major areas, one is our believe that you can't
21 really have a one-size-fits-all. There are a lot
22 of smaller utilities that have very differing
23 service territories in California and there should
24 be some provision for them.

25 And secondly, we were really prepared to

1 speak eloquently on local control of rates. I
2 must say at first reading though that the
3 Chairman's alternative language probably solves
4 many of those problems so I may not have as much
5 to say today.

6 PRESIDING MEMBER ROSENFELD: Well we're
7 glad to have you here anyway.

8 MR. JORDAN: Thanks.

9 MR. TOMASHEFSKY: Good morning. I'm
10 Scott Tomashefsky with the Northern California
11 Power Agency.

12 Jerry alluded to the issue of some of
13 the smaller utility perspectives. As our
14 membership goes from about 10 megawatts peak to
15 550 or 600 megawatts peak so there are certainly
16 some provisions and impacts for smaller utilities
17 that we certainly want to convey.

18 ASSOCIATE MEMBER PFANNENSTIEL: Is there
19 nobody here from LA or SCCPA? Are we expecting
20 somebody, Gabe?

21 MR. TAYLOR: I did speak with them. I
22 don't think they are going to come.

23 ASSOCIATE MEMBER PFANNENSTIEL: Thank
24 you.

25 PRESIDING MEMBER ROSENFELD: Here we go.

1 MR. OLIVA: I'm Larry Oliva.

2 PRESIDING MEMBER ROSENFELD: Your place
3 has been warmed.

4 (Laughter)

5 MR. OLIVA: Great, thank you.

6 PRESIDING MEMBER ROSENFELD: You just
7 came in time to say good morning to everybody, we
8 are just getting started.

9 MR. OLIVA: Good morning. My name is
10 Larry Oliva. I am with Southern California Edison
11 in Tariff Programs and Services.

12 PRESIDING MEMBER ROSENFELD: Welcome.

13 MR. OLIVA: Thank you.

14 MR. TAYLOR: Okay, as I discussed in the
15 introduction we are just going to go through the
16 load management standards in the order presented
17 on the agenda. I am going to ask each of the
18 stakeholders in front of the room to give some
19 brief comments, remarks or any thoughts or
20 discussion items that they have that they would
21 like to discuss with the Commissioners. Likewise
22 I encourage the members on the dais to interact.

23 And in addition I would like to
24 encourage members of the audience. If you would
25 like to speak on any of these load management

1 standards please feel free to come up to the
2 podium. Just make a line while the other members
3 here are discussing and we'll get through that.

4 Please keep your comments to about five
5 minutes or so. We do have a lot of information.
6 Hopefully we will have some extra time at the end
7 of the day where we can make some more comments as
8 well. So I think with that, Jana, would you like
9 to go first.

10 MS. COREY: Great. On the load
11 management standard number two, dynamic rates. As
12 you pointed out in the draft proposed standards,
13 PG&E has a proceeding that is ongoing at the
14 Commission at this time on dynamic electricity
15 rates so our comments are de minimis on this
16 particular topic. However, we do believe that it
17 should -- we appreciate the opportunity to have
18 this kind of program apply to non-IOU entities
19 like CCA, direct access and demand response
20 aggregators. And hopefully that will be an
21 outcome of this proceeding. That's all I have.

22 PRESIDING MEMBER ROSENFELD: I think the
23 spirit of this -- I have a general remark. I
24 think what the PUC working with the IOUs has
25 accomplished is magnificent. Precisely my view is

1 we want to open this up to the remaining whatever
2 it is, 15 or 20 percent of the state which is not
3 IOUs. And while I'm talking about that, SMUD of
4 course has already got a vigorous program so I am
5 looking fondly at Jim Parks.

6 ASSOCIATE MEMBER PFANNENSTIEL: Jana, I
7 want to make sure that PG&E and the other IOUs
8 focus specifically on AB 1X. One of my concerns
9 is that we not wait until AB 1X gets resolved for
10 the investor-owned utilities to promote time
11 varying, dynamic rates, whatever you want to call
12 them, to residential customers. And I think that
13 we don't want to hide behind AB 1X.

14 On the other hand, just having a tariff,
15 however well-designed it is, on your tariff book
16 and then wondering why nobody is taking it, isn't
17 sufficient either. I think that there needs to be
18 an understanding that there will be some set of
19 tariffs which, my understanding of AB 1X is that
20 it is voluntary, then there isn't a problem. But
21 there is one thing about it being just plain there
22 and something else about it being promoted. And
23 so we are very conscious of wanting to get the
24 investor-owned utilities out there working with
25 residential customers.

1 MS. COREY: Right. In our AMI
2 proceeding, the original proceeding, we had
3 significant funding for marketing and promoting
4 this particular critical peak pricing tariff that
5 we have offered.

6 We had our first summer where we offered
7 it. We had an accelerated take rate, much higher
8 than we anticipated. We wanted to experiment with
9 10,000 customers and we just signed people up very
10 quickly. So there's a lot of interest in it. And
11 the marketing materials are being evaluated. How
12 effective were they, did they target the right
13 audience, did we have the take rate we expected,
14 that kind of thing. We have a very keen interest
15 in promoting this particular tariff and we had a
16 very good successful summer doing that.

17 So I think you can rest assured we have
18 funding available. The Commission in its wisdom
19 carved out the marketing money out of our AMI
20 proceeding and it is not fungible with the other
21 elements of the project. It is only targeted to
22 marketing the critical peak pricing tariff.

23 ASSOCIATE MEMBER PFANNENSTIEL: And is
24 this residential, single tariff residential
25 customers?

1 MS. COREY: Yes, it was focused on --

2 ASSOCIATE MEMBER PFANNENSTIEL: And
3 everybody who has the advanced meter was marketed
4 to?

5 MS. COREY: Would be, yes. And we only
6 had Bakersfield in last summer so that's where we
7 went with our direct marketing materials.

8 ASSOCIATE MEMBER PFANNENSTIEL: I see.
9 But in the future as the meters go in the
10 marketing materials will follow?

11 MS. COREY: That's right.

12 ASSOCIATE MEMBER PFANNENSTIEL: Great,
13 thanks.

14 ADVISOR TUTT: Janet, I had one
15 question, this is Tim. You mentioned CCAs and
16 ESPs. I just wanted to make sure that you're
17 talking about, as we go through this process to
18 developing the final standards that we track them
19 so that they do apply to CCAs and ESPs and other
20 retail sellers as well as utilities. Thank you.

21 MS. COREY: Right.

22 ADVISOR TUTT: And for the record I
23 would like to clarify that CCAs and ESPs are
24 community choice aggregators and energy service
25 providers.

1 PRESIDING MEMBER ROSENFELD: Gabe is the
2 master of the glossary. Larry.

3 MR. OLIVA: Yes, thank you. Good
4 morning.

5 Southern California Edison has critical
6 peak pricing rates offered for large customers who
7 have integral meters today. We plan to roll out
8 critical peak pricing TOU rates and peak time
9 rebates as we roll out our AMI metering
10 infrastructure. We plan to offer critical peak
11 price rates to customers beginning in 2010, here
12 again roll out when our systems are available, and
13 we were very supportive.

14 I echo PG&E's comments on we are
15 supportive of dynamic pricing generally and for
16 dynamic pricing to be a standard throughout the
17 state. If we want to make dynamic pricing or load
18 management and demand response a way of life then
19 everybody should be exposed to it and participate.

20 PRESIDING MEMBER ROSENFELD: That's it?

21 MR. OLIVA: That's it.

22 PRESIDING MEMBER ROSENFELD: Enthusiasm.
23 Ed.

24 MR. FONG: I will have a few more
25 substantive comments here. A couple of things I

1 just want to mention. On the original draft --

2 PRESIDING MEMBER ROSENFELD: A little
3 closer to the mic.

4 MR. FONG: On the original --

5 PRESIDING MEMBER ROSENFELD: That's it.

6 MR. FONG: On the original draft SDG&E
7 firmly supports the principles laid out; I'll call
8 them principles 5 through 14 for dynamic rates and
9 rate design. That goes without saying.

10 SDG&E has been an early advocate of
11 dynamic rates. As a matter of fact we're the
12 first to have a default CPP for our commercial and
13 industrial customers 20 kW and greater and that
14 was in a recent decision this year from the Public
15 Utilities Commission. With that we introduced
16 various new concepts like the capacity reservation
17 charge, which was mentioned in the report.

18 We have also mentioned to the California
19 Public Utilities Commission that we are developing
20 other dynamic rate proposals that will be in
21 subsequent rate design window filings and this
22 includes a default dynamic rate for the small
23 commercial customers. We plan to eliminate the
24 flat rate option, the flat rates that the small
25 commercial customers are on today, which are the

1 less than 20 kW customers.

2 Obviously the option of RTP is also on
3 the agenda for us and we are trying to figure out
4 exactly how to balance the option of dynamic rates
5 for the residential customers. I'll get into that
6 a little bit because it has to do with
7 cannibalizing different dynamic rates when you
8 start offering many, many options out there.

9 A couple of comments on the peak time
10 rebate. I actually really took great notice of
11 the statement you made, Chairperson Pfannenstiel,
12 about not hiding behind AB 1X. And I think that
13 means we have to introduce the concept of dynamic
14 rates to the residential customers as quickly as
15 possible when the AMI meters become available.

16 So to make a long story short, where we
17 stand, which differs a little bit from the report
18 here, we believe that the peak time rebate, or
19 PTR, is a mechanism that will provide all
20 residential customers introduction to the concept
21 of time differentiated usage and the value of
22 that. We also agree with the report though that
23 it is not a substitute for dynamic rates. It is
24 not a dynamic rate in a pure sense. But it does
25 provide a bridge to the long-term goal of moving

1 the residential customers there.

2 What we think of is, and not to hide
3 behind AB 1X at all. Once we determine how we can
4 ramp off of AB 1X then later we can determine how
5 we can ramp down PTR and ramp up, in many ways
6 begin to migrate customers over to a CPP rate.
7 This is a little bit of a trick that you have to
8 think of but it is something that I think we can
9 look at and try to resolve.

10 The last thing that I sort of want to go
11 on is when we look at voluntary CPP what we are
12 struggling with, and this is a note to the
13 California Public Utilities Commission here. When
14 you have a CPP rate for the residential customers
15 there are some things that happen today in the
16 higher tiers, Tier 3 and Tier 4 for the
17 residential customers. If you have a voluntary
18 CPP rate and you don't structure it correctly you
19 can see there's a lot of migration from the higher
20 tier/high usage customers over to a CPP rate.

21 And what they are doing, what will
22 effectively end up happening is that they end up
23 avoiding paying those higher tiers for obvious
24 economic rationale reasons, right. The rationale
25 is absolutely the correct economic person doing

1 it.

2 But what ends up happening now is that
3 since there will be less and less customers in
4 those Tiers 3 or 4, how are you going to pay for
5 the lower tier, the 130 percent subsidy that
6 happens for the lower tiers. So that is a
7 dilemma, a revenue requirement dilemma that you
8 run into. This is for the UBC charges and for the
9 commodity charges that come into bear.

10 There are alternatives but they end up
11 violating, if you think about it, violating the
12 principles of 5 through 14. You can have like a
13 tier, an AB 1X tier for the UBC charges and CPP
14 rates for the commodity charges. But then later
15 the rate then becomes less transparent.

16 And my caution to the Commission here is
17 that these things have to be worked through. They
18 are technical details but they end up impacting on
19 who migrates to those rates, what ends up
20 happening, what ends up happening to the AB 1X
21 subsidy and who pays for it or who doesn't pay for
22 it.

23 ASSOCIATE MEMBER PFANNENSTIEL: Well it
24 does seem to me that they are more than just
25 details, they are really the substance of rate

1 design and I am very, very aware, very sympathetic
2 to that. But in fact if customers are making the
3 right economic decision to move over to a CPP rate
4 and the CPP rate is correctly designed then the
5 issue of fewer customers paying for higher tiers
6 may, in fact, end up collapsing the AB 1X program
7 of its own weight, which is probably not a bad
8 thing.

9 MR. FONG: Yes, yes.

10 PRESIDING MEMBER ROSENFELD: But it is,
11 it is very tricky. Did you have more to say, Ed?

12 MR. FONG: No, I think we're done with
13 our response. Just to mention, for the load
14 management standards that follow we have other
15 SDG&E representatives.

16 PRESIDING MEMBER ROSENFELD: Thank you.

17 MR. PARKS: When we looked at the seven
18 proposed load management standards I think six out
19 of seven we said, this looks pretty good and we
20 had a few clarifying questions. But this is the
21 one that gave us the most heartburn, I won't deny
22 that. We felt like it was a bit too prescriptive
23 in that it was really telling us what to do and it
24 was taking away the authority of our boards to
25 make their own decisions in making rates. And so

1 this one caused a fair amount of concern.

2 I think the alternate standard is one
3 that looks a little bit more promising from my
4 perspective and we'll look at it in more detail,
5 of course, and provide some written comments. But
6 we think that establishing rates is kind of the
7 lifeblood of the utility. It's the way we recover
8 our costs. And we fell like that each utility
9 should have the ability to set those own rates
10 based on the characteristics of that utility
11 because each utility is unique.

12 And I think that this standard as
13 proposed is just going into a little bit too much
14 detail in telling us exactly what we should do and
15 I think that we need to have the option to have
16 some flexibility.

17 Having said that, I think that most
18 utilities work better under getting a high level
19 directive and then you allow the utility to figure
20 out how to achieve that. As an example I would
21 give AB 2021 which said to the munis, you have to
22 achieve one percent. That's fine, that's a big,
23 high-level goal and we will figure out how to do
24 that. It did not say you will do it by so many
25 CFLs and so many air conditioners. It wasn't

1 prescriptive, it just gave us a high-level goal.
2 And that's something that we would be more in
3 favor of.

4 I would also side with my other muni
5 brethren on the impact to smaller utilities. I
6 think the lower 25-plus utilities make up
7 something like less than five percent of the load
8 in the state and I think it would be a big effort
9 to really lay some of these things on them. And
10 so I guess I would ask for a little bit of a
11 reprieve for some of the smaller utilities. Let
12 things formulate at the bigger utility level and
13 then over time take a look again and see if it
14 makes sense to move into that area.

15 PRESIDING MEMBER ROSENFELD: Jim, let me
16 ask you. I thought that we had already Chapter 8
17 which said, if you are in trouble because you are
18 small or you are waiting two years until you can
19 piggyback on SMUD or whatever that it will be easy
20 to get an exemption.

21 MR. PARKS: Okay. That's good. I did
22 see that there was some way for an exemption. It
23 seemed like they had to apply for that.

24 PRESIDING MEMBER ROSENFELD: We clearly
25 need some definitions in which it is easy to read.

1 It's sort of a rat's nest right now.

2 MR. PARKS: I think so too and I think
3 it is in our best interest to just respond to some
4 of this in our written comments.

5 And then also just say that SMUD is
6 planning on doing some demonstration projects with
7 critical peak pricing and time of use. From that
8 we hope to figure out the direction that we want
9 to go once our advanced metering infrastructure is
10 installed.

11 Beyond that, we will provide written
12 comments that will be in more detail than what I
13 am saying today.

14 PRESIDING MEMBER ROSENFELD: Jim, I
15 realize this isn't right on your panel but can you
16 remind us of your time scale for putting in AMI.

17 MR. PARKS: Yes. We are going to the
18 board in January with the proposed vendor and then
19 we are going to do a demonstration project with
20 something like 10,000 to 15,000 meters beginning
21 in 2009. We are expecting to have full deployment
22 sometime in 2012.

23 PRESIDING MEMBER ROSENFELD: Thanks.
24 That's it?

25 MR. PARKS: That's it.

1 MR. JORDAN: Thanks. I would echo many
2 of Jim's comments. I think the proposed
3 alternative does issue -- does deal with some of
4 these issues. But the kinds of things that we
5 were concerned about is that both the Public
6 Utilities Commission and local elected officials
7 actually have a fiduciary responsibility to
8 ratepayers and I think the previous draft may have
9 put that in some danger.

10 In addition, public agencies have a
11 couple of other things that investor-owned
12 utilities do not have. Article 13B of the
13 constitution, for instance, says that a local
14 agency cannot raise the rates more than what is
15 reasonably related to the cost of service without
16 a vote of the public.

17 And not necessarily you couldn't do that
18 but you would have to probably do a rate study to
19 demonstrate that and make sure that local agencies
20 weren't subject to a taxpayer lawsuit on that
21 issue, which is something that the rate bodies
22 will do I think under the proposed alternative
23 language.

24 The other issue that affects public
25 agencies strangely enough is the issue of capital

1 facilities fees. The Supreme Court decided in --

2 PRESIDING MEMBER ROSENFELD: I'm sorry,
3 the issue of? Just say it again.

4 MR. JORDAN: Capital facility fees. In
5 1986 I believe it was, the California Supreme
6 Court in the San Marcos case decided that one
7 public agency couldn't charge another public
8 agency for fees that went for capital services,
9 i.e. transmission or power plants. That was the
10 subject of litigation, a number of lawsuits.

11 It was subject to about three different
12 bills that have passed trying to define that, the
13 last one of which was AB 1051. And it is just
14 another requirement that has to go into the
15 ratemaking process to prove that something like
16 this differentiated rate was in fact something
17 that could be charged to other public agencies and
18 that it was not violating Article 13B of the
19 Constitution. But I think your amendments will go
20 a long way towards solving those problems.

21 MR. TOMASHEFSKY: I think as we go
22 around the dais here we'll probably see a common
23 theme where the investor-owned utilities, by the
24 time you're done with San Diego's comments you've
25 pretty much ... the same thing. By the time

1 you're done with the munis perspective you'll have
2 the same --

3 PRESIDING MEMBER ROSENFELD: Scott,
4 Scott, to the court reporter, just for the court
5 reporter, I want to make sure the panel members,
6 even the panel members say who they are. I know
7 you are Scott Tomashefsky but --

8 MR. TOMASHEFSKY: Absolutely. Scott
9 Tomashefsky, NCPA again.

10 And again I want to certainly echo
11 Jerry's points and Jim Park's points related to
12 improvements that are made with the Chairman's
13 proposal here in terms of local governing board
14 authority for rate establishment.

15 There's a couple of things I just wanted
16 to point out in terms of what has been proposed as
17 an alternative. Which one is more of a question,
18 one is an acknowledgement. I think the notion of
19 Provision 1 where we are talking about offering a
20 menu of time differentiated rates to customers who
21 have advanced meters. I think that is very
22 important to put in the regulations.

23 Because to the extent that the first
24 standard is, the conclusion is that the meters are
25 not cost-effective, you don't want to put a

1 utility in a situation where they would have to
2 offer time differentiated rates where there is
3 electronic metering and other infrastructure that
4 you would want to have to support that. So you
5 don't want to put a utility in a position to
6 completely fail in terms of how you might deploy
7 those things short of just having time-of-use
8 rates.

9 The other one is more of a question or
10 kind of a query. In terms of having in Section 3
11 when we talk about the utilities providing
12 extensive education and promotional material. I
13 would, I would argue that that might be something
14 that would be better offered by the Energy
15 Commission as something that could be coordinated
16 as opposed to imposing that obligation on the
17 utilities to develop that information.

18 You might want to have something that is
19 a little bit more standardized in terms of the
20 things that are offered, the types of rate
21 structures. And you will have a varying level of
22 knowledge base of customers and also utility
23 representatives that it would be different
24 perspectives that you could provide as a state
25 agency as opposed to each individual utility.

1 PRESIDING MEMBER ROSENFELD: My brow is
2 furrowing. I would, I would think that outfits
3 like your association and CMUA would do assume
4 that responsibility. If there are economies of
5 scale, and I understand your point. It seems like
6 for the Energy Commission itself to be dealing
7 with that isn't as efficient as you guys stepping
8 up to the plate.

9 MR. TOMASHEFSKY: It depends on what
10 type of information you want to see put forth.
11 Using the term extensive is subject to an awful
12 lot of discretion and interpretation as to what
13 could be considered extensive and so would there
14 be a follow-up review process. Would the Energy
15 Commission have a, would they be in a position to
16 determine whether the promotional material is
17 enough. Because at some point you are going to be
18 evaluating whether, whether we are doing what we
19 are supposed to be doing from your perspective.

20 And that's been kind of the objective of
21 the 2.2 percent of demand response. That's been a
22 concern of the Commission for a long time. Do you
23 want to, do you want to try to assess why those
24 things are happening? And so from the standpoint
25 of, is it the lack of education average, those

1 type of things, and what's the impact of that.

2 So I think really from the standpoint of
3 how you get there, it's more of kind of a
4 partnership to determine how you develop the
5 educational materials. But you might want to give
6 some consideration as to whether that would be
7 something that would be at least shepherded by the
8 Commission instead of individual utilities.

9 One other comment also just alluding to
10 the exemption notion. I know Gabe and I had
11 talked about this off-line before. Page 31 has a
12 statement at the end that talks about it is not
13 the intent of the Energy Commission to create
14 undue burdens on any utility or to increase costs
15 to utility customers and talk about exemptions to
16 be granted.

17 Very similar to PUC decisions is that
18 the only thing that really counts is what is at
19 the end of the decision, not in the text of the
20 document. So to the extent that is the intent,
21 which I think it is, that somehow has to find its
22 way into these proposed standards. So ultimately
23 when a document is finalized before you start the
24 regulations process please be clear as far as what
25 you want in terms of exemptions.

1 ASSOCIATE MEMBER PFANNENSTIEL: And you
2 will help us with that language?

3 MR. TOMASHEFSKY: We will absolutely
4 help you.

5 PRESIDING MEMBER ROSENFELD: But Scott,
6 you are absolutely right. If it isn't in Chapter
7 8 it --

8 MR. TOMASHEFSKY: Doesn't count.

9 PRESIDING MEMBER ROSENFELD: -- doesn't
10 count. But we have not done that yet.

11 MR. TOMASHEFSKY: And I also just want
12 to make as a general statement that when we talk
13 about exemptions that is by no means a reflection
14 of we aren't interested in finding ways to make
15 this successful. Exemptions are done for
16 practical and business purposes, it's not done to
17 say, we are interested in ignoring state policy
18 objectives.

19 ADVISOR HUNGERFORD: Right. And we
20 would like some input from the municipal utilities
21 on how those exemptions would be constructed and
22 what would be required. For instance, one
23 argument was that all municipal utilities would
24 have provide some sort of justification for an
25 exemption.

1 But there are some very small utilities,
2 two guys running nine meters and a dam, that might
3 not, that that might be an excessive burden. And
4 so we need some help from you guys to figure out
5 what levels are appropriate for both, what level
6 of filing for an exemption or automatic exemptions
7 for size. Because you guys know better than we do
8 what levels we need.

9 MR. JORDAN: We can certainly do that
10 and provide you with that language. It also
11 occurs to me, I don't know how you defined
12 publicly-owned utility in your regulation. In the
13 statute it is often defined in such a way that it
14 actually includes NCPA and SCCPA. And there
15 doesn't seem to be a lot of sense for joint power
16 agencies who provide power but are not certainly
17 retail customers to be at least technically
18 subject to these regulations.

19 ADVISOR HUNGERFORD: Your knowledge and
20 help on clarifying that would be well received.

21 MR. JORDAN: We'd be happy to do that.

22 PRESIDING MEMBER ROSENFELD: We probably
23 need a definition, approved by Northern and
24 Southern California. Maybe it's a, I don't know,
25 a Class 1, a public utility to which our order

1 applies and Class 2 gets treated --

2 MR. JORDAN: We can do that. We'll get
3 together and come up with that.

4 PRESIDING MEMBER ROSENFELD: Andy.

5 CPUC ADVISOR CAMPBELL: I just wanted to
6 add that some thought will also need to go into --
7 on the investor-owned utility side there are some
8 small investor-owned utilities who aren't
9 represented here and there are also a couple of
10 multi-jurisdictional utilities, Pacific Corp and
11 Sierra Pacific in particular. So, you know, some
12 thought will need to go into how they should be
13 considered here.

14 PRESIDING MEMBER ROSENFELD: Jana.

15 MS. COREY: I have a specific question.
16 Was Commissioner Pfannenstiel's alternative
17 language the one that will be sort of going
18 forward language or are you making a decision
19 between the two? Because we are supportive of the
20 changes that you made this morning.

21 ASSOCIATE MEMBER PFANNENSTIEL: And the
22 answer is, neither one will go forward as is.
23 They are two different approaches to I believe
24 reaching the same goal. And some people may --
25 they are free to comment on one or the other but

1 we will try to get the best of both. I was
2 looking at the goal and approached it somewhat
3 differently than the staff had so we would like
4 comments on both.

5 MS. COREY: Okay, very good.

6 PRESIDING MEMBER ROSENFELD: Thanks for
7 clarifying that, Jana.

8 MR. FONG: So if the two versions, the
9 Commission will ponder how to incorporate the two
10 languages then I have a question, an additional
11 question for you to ponder. This is the first
12 time I have seen what we consider time-of-use
13 rates, TOU rates, as a dynamic rate. At least
14 from SDG&E's perspective we have always considered
15 time-of-use, pure time-of-use rates, as just a
16 time-differentiated rate but not a dynamic rate.

17 ASSOCIATE MEMBER PFANNENSTIEL: Yes. My
18 sense again is sort of definitional and I am not
19 going to push back on that. It is certainly not a
20 dynamic rate. But it does get towards some of the
21 other criteria we are trying to meet with rates,
22 which is to give customers better pricing nodes to
23 allow them to make decisions and do things. Not
24 as good as dynamic rate may work in some cases.
25 So again I would like to hear from the utilities.

1 If you don't think that a time-of-use rate is
2 worth offering then please tell us that.

3 MR. FONG: Well I think we have always
4 considered a time-of-use rate when we have talked
5 with the Public Utilities Commission as a little
6 bit more with certainty and what we think of as
7 another hedge rate that you could have but it is
8 not what we think of as a pure dynamic rate.

9 ASSOCIATE MEMBER PFANNENSTIEL: Right.

10 MR. FONG: And now we're quibbling over,
11 you know, terminology and definition of things.

12 ASSOCIATE MEMBER PFANNENSTIEL: But if
13 you have, if you have advanced meters out there
14 for residential customers and some large number of
15 residential customers, even a small number, don't
16 want to be bothered with dynamic rates, wouldn't a
17 time-of-use rate be better information and a
18 better rate to offer those customers and to
19 promote to those customers than an inverted block
20 rate?

21 PRESIDING MEMBER ROSENFELD: In fact, I
22 think it was Ed Fong who just said you are going
23 to, once you get the meters in place you are not
24 even going to offer a flat rate anymore, you will
25 take advantage of at least time-of-use as the

1 minimum default.

2 MR. FONG: Exactly. For the small
3 commercial customers today, all the small
4 commercial customers, if they don't elect a time-
5 differentiated rate, are on a flat rate, our
6 proposal is to ultimately eliminate the flat rate.
7 And now it may be that a TOU rate is an option,
8 that is a flatter TOU, right. But we don't think
9 that what we think of as a Schedule A flat rate
10 ought to be anywhere sort of in these options.

11 PRESIDING MEMBER ROSENFELD: Once a
12 month is too seldom to read the meter. Larry.

13 MR. OLIVA: I would just add that time
14 differentiated rates such as TOU are essential for
15 permanent load shifting, if you are going to
16 encourage that through some form of technology
17 then TOU needs to be offered in some way.

18 PRESIDING MEMBER ROSENFELD: Just for
19 the benefit of people in the audience who may be
20 slightly less specialist on this let me just
21 summarize the actual status with the PUC with the
22 IOUs. And that is, in Commissioner Chong's
23 decision last year for rates in the PG&E rate case
24 the preferred rate default opt-out to start in
25 2011 is for critical peak pricing and time-of-use.

1 I support that strongly and I hope we go in that
2 direction.

3 She then permits as alternatives that
4 you can opt-out to just time-of-use, which is
5 consistent with what Ed Fong said. I think it is
6 fair to say that everybody on this dais thinks
7 that is great. The question is, how much of it do
8 you put into law? Dave Hungerford.

9 ADVISOR HUNGERFORD: I am going to
10 direct this question to Mr. Fong because I know
11 that SDG&E is, I talked with SDG&E staff about
12 some of these issues but the other utilities can
13 feel free to chime in.

14 One of the elements that was articulated
15 clearly in Commissioner Pfannenstiel's alternate
16 but was intended in the staff draft was the idea
17 that customers would have a menu of rates to
18 choose from rather than a single rate. They would
19 start out on a default, they would be defaulted to
20 a particular rate. And just like in IOU service
21 territories, they are defaulted to an inverted
22 tier rate now.

23 I know SDG&E has looked at this idea of
24 providing equivalent risk reward, different levels
25 of risk and reward within different rates but that

1 were essentially equivalent in terms of the, in
2 terms of the customer's impact on the system and
3 that you were looking at providing such
4 alternatives. And I would like to hear a little
5 more about what you guys have been thinking about
6 that as voluntary options.

7 MR. FONG: Dave, there's actually been
8 some rather vigorous debate within SDG&E on how
9 the structures are within a customer class. And
10 you look at different customer load profiles
11 within the customer class. How many rate options
12 would you offer. And that's the issue of risk and
13 reward. Because then later you would have certain
14 customers select a rate that they would migrate to
15 and they could be better off without taking much
16 action on what we think of as on the demand
17 response side. So it's a delicate balance.

18 With that I will say one thing. That
19 was the idea in many ways of the capacity
20 reservation charge, right. That a customer could
21 reduce some of the risk if they selected the
22 customer reservation charge at some level. They
23 would have to do some analysis but they could
24 reduce the risk. Of course they would have to pay
25 the capacity reservation charge.

1 But that has always been our concept.
2 That somehow the customer could choose their risk
3 reward ratio. But it's a trick, again, a
4 technical issue. How to structure those rates so
5 that they have the, they can make the right
6 choice. And the choices that they have, whether
7 it's a capacity reservation charge or the CPP
8 energy-type charge, it's transparent. It's
9 transparent and it's clear to them.

10 I know I didn't give you a direct
11 answer. I don't have an answer like, how many
12 rates would we have, what are the different rates
13 that we would have that would satisfy one set of
14 customers versus another set of customers within
15 the same customer class.

16 But it is something that I mentioned
17 that we are looking at and it is a rigorous
18 debate. Do you have four rates, five rate
19 options, six rates? Do we divide within a
20 customer class six segments, seven segments? It
21 is a very difficult issue.

22 MR. JORDAN: If I read this proposal
23 correctly, having the rate default to this new
24 complicated rate structure may not be the best way
25 to get customer acceptance in all utilities. For

1 them -- It would seem to me you would have more
2 buy-in from the public if they actually had to
3 choose this rate structure rather than if it was
4 defaulted to them because they forgot to read
5 their bill stuffer.

6 ADVISOR HUNGERFORD: All right, I'll
7 actually direct a question to the IOUs that
8 addresses that. When you consider the idea of an
9 opt-in versus opt-out scenario, which we with the
10 Public Utilities Commission and the IOUs have been
11 talking about for a number of years, what are your
12 expectations on the potential penetration of
13 voluntary opt-in rates, at best and at worst?

14 MR. FONG: I can tell you from our
15 current experience and that's actually the real
16 data that we have. So as you know, we are the
17 first utility with a default CPP rate for the C&I
18 customers as I mentioned. We were expecting
19 essentially a 70 percent retention rate within the
20 default CPP. At this particular point we have a
21 75 percent retention rate with the default CPP.

22 Now of course those numbers can change,
23 right. Twelve months from now after the 12 month
24 obligation changes they may change. But at this
25 point we were projecting 70 percent, it's at 75

1 percent. And of course -- But customers opt-out
2 too. It depends on the options that they can opt-
3 out to. That's a critical, that's a critical
4 issue. And that's what we're struggling with.
5 How options do we give them? How many optional
6 rates do we give them?

7 I don't want to speak to any one
8 particular segment but there's the one segment
9 where we have a few number of customers, this is
10 the agricultural water segment, but we have a huge
11 number of optional rates there. That was what we
12 were struggling with internally. How many
13 optional rates do you offer for a specific
14 customer?

15 PRESIDING MEMBER ROSENFELD: I don't
16 know whether this is a question you are prepared
17 to comment on or not but if you have default
18 option two and different possible rates, if I were
19 the customer I would want to see shadow bills of
20 what my monthly bill would be under these options.
21 Have you addressed that question or is this too
22 complicated a question to bring up here?

23 MR. FONG: It is really a technology
24 question and a customer information systems
25 question. When we moved to default CPP, when we

1 received a decision from the Commission, one of
2 the things that we had committed to and we
3 provided to our customers was a energy bill
4 analysis tool so they could look at what would
5 happen if they selected various levels of the
6 capacity reservation charge and compared it to
7 their otherwise applicable TOU rate. All these
8 customers were on a TOU rate. So they had that
9 tool to work a what-if analysis.

10 However, I come back. This is the, this
11 is the debate, right? If I have five or six other
12 optional rates would I also incorporate five or
13 six of those rates within this tool too. And now
14 it becomes really a more difficult like a software
15 technology issue because essentially you are
16 recreating a bill for a customer. Five different
17 bills, six different bills. And what customers
18 are interested in is not just their monthly bill,
19 it's their annual. They want to look at all 12
20 months.

21 PRESIDING MEMBER ROSENFELD: Year to
22 date or whatever.

23 MR. FONG: Well they want to look at, if
24 I were on this rate for this 12 month period what
25 is the impact on my bill.

1 ASSOCIATE MEMBER PFANNENSTIEL: Is it
2 absolutely out of the question that the utilities
3 could develop some software program and make it
4 available to customers to do themselves and say,
5 you know, on this time-of-use rate at these -- you
6 know, you plug in your usage level, this is what
7 it would be different times of the day. Let them
8 play with it rather than you having to do it for
9 all your customers.

10 MR. FONG: No actually we did not do it.
11 We developed a software program. The customers
12 got on-line to the software program. They had an
13 account ID. It downloaded 12 months of history
14 and they could run the what-if scenarios with two
15 rates, the default CPP and selecting various
16 capacity reservation charges and compared that
17 with their TOU rate.

18 But I said it becomes, I'm not quite
19 sure if I am using the right term, exponential.
20 It is really difficult when you add more and more
21 optional rates there because you have to replicate
22 the bill for the customer and that's the tricky
23 part.

24 PRESIDING MEMBER ROSENFELD: Ed, to make
25 a tiny comment on that. I don't see that it is

1 much more difficult for SDG&E to have to do the
2 work for say three shadows. I think it is very
3 difficult for the customer to make up his mind.
4 If you can calculate a shadow bill for Rate A, for
5 Tariff A, you can calculate a tariff bill for Rate
6 B and Rate C. But the customer will get pretty
7 damn confused. Yes, that's a really interesting
8 program. But bless you for experimenting with it.

9 ADVISOR HUNGERFORD: I see that PG&E has
10 someone else that joined Ms. Corey at the dais.

11 MS. COREY: Yes, this is Andrew Bell.
12 Andrew is our rate expert. And I wanted to make
13 sure that he had an opportunity to comment on your
14 questions, A; and B, also tell you a little bit
15 about the results of our CPP summer. Some of the
16 findings that came out of that experience were
17 remarkably successful and I think that people can
18 take heart from our experience on that.

19 MR. BELL: I think --

20 PRESIDING MEMBER ROSENFELD: Stand up so
21 I can see you, Andrew.

22 MR. BELL: I think there were two sets
23 of questions. One, Commissioner Pfannenstiel
24 started with the questions about voluntary versus
25 opt-out and expectations about enrollment levels

1 under the two. Certainly I think that everybody
2 has agreed all along that you would get more
3 customers on the CPP rates or the other dynamic
4 rates if they are opt-out than you do if they are
5 voluntary.

6 PG&E had long advocated for voluntary
7 programs and we have gotten, as Jana has already
8 alluded to, a good response in the first summer in
9 Bakersfield with just from the first round of
10 mailing right at the beginning of the summer. We
11 got over ten percent of the customers who already
12 had the meters in the Bakersfield area to make an
13 affirmative choice to choose the CPP service
14 during the first summer.

15 That said, it would certainly be
16 surprising if we ran an opt-out program and we
17 only retained ten percent on the CPP program, so
18 there's no question that you are going to have
19 more customers on an opt-out basis. PG&E has been
20 concerned that customers not learn about CPP for
21 the first time when they get their first bill that
22 is on a CPP rate and that is one of our concerns
23 with a voluntary program.

24 Another concern that we have had is that
25 if you have a voluntary program you can target

1 market it towards customers with lots of air
2 conditioning, customers who have the most ability
3 to produce real demand response benefits,
4 hopefully while achieving real savings too.

5 You may, if you have a default or an
6 opt-out program, in the worst case scenario you
7 run the risk of having people who structurally
8 benefit from going on the rate, lower their bill
9 without actually having to do anything. They may
10 be people who aren't even at home during the
11 afternoons so they don't have load to shed in the
12 afternoons. They will get reduced bills, they
13 will benefit from the reduced bills and they will
14 be very happy. but if they are the ones who stay
15 in the rate and everybody who has air conditioning
16 opts out, that's almost a worst case scenario that
17 you can get from an opt-out.

18 These are issues we have discussed
19 really over the last ten years that we have been
20 talking about various forms of critical peak
21 pricing in California. Based on our reading of
22 Decision 08-07-045, however, from the CPUC's
23 perspective the ship seems to have sailed on the
24 choice of opt-out versus opt-in.

25 And so we are preparing the filing in

1 February taking the Commission's instructions that
2 we got in July seriously that what they want to
3 see is opt-out proposals for all but the
4 residential customers with residential to be
5 addressed in the future after, after AB 1X has
6 been resolved or has expired.

7 That is my picture on the voluntary
8 versus opt-out. Perhaps I should ask if there are
9 questions from the dais before I talk about shadow
10 bills.

11 PRESIDING MEMBER ROSENFELD: David
12 Hungerford.

13 ADVISOR HUNGERFORD: In terms of
14 terminology. We view, or certainly I view the
15 term voluntary to apply to both an opt-in and an
16 opt-out rate because the customer's choices are
17 not restricted, it's simply a starting point
18 issue. Right now customers are not voluntarily in
19 the IOU service territories on their inverted tier
20 rates and they are not voluntarily paying up to 50
21 cents a kilowatt hour for their marginal
22 consumption. So the term voluntary applies to
23 both rates in our perception.

24 MR. BELL: I recognize --

25 ADVISOR HUNGERFORD: You were familiar

1 with that but I am saying it for the record.

2 MR. BELL: I recognize that point. And
3 it is fair to remind me because I do make that
4 linguistic slip from time to time.

5 ADVISOR HUNGERFORD: And I will also say
6 that certainly staff who have been working this
7 agree that the first bill shouldn't be a
8 customer's introduction to a rate change. The
9 other --

10 MR. BELL: That's correct. But I do
11 want to point out that we can't send a blue truck
12 to every single house and wait until the customer
13 comes home and talk them through it. We'll do
14 everything we can to provide customer information.
15 But I know that I don't read every piece of mail
16 that I get from PG&E. I'm sure there are others
17 who --

18 ADVISOR HUNGERFORD: Even the ones you
19 write?

20 (Laughter)

21 MR. BELL: Sometimes those are the ones
22 that are the last to open because I've already
23 read them at the office.

24 No, but seriously, we know that there
25 are going to be some people and it gets to be a

1 larger problem as you go farther down the size
2 queue. There are going to be some people, no
3 better our best efforts to communicate, and you
4 know. Hopefully it will be a relatively small
5 fraction but there will be some people the first
6 time they learn about it is when they get a bill,
7 under an opt-out program. Under an opt-in program
8 obviously people have made an affirmative choice.

9 There are still issues and we had some,
10 I should talk. We had 10,000 people sign up in
11 Bakersfield just in the first two weeks and I was
12 quite pleased with that response. We did have, if
13 I remember correctly the last time I heard, 500 of
14 those 10,000 drop out over the course of the
15 summer. It's actually a pretty good retention
16 rate through the first summer.

17 There were different reasons why
18 different people dropped out. In a couple of
19 cases that I remember we talked to one spouse, the
20 spouse signed up, and then the other spouse
21 learned about the program when the first bill
22 came. So that's an issue where we had one
23 customer in the household make an affirmative
24 decision to choose but they hadn't shared it with
25 the other person in the household and that created

1 difficulties.

2 ADVISOR HUNGERFORD: That may be a very
3 common response. I know that would happen in my
4 household.

5 Before you go into the shadow bills,
6 which is one of the things that you wanted to talk
7 about that I think we can discuss further here I
8 wanted to ask you a little bit about the idea of
9 structural benefiterers, which are the people that
10 on a time-of-use or a CPP rate, any change in
11 rate, there are going to be people whose load
12 profiles will give them a discount compared to
13 their current bill and others whose bills will go
14 up compared to a current bill, which is one of the
15 issues that I think the Commissioner has brought
16 up as a rate increase idea, a problem.

17 Under current rates there are customers
18 who are -- because they are paying close to an
19 average rate, what they are paying is figured off
20 of an average rate, have lower than average peak
21 consumption but they are paying an average rate.
22 That means that they are actually subsidizing the
23 air conditioning -- the people who have high peak
24 load profiles. And those who have higher peak
25 load profiles may be being subsidized.

1 So if the rate, if the rate design that
2 you come up with results in a revenue neutral
3 outcome and that the utility doesn't increase
4 their revenue under a situation where the same,
5 the same consumption scenario happened. Then it
6 seems like a reasonable thing that some customers
7 would come out winners by the fact that they are
8 having less of an impact on the system.

9 If these rates are true and cost-based
10 then some customers are overpaying because they
11 have a low impact on the system and some customers
12 are underpaying. And so that shift, that shift is
13 something we need to talk about. But is that, do
14 you consider that a major problem in terms of
15 policy or do you consider it a major problem in
16 terms of political viability?

17 MR. BELL: I think it is a classic
18 pricing dilemma that we face as we move towards
19 more time-differentiated rates. And I know that
20 at the staff level we have been talking about this
21 for a number of years. It is why I prefer to
22 refer to it as structural benefitters rather than
23 as free riders. Because the structural
24 benefitters, it can be argued, are paying more than
25 they should under the current rates.

1 But a couple of comments. First of all,
2 revenue neutral rate design is designed to be
3 revenue neutral for the whole class, as if
4 everybody was going to it. It is not going to be
5 revenue neutral if it is implemented on an opt-in
6 or opt-out basis and it turns out that the people
7 on the left hand side of the curve, if the left
8 hand side of the curve is where the structural
9 benefiters are, if all the people on the left hand
10 side of the curve stay in and all the people on
11 the right hand side of the curve opt-out. At that
12 point it is not revenue neutral, it is a little
13 bit revenue under. I don't think that would be a
14 large event but it does make the rate a little bit
15 less than revenue neutral and you would have to
16 make things balance the accounts in future years.

17 The second thing that it does do if you
18 do have that kind of an outcome that we need to
19 keep in mind and go into this with our eyes open
20 is that if those are the people who predominate on
21 the rates, it's true --

22 PRESIDING MEMBER ROSENFELD: Those
23 meaning the shifters?

24 MR. BELL: No, the structural
25 benefiters. The ones who benefit without doing

1 any change.

2 PRESIDING MEMBER ROSENFELD: The people
3 from Oakland who don't have a big air conditioning
4 bill.

5 MR. BELL: Like me.

6 PRESIDING MEMBER ROSENFELD: Yes.

7 MR. BELL: Yes. The difficulty then is
8 that you can argue that you have gotten the
9 structural benefiter out from underneath an
10 unfair tax if you will in paying for air
11 conditioning. And so you may have achieved that
12 policy goal of having rates that are more in line
13 with costs but you have not promoted demand
14 response because I am not at home between two and
15 six. And I don't have an air conditioning even
16 when I am at home, about the only thing I could do
17 is unplug my refrigerator. You are going to have
18 perhaps promoted rates that are more in line with
19 costs, but if that is the outcome you may not get
20 as much demand response as you had hoped.

21 ASSOCIATE MEMBER PFANNENSTIEL: But that
22 could be one acceptable outcome. If there are
23 customers who can't provide you much in the way of
24 demand response because of their usage
25 characteristics then just giving them more

1 accurate price signals is not in any way I think a
2 negative outcome.

3 MR. BELL: No, it is not a negative
4 outcome.

5 ASSOCIATE MEMBER PFANNENSTIEL: There is
6 no reason to penalize them because they can't
7 provide greater demand response.

8 MR. BELL: That's correct, that's
9 correct. I just want to make sure that we are all
10 going into this with our eyes open because I don't
11 think we are all here today and I don't think that
12 we all came up here a half-dozen times last summer
13 to solve the problem that Andrew Bell in Oakland
14 was paying too much for his electricity. We are
15 trying to promote demand response.

16 PRESIDING MEMBER ROSENFELD: Well I
17 don't know, I think I'm a little bit with Jackie.
18 We are taking advantage of new technology; smart
19 meters are now available. They have lots of
20 advantages, they also avoid reading the meter. I
21 feel that we should take advantage of all those
22 possibilities. And if I don't get the last
23 decimal point of demand response that's fine by
24 me.

25 ASSOCIATE MEMBER PFANNENSTIEL: And I

1 also think that a time-varying rate is going to
2 keep Andrew Bell from plugging in his plug-in
3 hybrid during the peak hours of the day anyway.

4 MR. BELL: Okay.

5 PRESIDING MEMBER ROSENFELD: But you
6 were going to talk -- I'm sorry, David, are you
7 okay?

8 ADVISOR HUNGERFORD: Yes.

9 ADVISOR TUTT: And I have one question
10 too for Andrew. Talking about turning off or
11 unplugging your refrigerator is a pretty dramatic
12 move. But with smart technologies it may not be
13 that you unplug the refrigerator but it just turns
14 off the freezer cycle during that time and you are
15 not affected at all but you do have demand
16 response.

17 MR. BELL: Ten years down the road that
18 would be a great, that would be a great outcome.

19 PRESIDING MEMBER ROSENFELD: But we want
20 to get started.

21 ADVISOR TUTT: And we need the
22 infrastructure --

23 ADVISOR HUNGERFORD: There's a chicken
24 and an egg issue there.

25 Without diving too deeply into the

1 details of rate design, one of the things that you
2 and a number of people in this room discussed
3 three or four years ago during the default CPP
4 hearings for large customers was the issue of
5 hedging fully-hedged opt-out rates.

6 The idea that when a customer is on --
7 right now the utilities in their procurement
8 practices are hedging, the utilities are taking a
9 risk for the customer in meeting extreme peak
10 loads, right?

11 And when a customer takes on that risk
12 by being on a CPP rate or some other dynamic rate
13 or some other design that you might come up with,
14 they should receive a discount for the amount of
15 that risk that they are taking on. That is, they
16 shouldn't be paying the premium for peak, for
17 resources that you are procuring to meet the peak
18 because they are taking on that risk and paying
19 the extreme high prices for what they would be,
20 for what would be a purchase in the real time
21 market or the day-ahead market for you.

22 So the idea that if a customer were to
23 opt-out, it would seem that the opt-out rates
24 would include, based on the level of risk the
25 customer was taking on. Maybe it's far too

1 complex to do that in rate design. But that the
2 opt-out rates could reflect those hedging premiums
3 that the utility is currently paying. And the
4 level of risk that they are taking on would
5 reflect, would be reflected in the overall cost of
6 that rate.

7 PRESIDING MEMBER ROSENFELD: But what's
8 your question?

9 ADVISOR HUNGERFORD: And so the question
10 is, am I dreaming or is that something that is
11 possible to think about and consider in rate
12 design?

13 MR. BELL: I have to start by saying I
14 feel like the Kevin Kline character in A Fish
15 Called Wanda and I have to ask you, what was the
16 middle part?

17 (Laughter)

18 MR. BELL: But seriously, remembering,
19 trying to recall what you were asking about. And
20 I actually want to talk about hedging, or what has
21 been called hedging under Ed's program at San
22 Diego when I talk about shadow bills, so I'll come
23 back to that.

24 The primary thing I want to be careful
25 about is I believe that the hedging that the

1 utilities do in the procurement business, which is
2 not a part of the company that I have worked in in
3 some time and it's a little bit mysterious to me,
4 but I know just enough about it not to be
5 dangerous.

6 What I do know about it and have been
7 told a couple of times is that the kind of hedging
8 instruments that the utility enters into to guard
9 against the risk of fuel price swings is very
10 different from the kind of perhaps more primitive
11 hedging that we are trying to do with capacity
12 reservation charges for customers under critical
13 peak pricing. I do think there is a role for the
14 capacity reservation charges in a well-designed,
15 critical peak pricing program.

16 But I want to be careful about saying
17 that kind of hedging and the kind of hedging that
18 gets done in electric procurement are the same
19 thing. I think they are different animals and I
20 hesitate to call it hedging.

21 ADVISOR HUNGERFORD: Okay.

22 MR. BELL: Going to the shadow bills
23 issues. As we are preparing the filing that we
24 need to make in compliance with the Commission
25 decision issued over the summer, that it puts a

1 burden on us of not only filing the rates but
2 talking about what kind of tools we are going to
3 be able to make, first of all to help customers,
4 educate customers about the rates and give them
5 tools for deciding about the choices in rates that
6 they are going to have.

7 We are going to do as good a job as we
8 can. We will be describing it in more detail when
9 we make the filing. It is a difficult problem.
10 And I want to caution that San Diego is a much
11 smaller utility than we are and also they have
12 just gone down to the 20 kilowatt level. We are
13 ultimately having to go to all commercial and
14 industrial customers.

15 Ninety percent of our customers are
16 under that 20 kW threshold so that creates an even
17 larger -- we have approximately a half-million
18 business customers all told. Of those, 50,000
19 more or less are in the over 20 kilowatt category
20 and the other 450,000 are under 20 kW, and so we
21 could certainly do a better job with tools than
22 more complicated rates for the over 20 kW category
23 but it gets more complicated with larger numbers
24 of customers. With less attention they are going
25 to be paying to their electric bills it becomes a

1 bigger problem.

2 There is also an issue with these rates
3 that I would describe as ex ante shadow bills,
4 which customers are going to look at before they
5 enroll, and ex post shadow bills, which customers
6 are either going to ask for or are going to, or
7 are going to create themselves if they feel like
8 they made a bad choice at the beginning of the
9 summer.

10 I am going to put Ed on the hook a
11 little bit in a minute to talk about an issue that
12 I have talked with others in San Diego about that
13 comes up in this context. Which is, when we do
14 the ex ante shadow bills we have to assume one of
15 the issues that was addressed and pretty much the
16 door closed on in the decision issued last summer
17 is that rather than designing rates based on a
18 fixed number of calls each summer the Public
19 Utilities Commission wants us to establish and
20 communicate a threshold in advance and stick to
21 that threshold. And let the number -- in a hot
22 summer let there be more calls, in a cool summer
23 let there be fewer calls. To design the rates
24 around the number of calls that are expected in an
25 average summer.

1 When I prepare ex ante shadow bills for
2 that kind of an approach I am going to be assuming
3 it is an average summer. I am also going to want
4 to try and give, and I am getting my arms how to
5 do this now, I am going to want to give customers
6 a way of looking at what their risk exposure is in
7 a warm summer, what their risk exposure is or what
8 their benefit potential is in a cool summer. But
9 that complicates greatly the process of
10 communicating the shadow bills and risks kind of
11 information overload for the customers.

12 I understand that in San Diego's first
13 summer on the critical peak pricing program there
14 have been no CPP events called at all. Perhaps
15 their trigger was set too high. Perhaps also as I
16 understand, San Diego's climate is very similar to
17 San Francisco's. There is not that much
18 variability and that makes it hard to design a
19 good trigger and makes the potential outcome of
20 either very few calls or a large number of calls
21 quite likely.

22 That raises issues when I talked with
23 one of Ed's counterparts. One of the first things
24 is that they retained, I think Ed said, 75 percent
25 of the customers. They offered customers a

1 default of hedging half of their load. What that
2 meant was that they paid for half of their demand
3 on a take or pay basis and then they only were
4 required to pay CPP charges on top of that level
5 of there were CPP events.

6 That greatly narrows the risk exposure
7 for customers. But it leaves people with buyer's
8 remorse and they want to talk about what kind of
9 after-the-fact customer care issues they may be
10 experiencing where I would imagine customers going
11 to Ed and saying, golly, you put me by default on
12 this rate where I was paying take or pay 50
13 percent of my demand. If I had known well enough
14 not to have any capacity reservation I wouldn't
15 have had to pay any CPP charges for the whole
16 summer and I wouldn't have had to pay any demand
17 charges for the whole summer. Ed.

18 MR. FONG: A couple of things. I
19 talked about this software tool that we provided
20 to customers. In the software tool they could
21 select what they thought were the number of CPP
22 days, their expected number of CPP days. The CPP
23 rate that we designed was designed for non-CPP
24 events.

25 They could have put in a number of zero,

1 one, two or three and then they could decide then
2 later whether a CRC was worth it or not or what
3 level of the capacity reservation charge was worth
4 it. So that's why I was getting to the complexity
5 of the software there allows you to do this but if
6 you have a lot of rate options out there it gets
7 even more complex.

8 With that being said, our preliminary
9 data at least shows that the summer of 2008 in San
10 Diego was very, very mild. It will probably be
11 one of our more mild summers that we have had.
12 Historically, obviously, we designed the rate for
13 nine CPP days given the historical numbers that we
14 saw.

15 With that being said we also saw, I
16 think we briefed Andy Campbell on this, in terms
17 of who actually proactively, which customers
18 proactively selected a CRC. Just didn't go to
19 default because they were, you know, they didn't
20 want to do anything and they automatically got the
21 default 50 percent capacity reservation charge.
22 It at least appears to us in the data that over 50
23 percent of the customers proactively went to the
24 tool that we provided them and did some analysis
25 to select a CRC.

1 So with that being said, some of those
2 customers opted out, of course, but it appears
3 that at least over 50 percent of the customers.
4 Andrew makes a great --

5 PRESIDING MEMBER ROSENFELD: Excuse me,
6 Ed. If you didn't do anything and you just took
7 the default, that would have been for no CRC?

8 MR. FONG: No, they would have gotten a
9 50 percent.

10 PRESIDING MEMBER ROSENFELD: Fifty
11 percent was the default.

12 MR. FONG: Yes, 50 percent was the
13 default.

14 PRESIDING MEMBER ROSENFELD: I
15 interrupted you, sorry, go ahead.

16 MR. FONG: I was going to address
17 Andrew's issue about, in terms of what we think
18 the customer reaction will be after they look at
19 their full 12 -- the issue is the full 12 month
20 bill, not any single month, right? Customers will
21 see some fluctuation but after they look at the
22 full 12 months.

23 It would be very interesting when we go
24 into the next summer because they are going to
25 have the option again to select a CRC. And so

1 from their 2008 experience does that somehow
2 impress upon them, right, hey, wait a minute, I've
3 got to be even a little more careful now. And it
4 is a transparent risk/reward issue, right? Do I
5 really expect nine event days, do I expect four or
6 five?

7 But this comes at the point that Andrew
8 was getting to. We are looking at in the San
9 Diego case, with the customers that for the summer
10 of 2008, roughly about 1750 customers. When we
11 move to the small commercial that I talked about,
12 that's roughly going to be, I believe, between
13 120,000 to 140,000 customers.

14 And that is the issue. Now you have to
15 make the rates for such a large base of customers
16 -- I wouldn't call them the simple version of CPP
17 but it may not necessary be the version of CPP
18 that we have now, default for the large commercial
19 and industrial customers. It is an issue of
20 transparency, right, and what a small customer can
21 deal with in terms of decision-making and risk.

22 MR. BELL: Focusing back on the shadow
23 bill issue in particular. I think what this
24 discussion with Ed and I highlights is that for
25 50,000 customers I can do a fairly good job. I

1 have tried to since we began implementing the
2 voluntary CPP for customers over 200 kilowatts
3 with about a population of about 10,000 customers,
4 develop tools to let customers make the choice
5 between the standard tariff and a CPP tariff based
6 on an assumed average number of calls and without
7 capacity reservation provisions.

8 It adds a degree of, an extra degree of
9 complexity if you need to show a range of possible
10 number of calls, it adds a degree of complexity if
11 you need to model the choice of different capacity
12 reservation levels so that it creates an extra
13 degree of complexity. You go from 10,000
14 customers to 50,000 customers when you lower the
15 threshold to 20 kW, to 500,000 customers when you
16 drop the kilowatt threshold altogether. All of
17 those things, each step increases the complexity
18 exponentially.

19 ADVISOR HUNGERFORD: Let me ask for
20 clarification. Do you see it as a problem for
21 customers to pay less in a cool summer and then
22 pay more in a hot summer but that over a number of
23 years would average out to an equivalent to the
24 current rates? It seems like customers would
25 consider that more fair than having to, than

1 having to worry about trying to make their costs
2 equal from year to year to year. Just comments on
3 that idea.

4 MR. FONG: My quick reaction to that,
5 David, is that it really depends on the customer's
6 planning period. I don't think a lot of small
7 commercial customers, for example, are projecting
8 out, you know, five or six years and therefore you
9 balance, right, over a five or six year period.

10 So that's my initial reaction. That
11 they do want to see an annual bill. What the bill
12 effect is for their annual total bill. How they
13 would look at it from a four or five summer
14 planning horizon, I'm not sure the customers would
15 think that far out.

16 MR. BELL: I'm a bit concerned even from
17 an annual perspective. I know that customers want
18 to see the annual effect. But I know that we also
19 had concerns in workshops we had last spring at
20 the CPUC when we began putting scenarios in front
21 of customers where we talked about the monthly
22 bill impact where you might be used to paying in
23 the range of \$80,000 to \$100,000 each month for
24 your electricity from May to October when our
25 summer rates are in effect with the swing based on

1 typical swings in usage.

2 Under a CPP scenario with no hedging it
3 is very easy to draw scenarios when in July and
4 August you are paying \$120,000 to \$150,000,
5 enjoying much lower bills, perhaps in the \$60,000
6 to \$80,000 range in May and June and potentially
7 in September and October.

8 I am concerned from a customer relations
9 perspective that when that customer opens their
10 \$150,000 bill in July and calls their account rep
11 to say, what in the world is going on here, that
12 the bill they paid a couple of months a couple of
13 months ago that was lower than it would have been
14 otherwise, you know, it's already receded. That
15 bill was already paid. It's the unexpectedly
16 large bill now that they have got to be concerned
17 with.

18 So that's just temporarily within a
19 year. You asked about the multi-year perspective.
20 I don't think the customers would object if they
21 understood it well, the costs being higher in a
22 hot year and lower in a cool year. But I think
23 there are issues when there are under-collections
24 and perhaps Ed can talk about whether they know
25 what the scale of the under-collection is in their

1 tariff from this mild summer in San Diego.

2 MR. FONG: At this point we are still
3 computing that, right, in terms of what the under-
4 collection would be.

5 MR. BELL: Presumably the mild summer
6 had somewhat lower procurement costs too and so
7 perhaps you had an under-expense in the
8 procurement account as well as an under-recovery
9 from the group of customers that were on this
10 rate. But my educated guess would be that the
11 under-collection from the large customers would be
12 an order of magnitude larger than the offsetting
13 procurement savings.

14 And so you get into a question of how
15 that is balanced if you go through a mild summer
16 and your revenue has dropped by more than your
17 cost has. You may be having to load more costs
18 into the following year and I would be concerned
19 about that. How that changes.

20 MR. FONG: I guess I want to add one
21 other thing. I am actually looking at Andy
22 Campbell straight ahead of me. There's one big
23 lesson learned, I think, from our first summer of
24 default CPP and now that we are talking with our
25 small commercial customers. And that is probably

1 the case where SDG&E did not think enough in terms
2 of the funding necessary for what Chairman
3 Pfannenstiel has on the extensive education.

4 I think that's a little bit of a lesson
5 learned. To operate even some of the software
6 that we developed, right, it requires extensive
7 education of the customer. And the more complex
8 you make the rate the more options you have and
9 even more education is necessary. So it's a
10 delicate balance here and that is probably a big
11 lesson learned from us. You know, we want to work
12 with the other utilities in terms of translating
13 those lessons learned. But I think the education
14 pat is probably something that we want to focus in
15 more on and resources.

16 MR. BELL: And you just mentioned a few
17 minutes ago a number that I heard before but had
18 forgotten, it was so small, that you have gone
19 down to the 20 kW level. But you have only got
20 1700 customers at that level.

21 MR. FONG: Yeah, it's -- Remember the AB
22 29X meters, right, that's with the 200 kW. But we
23 have some customers in the medium range, in the
24 2200, that have AMI-comparable meters. And so
25 therefore we defaulted those customers also to the

1 CPP.

2 MR. BELL: Okay, you have got more than
3 1700 customers over 20 kW but they just don't all
4 have the AMI --

5 MR. FONG: Yeah, yeah, exactly, exactly.

6 MR. BELL: But that was still a
7 relatively small pool you were working with for
8 that first summer.

9 MR. FONG: Yes, yes. The 1700 was
10 roughly the number for the 200 kW.

11 PRESIDING MEMBER ROSENFELD: Anybody
12 else? Tim.

13 ADVISOR TUTT: I just had one question
14 for Ed. You said there was a 75 percent retention
15 rate and I'm interested if you know anything about
16 the 25 percent of customers that said they didn't
17 want to do this when their demand charges
18 presumably were lower and there were no CPP calls.

19 MR. FONG: Yes, that's actually where
20 the -- Andrew Bell mentioned the account execs.
21 They are following up with those customers and it
22 will be very interesting. Because we will go
23 through another, an open period right for people
24 to begin to select their next year's CRC and CPP
25 and their opt-out options. It will be very

1 interesting to see.

2 By the way, most of these customers have
3 account execs, account executives, so it is a
4 little bit easier for us to follow up on a one-on-
5 one basis on sort of what drove a customer to
6 choose the opt-out option, right, rather than the
7 default CPP. And that is the research that we are
8 doing at this particular point. But I think,
9 Commissioner Tutt, what will be very interesting
10 is the next summer, this coming summer, right,
11 with the first summer's experience.

12 PRESIDING MEMBER ROSENFELD: I do want
13 to praise both of you utilities for experimenting
14 with this shadow bill web tool. I think it's the
15 most important piece of customer education we can
16 do. I admit that it gets complicated and you have
17 to guess how the weather is going to be but that's
18 a fact of life and that is part of customer
19 education.

20 ADVISOR HUNGERFORD: And I just have one
21 comment. When you go to this discussion of
22 meeting the revenue requirement and under-
23 collections and over-collections and customer
24 bills varying year to year based on, based on
25 system costs and that sort of thing. The

1 underlying principle of this entire effort for
2 demand responsive rates or for time varying rates
3 is that the costs of getting electricity are more
4 transparent to customers.

5 So it seems that if customers' bills go
6 up when the system costs go up and their bills go
7 down when their system costs go down, that that's
8 precisely what we are attempting to do here. And
9 that they have more control over their own costs
10 because they can avoid using power when it is the
11 most expensive to use it and maybe shift some of
12 their load or use power when it is the least
13 expensive to use it.

14 And if we are going into a future where
15 we have different kinds of storage technologies
16 and we are depending more on the electricity
17 system to take over for transportation from
18 petroleum fuels and that sort of thing, that this
19 underlying premise that people should understand
20 what costs, what their electricity costs are and
21 when they occur. And that they can use, they can
22 figure out ways to utilize their electricity in
23 the most efficient way for them is the goal.

24 And so when we talk about protecting
25 customers for that or the problems that are

1 created in shifting the current way of accounting
2 for revenue and for costs is a barrier to that, I
3 consider that something that we simply need to
4 work through, not a logical reason for avoiding
5 this policy direction.

6 PRESIDING MEMBER ROSENFELD: Larry
7 Oliva.

8 MR. OLIVA: It has been an interesting
9 discussion to listen to. I'm afraid we don't have
10 as much experience as the other two utilities do
11 in defaulting customers to a critical peak price
12 rate. But we have marketed the critical peak
13 price rate to our large customers with AMI meters
14 who are structural benefiterers.

15 And what we found was that the adoption
16 rate was less than we expected but we still got a
17 pretty good adoption rate, we are still working on
18 it. But the responsiveness was surprisingly good
19 in that customers got the price signal and acted
20 to the price signal. So while they were a
21 structural benefiter it already -- a load profile
22 that was favorable to the critical peak price rate
23 that is not that much usage during peak. They
24 still reduced their usage further because they had
25 that price signal.

1 So that was an encouraging sign. We had
2 some concerns about revenue loss by targeting
3 structural benefiterers but found that actually we
4 got it through demand response. So I just want to
5 point that out.

6 ADVISOR HUNGERFORD: Isn't that
7 consistent with the results for residential and
8 small commercial customers from the Statewide
9 Pricing Pilot?

10 MR. OLIVA: It is consistent from what I
11 understand of SPP.

12 I just wanted to make a point that when
13 we talk about information and energy analytics, so
14 to speak, that is, what we offer customers in
15 terms of shadow bill or being able to understand
16 ex ante or ex post and what their costs are. We
17 certainly have plans and we are working on designs
18 for all of that. But we really don't know. We
19 don't know what the most effective tools are going
20 to be really when customers are ultimately exposed
21 to the pricing options and enabling technologies
22 that we have for them.

23 And we have to be cognizant of an
24 overload of information and keeping it simple,
25 particularly in the beginning. And then, you

1 know, while offering choices not too many choices
2 because people become confused. And also to
3 recognize that we do have a call center that gets
4 a million calls a month. The more complicated we
5 make it you just get flooded with phone calls and
6 we don't have the people equipped to really answer
7 those calls.

8 So we are aware of that. We understand
9 that that's going to happen and we need to make
10 changes for that. But I think what I would
11 caution in standards is to not get too prescriptive
12 about saying, you know, this is what the customers
13 really ought to have. I think generally what we
14 have seen so far looks fine. But I want to make a
15 point that I just don't think we really know what
16 is going to be most effective from a cost point of
17 view as well as a customer adoption and ultimate
18 demand response point of view.

19 ADVISOR HUNGERFORD: And we would
20 appreciate your input on where, on how the
21 language could be written to allow that kind of
22 flexibility yet still achieve the goal that it not
23 be so lax that it doesn't require moving in some
24 direction.

25 MR. OLIVA: I want to make another

1 point, back to your, to David's original question.
2 Which is, what are the IOUs planning to offer
3 customers in terms of opt-out or opt-in choices.
4 And without spending too much time I just wanted
5 to point out to you that for our residential
6 customers, as they get AMI meters and those meters
7 are enabled through the system for billing, that
8 their default is their tiered rate structure but
9 they have available to them the peak time rebate.

10 And the peak time rebate has two
11 flavors. It has, if you have enabling technology
12 then you get a higher rebate than if you don't
13 have enabling technology. So then those customers
14 also would have the opt-in opportunity to go to a
15 time-of-use rate which would be -- and our rates
16 are in our general rate case right now so they are
17 pending but I can talk about what we've proposed.

18 On the TOU it's a three tier TOU rate,
19 which should be more appealing than the tiered
20 rate for the higher usage customers. It is not, I
21 would say, -- A one or two part rate would be the
22 most attractive for higher use customers but then
23 you have the revenue loss problem, a significant
24 revenue loss problem. So the three tier TOU is a
25 way to kind of mitigate or get, you know, not have

1 so much of a revenue deficiency issue.

2 PRESIDING MEMBER ROSENFELD: I'm sorry,
3 Larry, would you just define three tier, I mean,
4 explain what three tier versus two tier means.

5 MR. OLIVA: I'm not the rate expert but
6 I'll try.

7 PRESIDING MEMBER ROSENFELD: Just
8 vaguely. I guess it means that --

9 MR. OLIVA: Okay. Let me describe it
10 this way. We have five tiers in our rates and we
11 actually initially proposed that we have a time-
12 of-use for each tier. So depending on where you
13 were during the month you would have a different
14 rate of peak/off-peak within that tier. And
15 relooking at that we felt that was too
16 complicated, way too complicated.

17 PRESIDING MEMBER ROSENFELD: I think I
18 get the idea.

19 MR. OLIVA: You've got ten rates for the
20 summer and then ten rates for the winter so 20
21 rates for one, you know, choice. Twenty price
22 signals for one rate, so that was pretty
23 complicated.

24 So going to the three tier is really
25 keeping, collapsing the tiers three, four and five

1 into one and having a time-of-use peak/off-peak
2 within that usage category.

3 PRESIDING MEMBER ROSENFELD: Thank you.

4 MR. OLIVA: So when you reach that usage
5 category then --

6 PRESIDING MEMBER ROSENFELD: You're in
7 the top tier.

8 MR. OLIVA: Right.

9 ADVISOR TUTT: So the --

10 ADVISOR HUNGERFORD: So your customer --
11 Go ahead, I'm sorry, Tim.

12 ADVISOR TUTT: You don't have time-of-
13 use for the bottom two tiers?

14 MR. OLIVA: You do have time-of-use for
15 the bottom two tiers also.

16 PRESIDING MEMBER ROSENFELD: Just a
17 lower, right?

18 MR. OLIVA: Right.

19 PRESIDING MEMBER ROSENFELD: Okay. I
20 interrupted you.

21 MR. OLIVA: So that's the TOU. And then
22 on critical peak pricing, that would also be
23 offered and built onto a TOU rate. But also
24 enabling technology would be offered for customers
25 who wanted it and provide that to the customer for

1 free to enable them to participate in critical
2 peak price events.

3 PRESIDING MEMBER ROSENFELD: Gabe, do
4 you have somebody on the phone?

5 MR. TAYLOR: Yes. I think to keep the
6 trains running on time we need to move on here
7 relatively soon. I would like to give everybody
8 an opportunity to say one last thing on LMS-2 and
9 we did have one speaker on the phone.

10 PRESIDING MEMBER ROSENFELD: I am going
11 to ask one very short question of Ed Fong. As you
12 can see I am very favorably impressed with this
13 tool which allows you to see what your alternative
14 choices are. If that tool is somewhat confusing
15 and I don't know whether to guess five events or
16 seven events or whatever, is your call center
17 equipped to also bring up my bill on his screen
18 and -- are you thinking about that?

19 MR. FONG: This is the exact point that
20 Larry makes, right, about CSRs. The customer
21 service reps having access to help the customer
22 through here. Realize that the customers that we
23 targeted for the default CPP were, again, were the
24 large commercial customers and therefore they had
25 account execs who could help them with the

1 software tool.

2 If we -- And we are planning to roll out
3 to the more general population of commercial
4 customers. It's the 140,000 or so. Then the call
5 centers would have to be involved and that's what
6 we're struggling with right now. That's why I
7 mentioned the complexity of the situation changes.
8 And therefore we have to limit the rate options,
9 for one thing, right, just to get the software to
10 work, right.

11 The second thing is the complexity of
12 the decision-making, both the customer and whoever
13 else we have that will educate the customer with
14 that. I think that is what we are struggling
15 with. And that's why I think -- I look at Andy
16 here. That's why we have held off on this rate
17 design window on what we want to do with the small
18 commercial customers in CPP because these are
19 really structural, functional, operational
20 questions that we have in the company and we need
21 to think those things through. But it will be the
22 next design window that we are looking at in terms
23 of the CPP for the small commercial customers.

24 MR. BELL: I have a short comment on the
25 call center question too. I wanted to tell you

1 how we handled it in the Bakersfield area this
2 summer with getting the program off the ground.
3 When people called in the Bakersfield area after
4 they got their information package about the new
5 CPP rate, if they had questions they did not call
6 the standard call center number, we had a separate
7 number for them to call, separately staffed, a
8 separately educated group of CSRs, call service
9 representatives, specifically to address questions
10 about the new program.

11 I think that we were able to provide
12 better service that way. I also do want to
13 caution that providing better service has extra
14 costs attached to it. One of the things that we
15 are struggling with in complying with the decision
16 issued last summer is that we have got a lot of
17 mandates to offer the new rates, to do customer
18 education. We will have the opportunity and we
19 will be describing what the incremental costs are
20 that are associated with providing this new level
21 of service.

22 We might be able to limp along with the
23 existing call center and having people add that to
24 their knowledge base but we will be able to do a
25 better job if we can do things like have dedicated

1 teams.

2 MR. FONG: I can tell you where SDG&E is
3 at at this point. We know that the current tool
4 that we have for the large commercial and
5 industrial customers will not be adequate for the
6 larger base of customers and somehow we will have
7 to simplify the CPP rate for the larger base of
8 the small commercial and industrial customers.

9 The second thing about who handles those
10 customers, whether will be a special group of
11 people in the call center, a special group of
12 account execs. That has to be determined and it
13 is also a resource issue. It's interesting. When
14 we talk about customer education it is also the
15 employee education that we found as a lesson
16 learned. Because you have to train your folks.

17 PRESIDING MEMBER ROSENFELD: Yes.
18 Those are lessons learned that we didn't quite
19 think through in great detail because we didn't
20 propose, we had not proposed yet, right, a rate
21 for the general commercial class of customers.
22 That is, the small commercial, which is roughly
23 about 140,000.

24 MR. TAYLOR: Commissioners, I'm sorry
25 but I think we need to move on. We have a number

1 of commentors.

2 ADVISOR HUNGERFORD: I have one question
3 but I would like to let the gentleman at the
4 lectern and the gentleman on the phone ask their
5 questions first.

6 MR. TAYLOR: And we have another
7 commentor in the audience as well.

8 ADVISOR HUNGERFORD: Okay.

9 MR. TAYLOR: Go ahead, sir. And then
10 after you speak we will take the person on the
11 phone.

12 MR. AMES: Thank you. Commissioners, my
13 name is Doug Ames. I'm with Transphase, a
14 manufacturer of thermal storage systems. I
15 submitted comments to you on the proposed
16 standards. I know a number of other thermal
17 storage participants did as well.

18 Very briefly, this Commission has
19 supported thermal storage since at least the late
20 1970s, has been consistently supportive throughout
21 the years, the decades. In 1996 this Commission
22 issued a report, Source Energy and Environmental
23 Impacts of Thermal Energy Storage, which showed
24 that at least 40 percent of the energy used at the
25 power plant is reduced by shifting a kilowatt hour

1 from the daytime on-peak to the nighttime off-peak
2 hours.

3 This information has recently been
4 confirmed and in fact heightened in data responses
5 that I received from both Edison and PG&E in PUC
6 proceedings. Edison's time-differentiated heat
7 rates showed that by shifting a kilowatt hour from
8 the on-peak to the off-peak, 45 percent. There's
9 a 45 percent energy reduction. PG&E's time-
10 differentiated heat rate data showed a 37 percent
11 reduction in power plant energy usage.

12 In addition, thermal storage will go a
13 long way towards achieving California's Renewable
14 Portfolio Standard. For example, Edison provided
15 responses showing that they currently from their
16 wind power are receiving four times as much energy
17 during the off-peak as during the on-peak.

18 In the 1996 Energy Commission report the
19 Energy Commission stated that they felt that there
20 could be achieved 2500 megawatts of peak demand
21 reduction from thermal energy storage by the year
22 2005. In reality less than one one-thousandth of
23 that amount has been achieved.

24 PRESIDING MEMBER ROSENFELD: Because we
25 haven't had time-of-use rates.

1 MR. AMES: Well, in fact, the time-of-
2 use rates most recently have been getting worse
3 and worse.

4 PRESIDING MEMBER ROSENFELD: But we are
5 here to try to expedite this.

6 MR. AMES: Yes.

7 PRESIDING MEMBER ROSENFELD: So let's
8 take the point of view that -- I am going to state
9 my particular prejudice. Thermal storage is
10 wonderful, I have been for it for longer than I
11 want to admit. Time-of-use will get it there and
12 that's what we are trying to do. Go ahead.

13 MR. AMES: I very much appreciate that
14 sentiment and I know it's true. Unfortunately the
15 time-of-use rates and the critical peak pricing
16 rates that have been proposed by the utilities
17 have been going in the exact opposite direction.

18 Now this -- As one of the speakers I
19 think from SDG&E stated, the devil is in the
20 details. I completely agree with that. And that
21 is being litigated quite actively at the PUC right
22 now in Edison's general rate case phase two as
23 well as in a demand response proceeding at the
24 PUC.

25 However, obviously whatever standards

1 this Commission adopts is critical in terms of
2 informing the PUC as to the energy policy of the
3 state. Let me state, in general the alternate
4 standard suggested by the Chairman is, I believe,
5 extremely good and I support it. I believe it
6 sets out the general issues of rate design and
7 what the state's objectives are perfectly and it
8 leaves to the PUC the details of litigating this
9 and figuring it out. So I want to say in general
10 I greatly support the proposed standard for rate
11 design.

12 The one comment I would make about it at
13 this point is Provision number 2 which states:

14 "The California Public
15 Utilities Commission or the local
16 governing boards, as appropriate,
17 will authorize for each customer
18 class, the applicable price level
19 for these rate forms."

20 I am not really sure what the purpose of that is
21 or whether it is superfluous.

22 ASSOCIATE MEMBER PFANNENSTIEL: I think
23 it was just intended to recover the revenue
24 requirement of each utility.

25 MR. AMES: Okay. Well as I say, I think

1 the purpose is clear and I support it.

2 MR. TAYLOR: Mr. Ames, I hope you will
3 be submitting written comments as well. And I'd
4 like to give you just one more minute or so if you
5 would wrap it up.

6 MR. AMES: Yes. I will be submitting
7 written comments to this effect. As I say, I have
8 submitted written comments already, including all
9 of our testimony that we have submitted to the PUC
10 in two different proceedings. But as far as the
11 rate design, I will have comments on the enabling
12 technology standard this afternoon. But as far as
13 rate design, I strongly support the proposed
14 standard. Thank you.

15 ADVISOR HUNGERFORD: I just want to add
16 one point that the, that the language about the
17 price levels being set by the governing boards and
18 utilities is intended to reflect the limits of the
19 Energy Commission's load management standard
20 authority and the authority of the governing
21 boards and the Public Utilities Commission for
22 determining, for ratemaking. It's an attempt to
23 articulate that spot, that place where our
24 authority ends and the other organizations'
25 authority ends.

1 PRESIDING MEMBER ROSENFELD: Thank you.

2 MR. AMES: Thank you.

3 MR. TAYLOR: Thank you very much.

4 Mr. Klaus Schiess on the phone from KS
5 Engineers.

6 MR. SCHIESS: Good morning, ladies and
7 gentleman. It's Schiess [pronounced sheese], not
8 Schiess [pronounced shyse].

9 MR. TAYLOR: My apologies, Mr. Schiess.

10 MR. SCHIESS: I've made that joke before
11 that you're swearing in German.

12 (Laughter)

13 MR. TAYLOR: I stand corrected.

14 MR. SCHIESS: I'm with KS Engineers in
15 San Diego.

16 I like very much what I see in this
17 report and I think you are preparing a wonderful
18 dish. But there is a horsefly flying around it
19 which could spoil the whole good impression and I
20 am referring to what I read on page 48. It talks
21 of enabling technologies.

22 "Commissioners expressed
23 support for the concept, but
24 indicated that there may be no need
25 for a standard to address their

1 market penetration at this time.

2 With all customers moving towards
3 at least TOU rates under AMI, the
4 value of such technologies to
5 customers would appear to be
6 increasingly attractive."

7 And just now I heard Commissioner Art
8 Rosenfeld say we are going in that direction with
9 TOU. Well, we have been for 20 years. Twenty
10 years ago we had TOU. And it is not that we have
11 to have TOU rates to make thermal storage
12 economically feasible, it is the difference in TOU
13 rates we used to have and what we have now.

14 It is kind of like having a sale. I say
15 I have a sale, that's a good thing. But if the
16 sale only gives me two percent off nobody comes.
17 If you give me 30, 40 percent off, people come and
18 they break open the door.

19 And to say that TS has the opportunity
20 or is attractive at the moment, I think the TS
21 market has declined over the last 15 years and is
22 just about dying. And so I think we -- I hope
23 that the Energy Commission can change their
24 language and the impression that things are fine
25 with TOU.

1 When I read on page 16 you have
2 ideally --

3 PRESIDING MEMBER ROSENFELD: I'm sorry,
4 on page what?

5 MR. SCHIESS: And now I'm going to page
6 16.

7 PRESIDING MEMBER ROSENFELD: One-six?

8 MR. SCHIESS: No, 16.

9 PRESIDING MEMBER ROSENFELD: Six-zero,
10 thank you.

11 MR. SCHIESS: No, one-six, one-six.

12 PRESIDING MEMBER ROSENFELD: One-six,
13 thank you.

14 MR. SCHIESS: Yes. "Ideally, rate
15 designs should meet four criteria." I totally
16 agree with those. Actually I would like to add a
17 fifth one just now after listening to our friend
18 from San Diego Gas and Electric. I wish we could
19 get outside the box of all those rate designs we
20 have had. Just now I heard something of ten
21 tiers, twenty tiers.

22 I am a consulting engineer. I am on the
23 other side of the fence. I have to deal with
24 those rates. And it is unbelievable gymnastics
25 that one has to do. It's like the tax laws, you

1 need a CPA to do your taxes because they are so
2 complicated.

3 I wonder if the utilities and some
4 members of the other side, on the receiving end,
5 couldn't get together under the Energy Commission
6 and say, let's just do a brainstorming session.
7 How can we simplify our rates so that they are
8 simple, that customers don't have to call up your
9 phone centers.

10 If I go and buy gas at the gas station
11 it is so much at this time, so much at this time,
12 it varies. If I buy natural gas it costs me 80
13 cents and next month it costs me \$1.20. The same
14 thing should actually apply to electrical rates.
15 Sure the time constraint may be limited to an
16 hour. But if we had what I would call real-time
17 pricing where we say, that's the price you pay, I
18 think the customer would understand it.

19 And I think in '96 I was commissioned by
20 PG&E to do a study on the effect of real time
21 pricing on thermal energy storage. That article
22 got published and even used in a book but it is
23 still valid today. And the conclusion basically
24 was that if we really would pay what electricity
25 really costs, thermal energy storage systems would

1 pay for themselves, even perhaps in say a very hot
2 summer in a few days. If you start charging \$3
3 per kilowatt hour we could really promote this
4 kind of enabling technology.

5 So all I can say is they call me the
6 Moses of thermal energy storage because I made
7 commandment number one, thou shall have a rate
8 schedule that makes thermal energy storage
9 economically feasible. Commandment number two.

10 PRESIDING MEMBER ROSENFELD: Whoa, whoa,
11 whoa. This is Art Rosenfeld.

12 MR. SCHIESS: If it doesn't exist we
13 need incentives to get that technology going
14 because it is good for the state, it is good for
15 society, it is good for the nation.

16 PRESIDING MEMBER ROSENFELD: Mister --

17 MR. SCHIESS: Schiess.

18 PRESIDING MEMBER ROSENFELD: Schiess.

19 Sorry, I was trying to pronounce it right. I
20 think I have already laid my cards on the table,
21 which is that I firmly support the PG&E rate case
22 decision in which real time is an option.

23 I personally don't believe that it is
24 the Commission's job to set rates. I am looking
25 at my experienced friend on the utility, I think

1 that's their job.

2 I think thermal storage has not been
3 pushed for the last 20 years, unfortunately, but
4 we are coming up to date certain now. I don't
5 really accept your first or second commandments
6 that the rates have to be adjusted so as to make
7 thermal storage a reality. I believe that thermal
8 storage will obviously do very well when we have
9 time-of-use rates and all the offerings that you
10 are going to get.

11 But you are certainly welcome to submit
12 comments and I thank you very much for your
13 comments.

14 MR. SCHIESS: The Energy Commission is
15 not doing, is not supposed to do rates but I think
16 you are in a recommending and probably having to
17 do the homework for the CPUC so that they can
18 check that the utilities are looking at their rate
19 structures, not just from their internal point of
20 view but also what effect does it have on actual
21 load management projects.

22 And I can give you horror stories where
23 I had to basically kill multimillion dollar
24 thermal storage business to tell the customer,
25 look, the rates are not there. They were planned

1 on five year payback. The utility engaged --
2 switched the time-related demand charge around a
3 little and suddenly the payback was 25 years.

4 And I phoned up the utility and said,
5 are you going to give \$800,000 rebate for a
6 thermal storage project that has now a 25 year
7 payback? They said, I've got to get back to you,
8 I've got to talk to my supervisor. Of course the
9 project died and I never heard from the utility.

10 MR. TAYLOR: Mr. Schiess, I hope that
11 you will be submitting written comments. I'm
12 sorry but we need to move on.

13 MR. SCHIESS: Thank you, I have done so
14 already.

15 MR. TAYLOR: Okay, very good. And I
16 hope you will continue to participate in this
17 process.

18 MR. SCHIESS: Thank you.

19 MR. TAYLOR: We have another commentor
20 here at the podium.

21 MS. SCHILBERG: Yes. My name is Gayatri
22 Schilberg, I am with JBS Energy representing TURN.
23 Unfortunately my attorney at TURN has been ill and
24 we have not had a chance to make detailed comments
25 on this. But I just wanted to make one overview

1 comment about LMS-2.

2 First noting the purpose of this
3 standard. Now in rate design cost-based is one
4 component of what one wants the rate design to
5 reflect, however there are also many other goals.
6 Avoiding rate shock, as we heard about customers
7 might be subject to some shock. Recovering the
8 revenue in a reasonable time frame. So, for
9 example, I don't think we want to weigh cost-based
10 and then have the consequence be that -- we don't
11 want to prioritize cost-based for this year and
12 then recover half of it next year or something.

13 I notice -- Another goal that TURN is
14 very attached to for rate design is energy
15 efficiency, promoting energy conservation. I
16 notice in this purpose statement, energy
17 efficiency, even though it is very high in the
18 loading order, is almost the last goal. And given
19 that there are so many goals for rate design, it
20 is a very complex issue, I would be very wary if
21 the Commission were to focus only on cost-based,
22 especially to the detriment of other goals.

23 For example, in the discussion we were
24 having earlier this morning about the structural
25 benefiteres in the Bay Area. I think Commissioner

1 Pfannenstiel said, well if they got a more
2 accurate price, even if they paid a little bit
3 less wouldn't that be a benefit.

4 And I think this needs to be relooked
5 at. I don't think -- If it were going to
6 sacrifice the current rate design that has
7 inherent in it an encouragement of energy
8 conservation because the higher tiers, the more
9 usage, you get a higher price. So that encourages
10 energy conservation. I would hate to sacrifice
11 that goal just to give more accurate price signals
12 for people in the Bay Area. So I think that is
13 not a tradeoff that is a wise one for us to make
14 on a statewide level.

15 PRESIDING MEMBER ROSENFELD: Gayatri,
16 may I make a small comment. Can I interrupt you
17 for a second?

18 MS. SCHILBERG: Sure.

19 PRESIDING MEMBER ROSENFELD: It seems to
20 me that there are power arguments for tiers. That
21 there are also -- We are here because there are
22 powerful arguments for time-dependant prices. I
23 am simply going to make the point that if you are
24 a believer in tiers, and I kind of am, I don't
25 know that they are incompatible. That is, I can

1 see TURN arguing for a time-dependent price that
2 is trued up at the end of the month with
3 consumption information, the way we are used to.
4 And I hope that if you feel that way that you will
5 make written comments to that effect.

6 MS. SCHILBERG: Well, we supported TOU
7 prices long, long ago before we even got into the
8 AMI discussion. But I am worried about the focus
9 of this standard that seems to focus mostly on
10 cost-based. And I would not want it to read that
11 it is at the expense or would not want actions
12 that would be taken in favor of just the cost-
13 based at the expense of some of the other very
14 important goals of rate design.

15 PRESIDING MEMBER ROSENFELD: Okay, but I
16 am also going to remind you that we have a whole
17 panel after lunch on efficiency as it is related
18 to this issue.

19 MS. SCHILBERG: Okay. I just have one
20 other quick comment on cost-effectiveness. I
21 notice, I do believe it is on page seven of the
22 document. It mentions that these standards will
23 be subject to some cost-effectiveness review. Of
24 course we will be looking very closely at that.

25 Again, it is one of those items that

1 ended up in the middle of the document but did not
2 end up in the last chapter. So we would want to
3 be looking very closely to see that each of these
4 standards is really cost-effective. And
5 furthermore, cost-effective incremental to what is
6 already on the table in all the PUC proceedings
7 and that sort of thing.

8 I am especially worried by say LMS-2
9 item number three, utilities will provide
10 extensive education.

11 PRESIDING MEMBER ROSENFELD: I'm sorry,
12 are you on page 68 now?

13 MS. SCHILBERG: No, I'm on LMS-2 item 3
14 of the Chairman Pfannenstiel draft.

15 PRESIDING MEMBER ROSENFELD: Oh, on
16 Commissioner Pfannenstiel's document.

17 MS. SCHILBERG: It maybe was in the
18 earlier language too. I think these open-ended
19 requirements for extensive education are going to
20 have to have some cost-effectiveness review and so
21 we will be looking very closely at that. That's
22 all I have.

23 ASSOCIATE MEMBER PFANNENSTIEL: I would
24 just like to comment that all the standards
25 adopted by the Energy Commission, whether

1 appliance standards or building standards or in
2 this load management standards, must meet a cost-
3 effectiveness test. That that is not an option.

4 My second point, and I just thought I
5 would put it on the table since Commissioner
6 Rosenfeld indicated his preference for tiers and
7 he was hoping to find some way of building time-
8 of-use and tiers together. I can offer my
9 opposition to tiers based on about 30 years of
10 rate design where I have not found them to
11 accomplish the efficiency intentions that they
12 were necessarily set out to do. There's other
13 rate designs.

14 And you are right that we start this in
15 talking about cost-based pricing, which I actually
16 think is very important but it is not the only
17 criteria that we put here. And in fact, being
18 able to have demand response capabilities is very
19 important. Because I think as you appreciate,
20 that can reduce everybody's costs and therefore
21 everybody's rates. There are many other rate
22 design criteria that we are trying to accomplish
23 here and cost basis is sort of the most obvious
24 one but not the only one.

25 PRESIDING MEMBER ROSENFELD: Thank you.

1 MR. TAYLOR: I think we are ready to
2 move on to the second topic on the agenda. We
3 will move on to Load Management Standard 7.
4 Hopefully we can get in a discussion before lunch
5 of the Customer Access to Meter Data standard.

6 And I think we will use the same format,
7 we will just go around the table. Scott, would
8 you like to start this time? Are you prepared?

9 MR. TOMASHEFSKY: If I am not prepared I
10 will be prepared in the next three seconds.

11 MR. TAYLOR: Okay. We are going in no
12 particular order here. I tried to arrange it --

13 MR. TOMASHEFSKY: Okay. I don't have
14 much to add to that. I think just to throw out
15 the notion, especially with -- It's one thing in
16 terms of access, the types of meter data when you
17 are dealing with multiple climate zones.

18 There may be instances in certain
19 utilities certainly where you have not a lot of
20 peak variation where the value of what the
21 information that's provided to the customer may be
22 somewhat different. So in the context of what you
23 require from individual utilities, just give some
24 thought as to there really is a cost-effectiveness
25 test in terms of even the information that you

1 would provide to customers.

2 So in terms of what you have in there.

3 I think going back to the comment that was made
4 earlier. The more you can stay away from being
5 prescriptive the more flexibility it gives any
6 utility to be able to accommodate the standards
7 and the things that you are trying to effect.

8 From the context of individual
9 utilities, there is certainly a high level of
10 value associated with some pieces of information
11 being provided to the customers. I think the
12 local utilities can often figure out what are best
13 and really maximize the things that are really
14 useful for their customers. That's really all I
15 have to say.

16 MR. TAYLOR: Jerry.

17 MR. JORDAN: I wouldn't even attempt to
18 add anything to that.

19 MR. TAYLOR: Okay.

20 MR. PARKS: Just one comment on this
21 one. It looks like this assumes that the
22 utilities have advanced metering infrastructure
23 already in place, based on the one that says, you
24 are going to include the hour 24 hours prior to
25 the request. If you didn't have advanced metering

1 infrastructure in place that would require someone
2 to go on site to do a meter read. So I would just
3 request that you include that in the language,
4 that this assumes that advanced --

5 ASSOCIATE MEMBER PFANNENSTIEL: So it is
6 applicable to those utilities --

7 MR. PARKS: With AMI.

8 ASSOCIATE MEMBER PFANNENSTIEL: With
9 AMI.

10 PRESIDING MEMBER ROSENFELD: With AMI.
11 I regret that it doesn't say that yet.

12 (Whereupon several people
13 spoke at once.)

14 MR. TAYLOR: The standard's intent, I
15 believe the language in there applies to utilities
16 that are already implementing time varying rates.
17 So the assumption there is not clear enough that
18 they also have the appropriate meters.

19 PRESIDING MEMBER ROSENFELD: I guess,
20 Gabe, that goes in our definitions of what a
21 utility is. We also need to say, utilities with
22 meters in place or define it somehow.

23 MR. TAYLOR: Yes, we did touch on these.
24 I believe we discussed earlier the concept of
25 defining dynamic pricing but not defining time-

1 varying rates, that sort of thing. Definitions
2 are a clear part of the standards once they are
3 proposed to the Office of Administrative Law and
4 have not been part of this process yet. This is a
5 conceptual framework that we are working on so far
6 and the next step would be to work on definitions
7 and really tighten it up into actual legal
8 language. So Ed.

9 MR. FONG: I don't think there's much
10 comment from SDG&E's part. We certainly support
11 the standard and allowing access.

12 I would actually support the idea that
13 we shouldn't be prescriptive here. And Larry was
14 pointing out actually one of the, one of the
15 statements here where -- and Larry can certainly
16 talk to it. On page 73 of the load management
17 standards here. It's the sentence on the top of
18 the page:

19 "Utilities shall not deny
20 access to real time or near real
21 time information to customers who
22 pay the utility for access."

23 It may not be necessary when you look
24 out in the future, right, to have access to real-
25 time information. I think this is a carryover

1 from a little bit of today how we look at putting
2 in enhanced technology for large commercial
3 customers where they have to pay a fee for what we
4 think of as the KYZ port there. But in the future
5 it may not be necessary to have that with the Home
6 Area Network and Zigbee standards that we are
7 looking at. I support it. Let's not too
8 prescriptive here because it may tie us down to
9 things that we didn't expect.

10 PRESIDING MEMBER ROSENFELD: So you are
11 actually suggesting that this particular sentence
12 simply disappear.

13 MR. FONG: It is probably not necessary
14 but I'll let Larry speak to it, he was point it
15 out to me.

16 ADVISOR TUTT: Larry, I guess I'm
17 confused. Are you suggesting that there may not
18 be a need for a fee for that access, or that there
19 may not be a need for the access?

20 MR. OLIVA: Well, I wasn't, I don't have
21 a remedy for the sentence that is causing me
22 concern because the CPUC requirements for the AMI
23 system that we are installing did not require
24 real-time data availability to the customer. So
25 we, while we support the idea of doing it and we

1 are working on a way to make that possible with
2 our system, it requires a device in the home.

3 We don't plan to offer real-time
4 information through the Internet to customers. So
5 the difficulty for us is with a Home Area Network-
6 enabled device or a device in the home that it
7 needs to be secure, you know. That's where all
8 the problems or issues with security have not been
9 finally worked out yet. We are working on that,
10 we would like it to be available. We wouldn't
11 want to deny access to customers for information
12 so we support the spirit of it. It's just that we
13 don't have the technology to really enable it
14 right now for the mass market.

15 ADVISOR HUNGERFORD: We would very much
16 appreciate your input on what we can say to
17 require the availability of data to customers,
18 make that consistent with what is technologically
19 feasible and reasonable, especially given your
20 current, current plans for installation and what
21 kind of technology you are going to provide.

22 MR. OLIVA: We would be happy to provide
23 that.

24 ADVISOR HUNGERFORD: I know that SDG&E,
25 for instance, their plan is to -- customers, when

1 they go on the website, would have access to
2 lagged data because they don't have the bandwidth
3 to constantly be downloading information from the
4 meters. So it would all be available to everyone
5 on the website on a 24 hour basis.

6 But that they also have plans, they have
7 sufficient communications capabilities that they
8 have plans to make it possible for customers to,
9 for instance, call a customer service
10 representative and then get an update. They can
11 actually ping the meter and pull that information
12 on an individual basis.

13 So if you can just help us clarify where
14 that line should be then we would, we would
15 appreciate that.

16 MR. FONG: I guess let me build on this.
17 I'll just reiterate, sir, when I read that
18 statement and Larry was pointing it out. It
19 wasn't so much that technology was available today
20 but that the standard, if the language stands as
21 is, it may tie our hands in the future. With all
22 three utilities promoting the Home Area Network
23 and connection between the meter and the Home Area
24 Network technology could very well be available in
25 the future that will allow customers -- and I like

1 the term, near real-time. You never have real-
2 time but near real-time.

3 PRESIDING MEMBER ROSENFELD: Nor do we
4 want it.

5 MR. FONG: Yes however, however you want
6 to define that. But that's the vision. And I
7 think the issue of having a customer pay a fee to
8 have access to that data when the Home Area
9 Network is there and the protocols and security
10 are already there, that's what is emerging in the
11 various forums that we have. I just don't want
12 the language to be so prescriptive that it ties
13 the hands, our hands, total aggregate hands in the
14 future.

15 ADVISOR HUNGERFORD: And nor do we.

16 MS. COREY: I was a little unclear on
17 what these two specific paragraphs were intended
18 to communicate and I assumed that it was a
19 recommendation that those non-IOUs who were going
20 to develop their AMI system would be incorporating
21 something like the Home Area Network device in
22 their meters.

23 I assumed that was the intent of this
24 because the Home Area Network does meet the spirit
25 of this, which is, the utilities will be able to

1 provide near real-time data to consumers. The
2 IOUs are all deploying that kind of technology.
3 So I assumed this was an intention to deliver that
4 encouragement to the non-IOUs who are looking at
5 AMI networks.

6 It's a relatively inexpensive device to
7 add to your meter. The big meter manufacturers
8 are all -- the big communications, AMI
9 communications companies are incorporating this
10 capability so it is not a huge ask. But it is a
11 very significant and important element to add to
12 the meter AMI technologies.

13 MR. JORDAN: However, I do think that
14 that emphasizes the importance of having a
15 different system, if you will, for really small
16 utilities because that could, in fact, be pretty
17 burdensome for very small utilities.

18 ADVISOR HUNGERFORD: And just to be
19 clear, in our discussions on this matter the
20 intent was not that all homes should end up with
21 devices that allow them to read their information
22 in real time, at all time, but rather that the
23 systems be capable of providing that to the
24 customers if they, if they so desired, possibly at
25 additional cost to the purchase of the device to

1 read such a --

2 MR. JORDAN: Hopefully not this debased.

3 ADVISOR HUNGERFORD: Right.

4 PRESIDING MEMBER ROSENFELD: Hopefully
5 not what?

6 MR. JORDAN: This debased, yes. We
7 don't want to pour concrete around this stuff.

8 MS. COREY: If I might add a couple more
9 observations. First of all for PG&E, we have not
10 been approved for our Home Area Network capability
11 just yet but we are optimistic, cautiously
12 optimistic as we say in the utility biz. But I
13 did want to make a couple other quick observations
14 about this load management standard.

15 There was some question mark in our mind
16 about the specific language around customer data.
17 And we assumed that the rules of the CPUC, the
18 guidelines that utilities have for handling
19 customer data is embedded in this load management
20 standard. There were some questions about
21 specific language but we are assuming that. The
22 IOUs have very specified rules for how we handle
23 customer data so we are assuming that that takes
24 precedent, as it were.

25 The other thing I wanted to mention, and

1 this is maybe more for the audience. We
2 currently, the California utilities, the IOUs,
3 pardon me, have two methods for communicating
4 customer data to them. One is, as you suggested,
5 the website where the data would be available next
6 day.

7 And we are assuming that your reference
8 to 24 hours on here is an acknowledgement that we
9 will have web data available to our consumers one
10 day late. Again, we had a question mark on
11 exactly how the language was crafted but I am
12 assuming that that was intended to acknowledge our
13 web data would be from the prior day. Correct me
14 if I am wrong. I see you nodding.

15 ADVISOR HUNGERFORD: That's correct.

16 PRESIDING MEMBER ROSENFELD: In fact I
17 think prior day is probably a good definition.

18 MS. COREY: Okay, all right, very good.
19 And then the other methodology is the home area
20 networking capability. So those are the two
21 methods that we currently are contemplating for
22 communicating the information with our customers.

23 But I did also want to -- there was some
24 reference to doing customer research. And I did
25 want to make you aware of the fact that we

1 continually test our website materials with
2 customer groups, either focus groups or user
3 testing of content reviews with our customers.

4 So I would imagine that alongside our
5 earlier conversation about tools that we make
6 available to our customers, the accessibility of
7 the data, the usability and their ability to get
8 what the need off the website, we continue to do
9 customer research in that on a continuous basis.
10 So those are other things that we are doing in
11 that space.

12 ADVISOR HUNGERFORD: We hope that that
13 information could somehow be shared with the
14 smaller publicly-owned utility who don't have the
15 resources to do the kind of extensive research
16 that the investor-owned utilities have been doing
17 and the larger municipal utilities have been doing
18 on -- certainly with obvious confidentiality
19 concerns addressed. But to be able to give them
20 the benefit of some of the work that you have been
21 doing for the past eight or nine years on this.

22 MS. COREY: Is that a question mark at
23 the end of that?

24 ADVISOR HUNGERFORD: I would hope that
25 -- It's a statement. I would hope that, I think

1 is how I began it.

2 MS. COREY: Okay. If I might just make
3 an observation about that. I was going to talk
4 about this in the AMI section. We, and I would
5 include my brethren here. But I know PG&E, we
6 have entertained many, many utilities who have
7 come to us for advice, counsel, experience. We
8 helped provide deployment information to the other
9 utilities who haven't been through deployment. So
10 there is a long history of other utilities helping
11 us as we began our AMI journey and we have also
12 offered that to other utilities. We have been
13 doing that and we will continue to do that.

14 MR. TOMASHEFSKY: I would like to add,
15 as much as people think we don't actually talk
16 amongst the utility group, we do. We had, just as
17 an example, for our membership we had a smart grid
18 workshop and we just worked through the various
19 things that our utilities are doing. We had about
20 an hour-long presentation from Edison to talk
21 about the things that they are doing. So there is
22 a lot of communication that goes on that you may
23 or may not be aware of. So I just wanted to put
24 that on the, put that on the record.

25 In listening to the discussion here.

1 You know, this particular issue, it feels more
2 like a guideline issue. And getting to the
3 renewable side of how the Energy Commission deals
4 with guidelines, this one is definitely more of
5 that nature in the sense that from a regulation
6 perspective you can say, you are encouraging the
7 utilities to take all appropriate steps to provide
8 enough information to customers so that they can
9 have the most relevant information that's
10 available.

11 And then the way you get there becomes a
12 series of, here's a number of suggestions, a
13 number of examples. And then you can have the
14 ability to revisit those things on a fairly
15 regular basis and say, where are you, a couple of
16 years out.

17 So from the standpoint of the things
18 that some of the IOUs are doing, we certainly from
19 a small utility perspective, we definitely pay a
20 lot of attention to what you guys are doing in
21 terms of R&D. That's not really part of our, we
22 don't really have the, it is not built into what
23 we can do. In terms of, if we did R&D we would do
24 nothing else. So to the extent that you are able
25 to do that we are more than happy to piggyback on

1 the benefits of the things that you might find or
2 stay away from the problems that you encounter.

3 So getting back to this. I think look
4 at it, I would suggest looking at it more as a
5 very general standard and provide guidance on that
6 and that document will be useful for us to look
7 at. And then you can revisit that and not find
8 yourself debating about, well, maybe there's
9 something better than a website evaluation that
10 pops up in the next couple of years. You just
11 don't know at this point.

12 ADVISOR HUNGERFORD: I hope that you
13 would articulate these thoughts in your written
14 comments.

15 MR. TOMASHEFSKY: Absolutely.

16 PRESIDING MEMBER ROSENFELD: Scott, I
17 think you have a very interesting point. That we
18 could take a lot of this material where we have
19 been worried that the status of law is too rigid,
20 AB 1X is a good example of a law that is too
21 rigid.

22 MR. TOMASHEFSKY: Yes, I think the
23 challenge, the challenge that you have is that
24 you're prescriptive when you think things aren't
25 being done. And so if we don't convince you that

1 things aren't being done then yo take it to the
2 next step.

3 PRESIDING MEMBER ROSENFELD: Right.

4 MR. TOMASHEFSKY: I can tell you with a
5 very straight face that there's a lot of, a lot of
6 interest in all of this, irrespective of whether
7 we can or cannot do things. We are looking at it
8 from a 20,000 megawatt utility to a 10 megawatt
9 utility. It's all being very much put through the
10 plan.

11 PRESIDING MEMBER ROSENFELD: So that's a
12 very good, a very nice suggestion, thank you.

13 MR. TAYLOR: Gayatri.

14 PRESIDING MEMBER ROSENFELD: Gayatri has
15 a comment.

16 MS. SCHILBERG: Yes, just one comment on
17 the last sentence. From the point of view of a
18 researcher who sometimes uses customer data, I
19 would hope that this language is looked at by an
20 attorney that could verify that the last sentence,
21 specifically:

22 "The utilities must obtain
23 permission from the customer before
24 releasing data relating to that
25 customer to any party outside the

1 utility."

2 I would hope that it would still be
3 possible to have customer usage excluding their
4 name and stuff like that. But have that data
5 available for research. Even though it relates to
6 the customer it doesn't have his name. So I hope
7 that some of your legal minds will be reviewing
8 that.

9 MR. JORDAN: I do think we need to be
10 very careful of that, though. There is, in fact,
11 considerable statute over what utilities are
12 allowed to do with customer information.

13 PRESIDING MEMBER ROSENFELD: Well I
14 think Gayatri is saying that we have worked out
15 anonymity -- ways of doing this and that let's
16 preserve them.

17 MS. SCHILBERG: And not make them more
18 stringent.

19 MR. JORDAN: I am just coming from the
20 standpoint that many of our water utilities have
21 been sued in the past for releasing information on
22 water use.

23 PRESIDING MEMBER ROSENFELD: Okay.
24 Gabe.

25 MR. TAYLOR: Are there any other

1 commentors from the audience who would like to
2 comment on Load Management Standard number 7.
3 Certainly.

4 MR. SHERMAN: Craig Sherman from the
5 Sacramento Municipal Utility District. I just
6 wanted to get something clarified so we can
7 provide comments on it. At SMUD we do offer an
8 energy tracking service program for all of our
9 commercial/industrial customers. And a lot of
10 these customers like to get the energy usage
11 information from the meter and we present that
12 information next day to them via the web.

13 However, there are a lot of commercial
14 and industrial customers in our service territory
15 that also like to receive next-day information on
16 large chillers and large industrial end-use
17 devices that we also provide on the web as well.

18 I think some of our intent is once our
19 metering infrastructure goes in we will probably
20 stop our service or stop charging customers a fee
21 for providing that service, just offer it free of
22 charge. However, if we are going to continue to
23 offer a service to our commercial/industrial
24 customers to track their end-use down to the
25 chiller level or other industrial devices that we

1 may consider a fee for that for installing
2 recording equipment, et cetera.

3 The automated metering infrastructure
4 meters that are going to be going in will be
5 multiple channel and so it could be easily tied
6 into the AMI system. So is it your intention that
7 this particular LMS-7 just be allocated to the
8 meter itself or further considering downstream as
9 well into the end use devices? Or do you have any
10 preference?

11 ADVISOR HUNGERFORD: I don't believe we,
12 we intended in this language to restrict any other
13 activities or any other uses of the data in any
14 more extensive programs or projects that you could
15 do for your customers. Only it was to set sort of
16 a minimum level data availability so the customers
17 would have access to this, to the data that the
18 metering system would be able to provide.

19 MR. TAYLOR: Any other comments? Okay,
20 the next item we have on the agenda is actually
21 lunch. However, I did want to take one more item
22 out of order. We are going to lose our
23 representative from NCPA after lunch so I wanted
24 to give Mr. Tomashefsky an opportunity to comment
25 on the AMI standard, which is LMS-1, part of our

1 session number two in the afternoon.

2 I also wanted to give everybody a little
3 bit of perspective here. We have some grandiose
4 concepts here but we have some influence over some
5 aspects of the energy system and not over others.
6 With that I am going to turn it over to Scott.

7 MR. TOMASHEFSKY: Thank you, Gabe. I
8 appreciate the accommodation for schedule.
9 There's always a number of challenges with all the
10 things going on these days so I appreciate that.

11 Just in general with AMI. I think the
12 alternative language provides some flexibility as
13 to how we deal with AMI deployment. Again we
14 probably need to think a little bit about how and
15 what is defined as a business plan and what is
16 acceptable. General guidelines as far as what
17 that might entail.

18 From a larger utility perspective the
19 administrative costs of that may not be as
20 dramatic as perhaps on a smaller utility so the
21 notion of aggregating those type of plans perhaps
22 at the SCCPA or NCPA level might be something to
23 consider. What we would have to take a look at is
24 to what extent the business plan would have to
25 have the level of detail that you want or not

1 want. So that's just something that we will need
2 to take a look at.

3 In terms, just to give you a general
4 feel for what we have done within our 17-member
5 family. We think the most active utility in terms
6 of AMI deployment is Turlock Irrigation District
7 and they are going for a full scale deployment of
8 AMI over the next four years, which is a project
9 in excess of about \$10 million.

10 Their justification for doing that makes
11 quite a bit of sense and there's a lot of customer
12 information that actually provided very consistent
13 with what you have been talking about here earlier
14 this morning. It's a 700 square mile service area
15 and so from the standpoint of meter reading, from
16 that perspective alone there's a lot of benefits
17 to just being able to do remote metering.

18 When you start looking at some of our
19 other utilities. And I hate to start to sound
20 like a broken record but I think we have been
21 doing that for several years now in terms of
22 smaller utilities have different issues.

23 When you are dealing with a utility that
24 has a three square mile service territory, the
25 cost-effectiveness of meter deployment is very

1 different and so you are not necessarily avoiding
2 having to go read the meter. It is not a very
3 difficult task to do that. And so to put the
4 meters in place and actually do that as a cost
5 avoidance issue is one element.

6 And then the other question then becomes
7 the general purpose of demand response and dealing
8 with meeting the needs of the grid. How does that
9 really fit into the equation when your utility is
10 primarily fully resourced and you are not really
11 subject to peak pricing. Perhaps your, your, your
12 needle peaks are not quite the same as they are in
13 certain areas.

14 So climate zones matter, size matters
15 and those things would have to go into a business
16 plan. I wouldn't want to, I wouldn't want to have
17 a particular utility avoid that type of
18 information sharing for purposes of saying, AMI
19 doesn't work. But there will be some instances
20 where it really isn't a very cost-effective thing
21 and it wouldn't take much analysis to come to that
22 conclusion.

23 Having said that, there are certainly
24 reasons to look at those, those particular
25 elements. And definitely as you get into climate

1 zones that are warmer there's different nuances
2 that are important to take into consideration.
3 Thank you.

4 MR. TAYLOR: Any questions?

5 PRESIDING MEMBER ROSENFELD: Ready for
6 lunch?

7 MR. TAYLOR: I think so.

8 PRESIDING MEMBER ROSENFELD: It says one
9 hour for lunch. Should we actually be honest and
10 make it exactly 1:05?

11 ASSOCIATE MEMBER PFANNENSTIEL: Make it
12 1:15.

13 PRESIDING MEMBER ROSENFELD: Jackie is
14 suggesting 1:15. Anybody prefer that? One-
15 fifteen.

16 MR. TAYLOR: One-fifteen it is. We will
17 recommence at 1:15, thank you.

18 (Whereupon, the lunch recess
19 was taken.)

20 --oOo--

1 AFTERNOON SESSION

2 PRESIDING MEMBER ROSENFELD: Good
3 afternoon, ladies and gentlemen. It's 1:20 so
4 it's time to start our 1:15 session.

5 Any introductory comments from the dais
6 or shall we just proceed? Gabe, are you ready to
7 run us into Panel 2?

8 MR. TAYLOR: Welcome back, thanks
9 everybody for returning. We are going to jump
10 right back into our session number two on the
11 agenda. This is Load Management Standard number 1
12 concerning advanced metering infrastructure. We
13 already started discussing this topic just before
14 lunch with the representative from NCPA. Janet,
15 are you ready to start the discussion?

16 MS. COREY: Sure.

17 MR. TAYLOR: Okay.

18 MS. COREY: I think everybody is aware
19 that PG&E's Smart Meter Program is well underway
20 with over a million and a half meters deployed.
21 It does meet all the functionality provisions
22 provided for in the LMS-1.

23 And as I stated prior to lunch, we are
24 willing to share our experiences with other
25 utilities that have not been through the process

1 as we tend to be a little ahead of the game in
2 terms of timing on our deployment. And we have
3 learned a lot of lessons, some the hard way and
4 some through good fortune. So that's really all I
5 have to say about One.

6 MR. OLIVA: For Southern California
7 Edison, we believe we are compliant with LMS-1 by
8 virtue of our application that was authorized by
9 the Commission to move ahead with AMI.

10 We too have been and will continue to
11 offer information to other utilities or other
12 interested groups who want to learn about our
13 technology, about our process, about our business
14 case. As you probably know we have made a lot of
15 information about our filing public already, it
16 has been on our website, and so we plan to
17 continue that process. And that's all I have.

18 PRESIDING MEMBER ROSENFELD: It sounds
19 like we don't have a very hot topic here yet.

20 (Laughter)

21 MR. GAINES: I should introduce myself.
22 I'm Mark Gaines with SDG&E. I'll replace Ed Fong
23 for the rest of the afternoon.

24 I can ditto the comments from PG&E and
25 Edison. Just one additional one, the standards

1 written here seem to imply that the utilities have
2 not filed an approved program. So I am just
3 wondering if there is an exception if you have
4 already filed it. Do we need to -- And had it
5 approved. Do we need to refile with the CEC?
6 Just for clarification on the reports or is it
7 assumed that what is already approved by a
8 regulatory body that we don't need to file?

9 ASSOCIATE MEMBER PFANNENSTIEL: In the
10 alternative set of standards it specifically says
11 that --

12 MR. GAINES: Okay.

13 ASSOCIATE MEMBER PFANNENSTIEL: -- it
14 applies unless you have already met --

15 MR. GAINES: Thanks.

16 PRESIDING MEMBER ROSENFELD: Good
17 cleanup. That's all you have to say on that?

18 MR. GAINES: That's it.

19 ADVISOR TUTT: Before we switch to SMUD,
20 I was going to ask the IOUs. You have all filed
21 AMI cases with the PUC and are proceeding forth.
22 Are there any differences in functionality between
23 the three cases that you have that you can share
24 with us today?

25 MS. COREY: Well one notable exception

1 is PG&E has an outstanding upgrade at the CPUC.
2 I'll say that three or four more times today for
3 the benefit of those in the room that care. And
4 so assuming the functionality upgrades that are on
5 the docket are approved then we will have a
6 consistent set of functional capability.

7 MR. OLIVA: Yes, I am not the technical
8 expert but I guess I would say we are remarkably
9 aligned in the technology approaches that all
10 three utilities have taken. All three are
11 following an open AMI-type approach and offering
12 systems that meet the minimum requirements of the
13 CPUC.

14 MR. GAINES: A similar response. In
15 fact my understanding is that we basically have
16 the same meter as Edison, I'm not sure what PG&E
17 choosing, but functionality is essentially
18 identical.

19 MS. COREY: Okay, I do have to make one
20 other comment. One of the differentiating factors
21 in our mesh networks, which is what we are all
22 pursuing, is the bandwidth capability. We happen
23 to have a bandwidth that we think is a little
24 higher. I think all three systems can meet all
25 the requirements. But we are kind of eager to

1 take advantage of that for smart grid
2 applications. And that's one of the things that
3 we have begun deploying in the field.

4 PRESIDING MEMBER ROSENFELD: Can you
5 give us an example of what functionality you will
6 add to what we have been talking about so far.

7 MS. COREY: Well in the smart grid arena
8 people are contemplating using these AMI networks
9 for distribution automation and potentially
10 monitoring and managing the unboarding of
11 renewables. There's a lot of vision about how the
12 smart grid is going to play out and we hope that
13 our AMI network will be available --

14 PRESIDING MEMBER ROSENFELD: Capable.

15 MS. COREY: -- and capable of handling
16 that additional traffic.

17 ADVISOR TUTT: So with the different
18 bandwidth Edison and SDG&E, they use, are you
19 going to lose that functionality unless you also
20 follow that path?

21 MR. GAINES: We are quickly going beyond
22 my technical expertise but my understanding is our
23 bandwidth is sufficient to provide on/off type
24 signals to customers for controlling devices but
25 not broad enough to send packets of information

1 much beyond that such as frequent meter reading,
2 things like that.

3 ASSOCIATE MEMBER PFANNENSTIEL: May I
4 just ask the three investor-owned utilities. When
5 you do file comments I would really like to know
6 how specific you think standards should be when
7 describing the capabilities and functionalities of
8 the AMI.

9 We heard it this morning, the tradeoff
10 between being sufficiently clear that we are
11 making sure that the AMI would meet the necessary
12 requirements, against recognizing that
13 technologies can change rapidly. Perhaps even by
14 the time these standards go into effect things may
15 have changed. And I think that there is a tension
16 that we feel there and I don't --

17 Standards take a while to change. And
18 once you get them in place you don't want to have
19 to then go back and refile. So I want to hear
20 from you how far you think we should go and where
21 do you think we should be more generic.

22 MS. COREY: If I might make one
23 additional comment. And this is relevant to when
24 we get to LMS-3. We are very supportive of the
25 Commission putting functional requirements in

1 place as opposed to being very specific about the
2 type of equipment that should be deployed or a
3 specific bandwidth capability or that type of
4 thing. The functional specs that were in place
5 when we all elected our technology solutions I
6 think led us to where we are today, which is all
7 very satisfactory networks and meter capability.
8 So that was it.

9 PRESIDING MEMBER ROSENFELD: Have we
10 overstepped that boundary in this draft?

11 MS. COREY: I think we should discuss
12 that when we get to LMS-3.

13 PRESIDING MEMBER ROSENFELD: All right.

14 MS. COREY: That would be a subject of
15 that discussion.

16 ADVISOR TUTT: I would just comment or
17 ask, it sounds like the functional specifications
18 though that you are using at PG&E might lead more
19 towards the smart grid concept than what San Diego
20 and Edison are using.

21 MS. COREY: Well unfortunately nobody
22 really knows exactly what the smart grid, what the
23 requirements are going to be at this point. So
24 that leaves you in a very difficult position I am
25 sure. But you have to marry your requirements

1 against what is available in the marketplace when
2 you are out -- And this is really more for those
3 who haven't made their selection. You have to
4 marry your requirements with what's available in
5 the marketplace and make your best pick.

6 You know, we happened to sort of, you
7 know, we sort of came behind Edison and San Diego
8 and there was another alternative that had a
9 slightly broader bandwidth so we were able to take
10 advantage of that. But as you point out, the
11 technology is continuing to change and the day
12 after tomorrow there will be something that the
13 munis will be able to take advantage of that may
14 have more capability that could support more smart
15 grid functionality when we figure out what that
16 is.

17 MR. OLIVA: If I could just add. Again,
18 I am not the technical expert so I don't know
19 whether the differences in bandwidth actually make
20 any real difference with respect to what we are
21 planning with our automation in terms of
22 distribution. There are other approaches and it
23 is not necessarily the case that you need to pile
24 everything on your AMI system. So just keep that
25 in mind.

1 MR. GAINES: And if I could clarify. I
2 didn't want to leave the impression that we are
3 lacking in capability on the smart grid side if
4 you define that as the distribution and
5 transmission side. We have plenty of capacity for
6 all the functionality that has been designed into
7 the system for that. The limitation comes on how
8 frequently and how much information you
9 communicate to each individual customer. That's
10 where the limitation comes in.

11 CPUC ADVISOR CAMPBELL: A quick comment.
12 The topic of smart grid was mentioned a couple of
13 times. I just wanted to highlight that the PUC is
14 considering a new smart grid rulemaking which
15 could be opened as soon as next Thursday's
16 Commission meeting. And it is fairly broad in
17 scope and you can take a look at that document if
18 you are interested. It will touch on some of the
19 things that are going to be -- have come up
20 already and will continue to come up today.

21 PRESIDING MEMBER ROSENFELD: Jim.

22 MR. PARKS: Jim Parks with SMUD. SMUD
23 is in compliance with LMS-1 and we are supportive.
24 We are hoping to install an infrastructure that
25 will help us to enable smart grid activities such

1 as net zero energy homes and buildings, energy
2 storage, demand response, time-of-use rates,
3 critical peak pricing, those sorts of things. And
4 that will be part of our pilot that we start in
5 2009.

6 The one concern I had on here was for
7 those that have not done a plan yet on AMI. I
8 think six months is a little bit of a short term.
9 We did ours in six months but we had like a one or
10 two year old plan that we started with. And we
11 worked really hard to get it out the door in six
12 months so I think one year would be a more
13 appropriate time frame to consider. And that's
14 all.

15 PRESIDING MEMBER ROSENFELD: Where is
16 that exactly? What sentence are you looking at,
17 Jim?

18 MR. PARKS: Somewhere in there it says
19 within six months they need to submit their plan.

20 ASSOCIATE MEMBER PFANNENSTIEL: Well the
21 original LMS-1 says 30 days and then the
22 alternative draft says --

23 PRESIDING MEMBER ROSENFELD: Six months,
24 okay.

25 MR. PARKS: The original one says it is

1 enforceable 30 days but item two says all
2 utilities shall report to the Commission Executive
3 Director within six months of the effective date.

4 PRESIDING MEMBER ROSENFELD: And so you
5 are recommending --

6 MR. PARKS: And I would submit that that
7 should be one year.

8 PRESIDING MEMBER ROSENFELD: It will be
9 duly noted. That's all?

10 MR. PARKS: That's all.

11 MR. JORDAN: Jerry Jordan, CMUA. I
12 would just echo what Jim said about the longer
13 time frame for developing those plans, especially
14 for utilities that may be starting at ground zero.

15 PRESIDING MEMBER ROSENFELD: And I guess
16 it doesn't do much good to call on SCCPA.

17 ASSOCIATE MEMBER PFANNENSTIEL: Which is
18 kind of a shame. I wish somebody could call on
19 SCCPA.

20 PRESIDING MEMBER ROSENFELD: Well gang,
21 we didn't get any good fights there. Are there
22 any --

23 (Laughter)

24 MR. TAYLOR: Do we have any commentators
25 from the audience? Bob, did you want to speak?

1 MR. LEVIN: Yes. Robert Levin
2 representing DRA. Just one very minor comment.

3 In the original version of the standard,
4 LMS-1, it refers to all utilities. There is a gas
5 utility, Southern California Gas, who has an AMI
6 filing out and we have taken the position that it
7 is probably not cost-effective for a stand-alone
8 gas utility. So I would ask that this particular
9 standard be limited to all electric utilities.

10 PRESIDING MEMBER ROSENFELD: Where are
11 you looking, exactly, Robert?

12 MR. LEVIN: In the original version of
13 LMS-1.

14 PRESIDING MEMBER ROSENFELD: Right.

15 MR. LEVIN: It says, purpose, to require
16 all utilities to prepare a plan for deploying
17 advanced meters. And I would suggest that that be
18 limited to all electric utilities.

19 Or in the alternative version it refers
20 to where the AMI infrastructure is cost-justified
21 and I think that's reasonable. But I wouldn't
22 want to suggest that gas utilities as a matter of
23 course go out and develop AMI infrastructure.
24 Because in our view many of the reasons for
25 developing AMI infrastructure for electric

1 utilities are simply not present for gas.

2 PRESIDING MEMBER ROSENFELD: Just a
3 factual question. You are, of course, attached to
4 the same premises as the electric meter, in
5 general. And are you going to piggyback? Are you
6 going to try to get rid of meter readers by
7 forwarding your information to the electric meter?

8 MR. LEVIN: We have suggested that SoCal
9 Gas work with Edison where there's an overlap in
10 their service territories. To do some sort of
11 joint development.

12 PRESIDING MEMBER ROSENFELD: Yes.

13 MR. LEVIN: Edison is in the process of
14 conducting workshops to explore that avenue. In
15 SoCal's filing they have stated that they don't
16 believe it is cost-effective to work with Edison
17 and they are proposing a stand-alone development
18 of AMI infrastructure, approximately \$1 billion.

19 PRESIDING MEMBER ROSENFELD: Wow. I can
20 ask the rest of the panel but I think you have
21 convinced me. We certainly had electric utilities
22 in mind when we were doing this and I don't even
23 know if our load management powers would extend to
24 gas.

25 ASSOCIATE MEMBER PFANNENSTIEL: I don't

1 know either.

2 PRESIDING MEMBER ROSENFELD: So I think
3 you have pointed out a --

4 MR. JORDAN: I might add, we also
5 represent three gas utilities so we would
6 definitely support those comments.

7 PRESIDING MEMBER ROSENFELD: Thank you.
8 Thank you for being helpful.

9 MR. GAINES: Commissioner Rosenfeld, as
10 a representative of the gas company too, just to
11 clarify things. Our communication network that we
12 are proposing for the gas AMI is a stand-alone
13 system. The reason behind that was that we only
14 overlap with Southern California Edison for about
15 two-thirds of our meters so we have to have a
16 stand-alone system for the rest of it. And the
17 analysis came back it would be better just to have
18 a stand-alone for everything rather than having
19 two systems.

20 PRESIDING MEMBER ROSENFELD: Two
21 systems, yes. Thanks.

22 MR. TAYLOR: It sounds like we are ready
23 to move on to Load Management Standard number 3.
24 This is the Statewide Time-Differentiated Rate
25 Broadcast.

1 MR. JORDAN: For those of us who are
2 just lobbyists can you tell me what that says. I
3 don't know what this means.

4 PRESIDING MEMBER ROSENFELD: Gabe, do
5 you want to?

6 MR. TAYLOR: In brief, this standard
7 requires the utilities to transmit via some sort
8 of a communication signal, in this case it
9 specifies a radio data signal, the time-
10 differentiated rates as they go into effect. So
11 that customers --

12 MR. JORDAN: The actual rates?

13 MR. TAYLOR: The actual time-
14 differentiated rate trigger points. So for
15 example, the TOU rates which we were discussing
16 earlier. If you have a peak period that starts at
17 some time in the afternoon then at that time there
18 would be a radio signal that goes out. So that
19 customers who choose to participate and want to
20 set up devices to respond to that signal will have
21 an opportunity to set up devices to automate their
22 responses to the changing price.

23 MR. JORDAN: Thank you, I feel better
24 now.

25 PRESIDING MEMBER ROSENFELD: So

1 basically the regulatory staff has knowledge of
2 the time of day and it needs also to have
3 knowledge of the current price.

4 MR. TAYLOR: Okay. We'll start with
5 Janet again. Sorry, Janet.

6 MS. COREY: That's fine. First of all
7 let me say that we applaud the goal to provide
8 pricing information to all California consumers.
9 And I think that's why we are all here together is
10 to make sure that that information is available to
11 all, all customers in California.

12 We have invested a very significant
13 amount of money, the three IOUs, to deploy AMI.
14 And it is our firm belief that we should be able
15 to use that to communicate our pricing signals to
16 our customers. We also all have plans to put
17 information on the website, potentially do alarms
18 or alerts on the website. If a customer logs in,
19 today is a critical peak pricing day, would come
20 up in some sort of alert mode.

21 Unfortunately an alternative
22 communication methodology creates overhead for us
23 in that the device manufacturers now will have to
24 accommodate two different kinds of communication
25 vehicles. The utility-adopted methodology or

1 protocol is Zigbee radio. We have been very
2 successful importing that protocol over to a wire
3 line solution so the very exciting thing is there
4 will be additional technologies available that
5 will speak with the same language protocol.

6 This alternative radio, it does require,
7 it is a one-way communication broadcast from a
8 central point out. There are some questions about
9 security. Now any person who is maintaining a
10 device in the home will have two radios within
11 that device. The maintenance and O&M of that
12 particular device is potentially higher or more
13 costly.

14 We spent a lot of time thinking about if
15 we were the Commission and we wanted to make sure,
16 to be able to communicate to those customers who
17 didn't have AMI, what would the alternative be.
18 And our technical guys really did concede that
19 what you have got in the standards is probably a
20 solution that makes sense. However, what we want
21 to ask for in this standard is the ability to use
22 our AMI network as our communication vehicle and
23 not the radio broadcast option. That's really,
24 this is the most fundamental change that we would
25 like to see in the standards.

1 PRESIDING MEMBER ROSENFELD: So if I
2 understand you correctly, you are saying you have
3 full confidence that you have a better system
4 working so you would like to be exempted from the
5 RDS requirement.

6 MS. COREY: We are confident we have a
7 better system. It has two-way capability so we
8 will get acknowledgement that the customer has
9 received, the device has received our signal. We
10 have the ability to watch response to the signal
11 that we have sent out. There's a lot of
12 advantages to a two-way communication with the
13 customer.

14 PRESIDING MEMBER ROSENFELD: Sure.

15 MS. COREY: Now the part that you put in
16 there, which was ready now. The devices going
17 into the meters now that will broadcast
18 information into the home, we have not developed
19 the upstream IT to actually make that
20 communication link deliver product or deliver
21 signals into the home at this point but that is
22 contemplated in our upgrade application and it is
23 contemplated I think for all the utilities. We
24 would be providing programs, pricing programs
25 would be an example of that, over our AMI network.

1 ADVISOR TUTT: And Jana, you would
2 envision with this communication through the AMI
3 network that consumers would be fully capable of
4 going out to a hardware store or a Home Depot and
5 purchasing technologies that would communicate
6 then with the AMI network that you install as a
7 utility as part of your AMI roll-out?

8 MS. COREY: Absolutely. And in fact the
9 more critical mass we have behind the common
10 adopted communication standard the more likely it
11 is that there's going to be devices proliferating.

12 And we have, and I'm sure Edison and San
13 Diego also, we have people coming into our office
14 pretty much every week to show us their stuff. It
15 is all Zigbee compatible, that's what they say,
16 okay. And a lot of it is big guns, Microsoft,
17 Canon, Honeywell, Cooper, those guys, and a lot of
18 them are dozens and dozens of start-ups that are
19 VC funded that are saying, we are right here
20 whenever you guys are ready to go. There's a lot
21 of excitement in the industry about this and I
22 have no doubt there will be a proliferation of
23 product.

24 PRESIDING MEMBER ROSENFELD: I guess we
25 will hear -- We will have some comments on this

1 but I guess we will hear from the other two IOUs.

2 MR. OLIVA: For Edison I would like to
3 build on Jana's comments. You know, and getting
4 back to where she said something earlier about
5 defining the functional requirement as opposed to
6 the specific technical requirement. That is,
7 define the what that you want and not how to get
8 there. So if we are looking at --

9 Well let me just take you to the
10 paragraph that:

11 "All utilities shall provide
12 two modes of access to this
13 published information without
14 additional charges:"

15 And then it identifies two things. We
16 would want to add a third thing and that would be
17 the AMI system that the utility has. And perhaps
18 -- I don't know how to word it but perhaps it is
19 that the AMI system had met the standard in LMS-1
20 or something like that.

21 And then add the or after number one and
22 or after number two. So it can be one or the
23 other or another.

24 But another fix could be to just --

25 PRESIDING MEMBER ROSENFELD: I'm sorry,

1 Larry, let me see if I can get your --

2 MR. OLIVA: I'm sorry, Art.

3 PRESIDING MEMBER ROSENFELD: You want
4 one or two or?

5 MR. OLIVA: Or three, which would be the
6 utility AMI system. Perhaps the one that meets
7 the first standard.

8 PRESIDING MEMBER ROSENFELD: Utility,
9 two-way communication system.

10 MR. OLIVA: Yes. Or another approach to
11 this is to just instead of, you know, just say,
12 without additional charges, such as. Whereas one
13 and two would be examples as opposed to the
14 methods.

15 We don't know, really, what the best
16 methods will be. You know, the RDS system may in
17 fact be a good solution. But, you know, everybody
18 has a television. Prices broadcast on TV is
19 another way to provide information to customers.
20 And I'm not saying that's the right answer either,
21 it's just there are many things that could be
22 offered with some creativity.

23 Then a second comment has to do with the
24 open auto-DR standard developed by Lawrence
25 Berkeley Laboratory. We are not clear on the

1 application of this. It seems like this standard
2 really should be applied just to commercial and
3 industrial customers of a certain size and not all
4 customers. It seems to apply to all customers,
5 residential included.

6 PRESIDING MEMBER ROSENFELD: My
7 understanding is that there is a checklist of
8 information which is needed to control any
9 thermostat or to control a load management system
10 for a commercial customer. And that auto-DR has
11 picked out a communications protocol that is not
12 particularly controversial. If the residential
13 customer who dials into a website doesn't need all
14 that information it doesn't matter, you have got
15 to put it out for commercial customers anyway. Is
16 there any hardship associated with it?

17 MR. OLIVA: I'm not sure what --
18 Technically I don't know what the protocol is so I
19 don't know whether or not it is compatible with
20 the protocol we use in AMI for RMS market
21 customers. We think our AMI systems provide the
22 necessary protocols to provide load control
23 signals or pricing information or other
24 information. The auto-DR standard, as we
25 understand it, was developed for large customers

1 and that's fine for large customers. We just want
2 to understand the application of this.

3 MS. COREY: I just want to add one other
4 point about this. Our very technical guys when
5 they looked at this they said, if the open auto-DR
6 standard were to go through a widely recognized
7 standards body like the IEC or the IEEE, they felt
8 very strongly that it would be, it would be a
9 qualified open standard.

10 But unless it does that where it has all
11 of the, you know, input of the industry standards
12 development that it would not -- they do not know
13 that it qualifies as a literal, open standard. So
14 they were supportive if this standard actually
15 makes its way through the formal, standards
16 process because it gets all the industry input
17 that's necessary.

18 ASSOCIATE MEMBER PFANNENSTIEL: But
19 supportive in what way, Jana? Does that mean that
20 if PG&E went its own way and used your AMI system
21 would that comply with the standard or would that
22 not comply?

23 MS. COREY: Well what they are hoping is
24 that as it goes through the, wends its way through
25 the standards process at the IEC or the IEEE that

1 there would be a common understanding. The way
2 the protocol is outlined in the Zigbee standard
3 and the way the protocol is outlined now in the
4 Home Plug standard, that those elements would be
5 picked up and also be reflected in this auto-DR
6 standard. So there would be a common set of,
7 common categories or common standard protocol that
8 would allow inter-operability between all of the
9 devices. That is their belief.

10 ASSOCIATE MEMBER PFANNENSTIEL: Which
11 is, of course, our purpose.

12 MS. COREY: Yes. And so they believe
13 that if it goes through that standards process
14 that it would be morphed to be congruent with the
15 other industry standards.

16 PRESIDING MEMBER ROSENFELD: Sure. In
17 fact I thought that was the case but -- It should
18 be the case.

19 MS. COREY: Yes, I think they are
20 agreeable.

21 PRESIDING MEMBER ROSENFELD: Larry, you
22 were --

23 MR. OLIVA: I am really not, I don't
24 feel like I am competent to speak to this other
25 than my folks back in the office tell me that the

1 auto-DR standard was really, was really developed
2 for the C&I customers. And that it was their
3 understanding that the Demand Response Research
4 Center also had that understanding. So I don't,
5 I'm not sure that -- I guess we want to go back
6 and check and provide you additional comment on
7 this to be helpful here. I mean, we generally
8 support the idea, it's just that we want to make
9 sure we are not creating an error here in being in
10 conflict with the open-AMI standards or open-HAN
11 standards that are already under development.

12 PRESIDING MEMBER ROSENFELD: I hope you
13 will go back and check. And I will, I will talk
14 to LBL and make sure that there aren't any
15 problems too, or have them talk to you.

16 ADVISOR TUTT: And Larry, one other
17 question. Your large commercial and industrial
18 customers will be under AMI as well. And those
19 that are already participating in an auto-DR
20 program will be presumably using the auto-DR
21 protocol. So isn't it compatible in that sense?

22 MR. OLIVA: Well my understanding of it.
23 I mean, we have our large customers, above 200 kW
24 who have AMI, right, which has its own system of
25 communicating developed a few years ago. Not

1 compatible with the AMI roll-out that we have,
2 that's a different system.

3 The auto-DR system or program that we
4 offer to those large customers has a clear box and
5 it has a communication protocol that talks to that
6 box. And we have, I don't know how many
7 customers, ten or 15 customers on that, on that
8 program. So it's a separate system.

9 MR. GAINES: A few similar comments from
10 SDG&E. First of all with regards to the multiple
11 communication links. Our AMI case was certainly
12 predicated in part on having a communication link
13 with the home, getting the benefits of being able
14 to send the demand response signals to the home.

15 It added cost to each of the meters of
16 about \$5 to put the chip in, and then gave us
17 benefits back of demand response controls. So we
18 viewed that adding a second system on top of that
19 would just be added cost that wasn't considered in
20 the cost-effectiveness. Unnecessary because the
21 functionality is fully complete with what we have
22 inside our AMI case.

23 Secondly, recognizing that
24 standardization is a good thing. All three
25 utilities worked very hard to come up with an

1 agreeable approach. We have all settled on the
2 Zigbee communication link within the home so we
3 are pushing that consistency across the state.

4 And then lastly, I think my
5 understanding of what is happening in the
6 marketplace. There is lots of devices that are
7 being developed for controls. They use different
8 communication links, perhaps in the buildings or
9 the homes. But it is not a problem to have all of
10 those communicate identically over the same
11 system.

12 There's universal translators that can
13 accept any signal, whether it's Zigbee or a power
14 line carrier or Wi-Fi, so that's not the critical
15 factor. I don't think that's a limitation to the
16 functionality we are looking for so I wouldn't
17 recommend putting too much specificity on what
18 communication link you have, just to make the
19 requirement to have one that meets certain
20 functionality.

21 As far as the auto-DR. My understanding
22 is similar to Larry's. That it is focused on
23 large, commercial and industrial customers. Our
24 concern with it is there's two aspects of it. One
25 is that it has certain functionality that we agree

1 with in that it sets standards for how you
2 communicate and what you communicate to different
3 devices and customers.

4 What we are concerned about is if it
5 also sets up a process going through Lawrence
6 Berkeley Laboratory and their servers. And we
7 think that is too much specificity. That you can
8 have the same functionality and use it through any
9 system you want, would be a better solution rather
10 than specifying a specific process.

11 PRESIDING MEMBER ROSENFELD: So the idea
12 of a protocol is okay but don't specify the
13 servers or the routing.

14 MR. OLIVA: Right.

15 MR. GAINES: Because we have third-party
16 service providers called aggregators that
17 aggregate customers for demand response. Most of
18 them have their own systems that automatically
19 send signals to the customers automatically,
20 adjust whatever they are going to adjust at those
21 sites. Their functionality meets the criteria for
22 auto-DR but they don't use the LBNL system itself.
23 So set those specifications.

24 PRESIDING MEMBER ROSENFELD: I guess you
25 folks have raised enough questions that probably

1 what we need is a subcommittee of one of your
2 technical folks each and LBL and Ron Hoffman, who
3 has been in on the design of the TCTs for a long
4 time where the same question arises. So duly
5 noted.

6 MR. OLIVA: We'd be happy to participate
7 in that.

8 PRESIDING MEMBER ROSENFELD: Is that it,
9 Mark?

10 MR. GAINES: Yes.

11 PRESIDING MEMBER ROSENFELD: David, did
12 you have a --

13 ADVISOR HUNGERFORD: I have a couple of
14 questions. First of all I am happy to see the
15 recent news about the utilities' work with the
16 Zigbee and the Home Plug folks to get those
17 systems talking to each other because I know you
18 had a concern about installation of meters in
19 premises where the meters were remote from the,
20 from the building or were clustered meters like in
21 apartment complexes and condos and that sort of
22 thing. And the Home Plug provides a solution so
23 that's a good development.

24 I did want to ask about, a little bit
25 about my understanding is about the functionality

1 of the two-way systems that you have, that you
2 guys are working on.

3 First of all, in order for a customer to
4 utilize the enabling technology signal or the rate
5 signal or whatever you choose to call it, would
6 the customers have to actively engage with the
7 utility to turn it on and make it work? Could
8 they go to the store, buy a device, bring it home,
9 plug it in and have it reading the signals from
10 your system without ever talking to you? Or would
11 they be able to, would they have to make a phone
12 call, set it up somehow or join a utility program?

13 MS. COREY: The Open HAN group that is
14 comprised of vendors, utilities, I think some CEC
15 members sit in on that too, made a determination
16 early on that you actually wanted to register your
17 device with the meter. You want to have a
18 handshake that is formally made so that your meter
19 is not broadcasting to the next-door neighbor's
20 thermostat.

21 PRESIDING MEMBER ROSENFELD: Sure.

22 MS. COREY: So there would be a
23 requirement for a consumer who brings home a
24 device to register with that meter. So make the
25 handshake with the meter. And that could be as

1 simple as a telephone call to the utility, get on-
2 line, enter the device number on the back of the
3 device and it will close that link, you know.

4 That link can be closed very quickly but there has
5 to be some kind of registration with the meter.

6 Does that answer your question?

7 PRESIDING MEMBER ROSENFELD: Sure. I
8 mean, as the non-owner of a smart meter. I expect
9 when I get a new credit card to have to have some
10 communication, either with the bank or -- in this
11 case it's with the bank to register my credit
12 card. I am not sure if I understand the import of
13 your question.

14 ADVISOR HUNGERFORD: Let me, let me find
15 the follow-ups here.

16 So the utility then knows what device an
17 individual customer has in their home and what
18 they have hooked it up to and that sort of thing,
19 right?

20 MS. COREY: That's what we have
21 contemplated at this time.

22 ADVISOR HUNGERFORD: Right, right. The
23 follow-up question is, would customers be able to
24 purchase and use a two-way capable Zigbee device
25 and use it to respond to the utility price signals

1 without the device sending information back to the
2 utility on it's, it's usage? In other words, in
3 other words, could you buy a two-way device but
4 then not tell the utility, not let the utility
5 know what you were doing with it?

6 Essentially one-way. That the utility
7 price signal is received, the device says, the
8 price has gone up, I am programmed to reduce the
9 temperature or turn off this battery charger or
10 turn off this pool pump when it hits this price.
11 But I don't want it sending information back to
12 the utility about what is getting turned on and
13 off in my house.

14 MS. COREY: That is a very good
15 question. I do know we contemplated the consumer
16 could have devices in their home that operate
17 without utility interconnection. But I still
18 think in order to receive a signal from the meter
19 we would have to register the device in order to
20 have that handshake.

21 But there is no reason why we would
22 expect, unless it is a utility-offered program,
23 why we would need to know what is happening in the
24 customer's home. Is that right based on what you
25 know? That's what I believe is the case.

1 MR. OLIVA: That's my understanding as
2 well.

3 MS. COREY: Okay. My expert back there
4 nods and said yes.

5 MR. GAINES: The only caveat I would put
6 is, if we were giving them incentive in some way
7 for them to have that device in the home, I think
8 there may be a requirement that we understand
9 whether it is actually doing something. So a
10 communication back may be required in those
11 situations but I think that is still up for
12 development.

13 ASSOCIATE MEMBER PFANNENSTIEL: That is
14 if you are giving them incentive. But then again,
15 maybe you wouldn't be.

16 MR. GAINES: If we wouldn't be then I
17 wouldn't see a reason to.

18 ADVISOR HUNGERFORD: Let me lay out one
19 of the concerns that has sort of pushed us this
20 direction in requiring the redundant system. It
21 seems that there are a lot of customers who would
22 choose to participate in a utility program who
23 wouldn't mind having information shared with the
24 utility about their end uses and would happily
25 participate in a situation where they were, where

1 the utility was trading information with them and
2 operating devices.

3 But there could be a large number of
4 customers who simply want to be, who simply want
5 to be on the rate that they are on just as they
6 are now and that the automation of their response
7 to those rates is something that they choose to
8 do. And choose to do with an inexpensive set of
9 devices that they purchase when they want to,
10 install and use when they want to, and how they
11 want to and they don't feel comfortable trading
12 information with the utility on that.

13 They are the ones, they are the ones
14 paying the rates. If they choose to install a
15 piece of equipment that listens to the price and
16 turns off when the price is higher then that seems
17 like that should be their right to do that without
18 ever having to involve the utility in this
19 transaction. And it is one of our fears that the
20 two-way system will actually limit the use of the
21 enabling technologies to a subset, to a smaller
22 subset of the population rather than it be
23 something that was universal and that everyone
24 could use.

25 That is the concern that leads to this

1 idea of a backup, one-way communication system
2 that is essentially a broadcast signal. It
3 doesn't have any security issues because, at least
4 for the customer's usage data, because there is no
5 information going back to the utility or to anyone
6 else. It is simply like tuning into a radio
7 station. Nobody cares whether you are listening
8 to that radio station or not, that's your choice
9 as a customer and as an owner of a radio.

10 In the same sense could someone own a
11 programmable communicating thermostat or a pool
12 pump switch that listened to the utility price.
13 That they can then, that they can then use on
14 their own without needing to communicate with the
15 utility on that?

16 MS. COREY: Yes, I'm pretty sure that
17 there is a one-way communication feature to this
18 but -- This is Dan Partridge from PG&E.

19 ADVISOR HUNGERFORD: Hi Dan.

20 MR. PARTRIDGE: So the standards, the
21 standards account for that. You can broadcast
22 through the Zigbee and we think the Home Plug a
23 unauthenticated pricing message. Whether you do
24 that or not is a policy decision. But technically
25 it is covered.

1 ADVISOR HUNGERFORD: So the technical
2 capability is there but it needs to be written
3 into policy whether that is the way it is
4 utilized. Rather than --

5 MR. PARTRIDGE: The concern is whether
6 there are security issues about sending a message
7 out that is fully authenticated or not. So if the
8 customer hasn't registered with the utility then
9 we can't assure that it can recognize the messages
10 from us and not from somebody else.

11 MR. TAYLOR: So the security concern is
12 about spoofing of signals, it's about signals that
13 are false?

14 MR. PARTRIDGE: But we did realize that
15 people may want to do that so it's supported in
16 the hardware and in the standard.

17 MS. COREY: And when Dan talks about
18 standard he is referring to the Open HAN.

19 ADVISOR HUNGERFORD: Thanks for that
20 clarification. It needs to be in the record.

21 MR. OLIVA: Well I would just like to
22 make one comment, David, on your remarks on that.
23 I guess I am not clear on the cost of RDS or the
24 cost of a redundant system but it just strikes me
25 that requiring a redundant system on the

1 possibility that maybe some customers might want
2 to do something in some way we don't know is kind
3 of -- you know, it just seems like it's an
4 expensive requirement for something we know very
5 little about in terms of an option that customers
6 might want.

7 I think, as Jana mentioned, that the
8 possibility of a customer having devices in their
9 home that are registered or have the handshake
10 with the meter and then do whatever they want to
11 do and the utility doesn't care, our system will
12 do that. The capability of that will be there.
13 So the redundancy or the necessity for redundancy
14 and the cost that might be associated with that is
15 certainly not clear to me.

16 PRESIDING MEMBER ROSENFELD: I am going
17 to repeat my suggestion that I think we need a
18 subcommittee. I think I am moved to make the
19 point that David's question of propriety of data
20 isn't the only issue. That is, the whole RDS
21 issue came up quite a long time ago.

22 We always thought it would be for one
23 generation of transmission. Zigbee at the time
24 was not as universal as it is now. And there was
25 the issue, and I don't know currently how

1 expensive it is. There was the issue that by
2 putting in the RDS signal, which is universal in
3 Europe and the US, that we would be making a mass-
4 market nationwide, larger than the California
5 market for the new meters and for the
6 communicating thermostats. And that might save us
7 more money than the couple of bucks that it takes
8 to put the RDS in. So it's a technical issue and
9 we probably need a subcommittee. I don't think we
10 can decide it here.

11 ADVISOR HUNGERFORD: No but I do -- One
12 point though. The RDS system will not require an
13 infrastructure investment. The infrastructure is
14 existing radio stations and their capability of
15 broadcasting in a digital sub-band, which is where
16 you get your radio station call letters and song
17 titles on your car radio now.

18 The system, the equipment, the capital
19 investment is already there. It is simply a
20 service that would, that you as a utility would
21 subscribe to for the time that it was, for the
22 time that it was needed. I believe SMUD has some
23 experience with a pilot using this system and
24 maybe Jim can enlighten us on some of those
25 details. Or he can rely on Vikki Wood in the

1 audience who has been working on that to do that.

2 ASSOCIATE MEMBER PFANNENSTIEL: Before
3 we jump off though into what has already gone on I
4 want to just register a concern here. We have
5 been working on the technology to go along with
6 load management and load management standards for
7 a number of years as have our counterparts at the
8 PUC. And while I think Commissioner Rosenfeld's
9 idea of convening a subgroup to make sure
10 everybody understands, I for one don't want to
11 delay this for another year. And it has been
12 years that we have been talking about this while
13 we have all reached agreement.

14 So I want to be very clear that when
15 people file comments on what is in front of you
16 right now, let's think about load management
17 standards as we were conceiving them, which is
18 mandatory standards that go into effect within the
19 next six months or year or however long it takes
20 to go through OAL.

21 Whether this should be in or not in, and
22 if in, what it should say, in a way that is both
23 technically compatible with what is going on and
24 doesn't require vastly additional costs. So I
25 want to see your comments on how we can make that

1 happen. And even as or even if we decide to put
2 the further technical discussions on a side path.
3 Sorry, Jim.

4 MR. PARKS: Jim Parks with SMUD. I did
5 want to say we do believe in the importance of
6 communicating with our customers. And I would
7 have to agree with my colleagues that I think we
8 should be agnostic as to the technology. I think
9 from SMUD's perspective we have no problem with
10 communicating with our customers in two forms, but
11 I think we should be allowed to determine what
12 those forms are rather than specifying on here.
13 And I think that's consistent with what I have
14 heard so far.

15 And then my only other comment on this
16 one would be that if we do keep this in there that
17 the layman should be able to understand what it
18 says. Because I read it and I was not quite sure
19 what it was saying, quite frankly. And so the
20 explanation helped but if we are going to leave it
21 in there I think, you know, anybody should be able
22 to pick it up and say, oh, I see what that's
23 saying.

24 And then in response to what you were
25 saying, Dave. Vikki Wood is here and can address

1 the pilot project that we did.

2 MS. WOOD: Well I would just like to
3 point out that we used the RDS in our pilot
4 project as a work-around because we don't have an
5 AMI system in place. And so it would be -- Were
6 we required to have both they would be redundant
7 and we would prefer to use -- We would have
8 preferred to use for the pilot to go through an
9 AMI infrastructure but we don't have one. And so
10 for us it was really a one-way communication to
11 the customer in order to dispatch a CPP signal.

12 And the RDS is a very narrow band and it
13 can't communicate a lot of information. It can
14 just communicate a time -- you know. It can
15 communicate to cut off some device, you know, to
16 control some device. But there is no
17 communication back. Communication back will have
18 to come through the meter in any case.

19 So for us and our use of that, it was
20 circumstantial that we used the RDS system for the
21 pilot. And we will continue to use it until we
22 have an AMI system in place but we would have
23 preferred to have used our own system.

24 PRESIDING MEMBER ROSENFELD: Okay.

25 MR. GAINES: If I could make just one

1 quick comment just to add on to this.

2 PRESIDING MEMBER ROSENFELD: Go ahead.

3 MR. GAINES: Another value of having a
4 two-way system is the value it adds to the demand
5 response that we receive. If the utilities have a
6 greater certainty of how much they are going to
7 get then obviously they can utilize that more
8 effectively in their planning process. Avoid
9 buying extra power.

10 With a one-way system you don't know how
11 much is out there to the accuracy that you would
12 with a two-way system that can tell us these
13 systems are on-line, producing this much power --
14 or using this much power and we'll get this much
15 with a signal to cut them off. So there is
16 incremental value to having the two-way
17 communication versus the one. And driving the
18 technology to utilize that two-way I think is
19 beneficial for us.

20 PRESIDING MEMBER ROSENFELD: Mark, I
21 think our load management gang was completely
22 convinced that two-way communication is 100 times
23 more attractive than one-way communication and is
24 certainly the wave of the future. It was really
25 with cases like Vikki Wood just had in mind where

1 there was no AMI working smoothly. I'm sorry,
2 there was no two-way communication working
3 smoothly. That this was supposed to be an interim
4 standby. And what we have to do is to look at the
5 economics and see what it is worth.

6 Just to put another number on the record
7 I seem to remember that to cover the state's 12
8 million meters with RDS adds like one cent per
9 month to the cost of operating the system. It's
10 not -- As Jackie Pfannenstiel says, we are really
11 down into fairly small weeds here.

12 Did SMUD have anything else to add?

13 MR. PARKS: That was it.

14 PRESIDING MEMBER ROSENFELD: That was
15 it?

16 MR. TAYLOR: Jerry, did you have any
17 comments on this?

18 MR. JORDAN: I don't have any comments,
19 no.

20 MR. TAYLOR: Okay, I think we are going
21 to move on to LMS-6, Enabling Technology Adoption
22 Programs. Jerry, did you want to start the
23 discussion on this one? Are you ready?

24 MR. JORDAN: Just kind of a question.
25 It seems like an awful lot of technology,

1 potentially. Does the Energy Commission have
2 intentions of certifying which devices are
3 appropriate or not? It seems to me that if each
4 utility has to go through the process of
5 determining which devices are going to operate on
6 their system and advise the customers about where
7 and how to get those things that that could be a
8 fairly large burden on a lot of utilities.

9 ASSOCIATE MEMBER PFANNENSTIEL: I would
10 like to offer that in the alternative standard the
11 utilities would not take that responsibility, they
12 would take the responsibility of providing
13 information and the customers would have the
14 responsibility of --

15 MR. JORDAN: My concern really was that
16 if you are providing information about specific
17 products there's an implied warranty of those
18 products and that utilities may be reluctant to do
19 that. Whereas if they were simply adding
20 information that the Energy Commission had already
21 certified about products that work that might be a
22 different issue.

23 ASSOCIATE MEMBER PFANNENSTIEL: But the
24 Energy Commission taking on a role of certifying
25 products would probably require their enhancement

1 of staff capabilities.

2 MR. JORDAN: But that would be true of
3 the utilities too.

4 ASSOCIATE MEMBER PFANNENSTIEL: I am not
5 sure that we would be suggesting the utilities
6 certify every product rather than have information
7 about what is in the marketplace.

8 MR. JORDAN: Right, but I think we heard
9 earlier that there are a number of vendors that
10 have been visiting PG&E, for instance, with
11 equipment that they claim will work with the
12 systems. I don't know how a utility would pass on
13 that information without some assurance that the
14 information would actually be accurate.

15 PRESIDING MEMBER ROSENFELD: The intent
16 here is not to certify or warranty or give a Good
17 Housekeeping -- or give a seal of approval to
18 hardware. The issue here is that there will be
19 lots of thermostats around. And once you have
20 bought a thermostat the price will be less if it
21 works all throughout California, if California is
22 one large market. In fact, if the customer can
23 move his thermostat from one of your muni
24 territories to PG&E when he moves --

25 So all we are asking for is that the

1 reference design be compatible as far as
2 communication, receiving and protocols and so on.
3 Compatible with standards which have been adopted
4 by such groups as Open-HAN and Open-AMI, in which
5 you participate in anyway. So it is just
6 standardization of communications that we are
7 concerned about.

8 ASSOCIATE MEMBER PFANNENSTIEL: Actually
9 I have a slightly different purpose in mind for
10 this in that -- It seems to me that that kind of
11 standardization could be a labeling question as
12 opposed to a does it exist question.

13 But my sense is that, as Jana pointed
14 out, there are a lot of new technologies being
15 developed every day. And I am not sure it is the
16 role of either the utilities or the regulators to
17 try to regulate the technology, the whole scope of
18 technologies that are going to be showing up at
19 Home Depot over the next couple of years. Yet I
20 think it is important that consumers know that
21 technologies are out there.

22 And maybe you don't -- Maybe I am not
23 suggesting the utilities make a list and say,
24 these 18 brand names of PCTs all comply. Rather
25 saying, there is a type of technology called a

1 programmable communicating thermostat, or there
2 are in-home communicating devices, or there are
3 in-home storage devices and, you know, you can
4 pick them up at the hardware store. It is more
5 the description of the kinds of technologies that
6 are there.

7 MR. JORDAN: That clarification
8 certainly helps.

9 MR. TAYLOR: Jim.

10 MR. PARKS: We didn't have any concerns
11 with LMS-6, both in the alternate version or the
12 original version.

13 PRESIDING MEMBER ROSENFELD: That's
14 quick and to the point.

15 MR. PARKS: And we think it is important
16 that we adopt these technologies if they come into
17 the market to enhance the AMI. I think we are all
18 installing these systems and we don't really know
19 where it could end up. We have based our cost-
20 effectiveness on a lot of things that -- basically
21 on meter reads and things like that that we could
22 kind of get our hands around. And now we are
23 trying to enhance our AMI and I think this is a
24 good avenue.

25 MR. GAINES: SDG&E didn't have any

1 problems with the original LMS-6. The only
2 problem we had with the alternative was Provision
3 number 1. With the clarifications from
4 Commissioner Pfannenstiel we are fine with that.

5 PRESIDING MEMBER ROSENFELD: I just
6 didn't hear. The clarification of what, Mark?

7 MR. GAINES: Provision 1. The way it
8 read here I thought we would have to list brand
9 names. But if it is just the availability of the
10 types of equipment then that's fine.

11 MR. OLIVA: For Southern California
12 Edison, we had no concerns with LMS-6. I think we
13 would be interested in seeing the reference
14 design. I would like to comment on that but
15 generally we support the language.

16 MS. COREY: On Commissioner
17 Pfannenstiel's alternative language, with that
18 clarification that it would be the type we are
19 very supportive of that. We want to, we are eager
20 to promote the in-home capabilities.

21 If we are still contemplating commenting
22 on the original, we had our same concerns about
23 the auto-DR that we did on LMS-3. We do support
24 the CEC's emphasis on these being voluntary-type
25 programs, consumers electing to put these devices

1 in their homes and taking advantage of our
2 programs.

3 Also with regard to incentives. I know
4 there has been an acknowledgement that that would
5 have to be something adopted within the CPUC
6 parameters. But we do have some form of
7 incentives for these types of devices currently
8 embedded in our energy efficiency, demand response
9 and smart meter programs. So they're modest.
10 They aren't, I don't think, what you had
11 originally envisioned but there are incentives
12 embedded in those proceedings to promote home
13 energy management devices.

14 PRESIDING MEMBER ROSENFELD: And you
15 would contemplate requesting more budget for that
16 in the outgoing years?

17 MS. COREY: Well, as part of our energy
18 efficiency and demand response programs we have
19 emergency technology funding. Those are three
20 year cycles. And so to the extent that we are
21 trying to move the market forward in the in-home
22 space I would not be surprised to see the
23 utilities taking a more, a little more proactive
24 role. That is really subject to where the Public
25 Utilities Commission wants our participation to

1 move that market.

2 PRESIDING MEMBER ROSENFELD: Okay. To
3 Andy.

4 PRESIDING MEMBER ROSENFELD: A couple of
5 questions for the utilities. Given there is a lot
6 of -- It sounds like there is increased activity
7 on the part of manufacturers to develop devices
8 that could work with Zigbee, for example. Are you
9 seeing kind of, any business-type associations
10 forming, manufacturer associations forming of
11 those groups that could be sort of a logical
12 entity that would help promote and help customers
13 understand what's available?

14 MS. COREY: Well at this point what we
15 see is that the vendors are participating in Open-
16 HAN so they are staying current on the standards
17 development work. But in reality the time frame
18 is pretty far out. It is not in the next six to
19 nine months, it is more like one to three years
20 before we have communicating capability from our
21 meters in California and before they are going to
22 be able to sell anything in volume. We are seeing
23 prototypes and we are seeing original production
24 runs being made in that space but not to the
25 extent that you would envision at this point.

1 CPUC ADVISOR CAMPBELL: A follow-up,
2 have you thought about, and this is more down the
3 road, looking at using vehicles like Flex Your
4 Power to help you increase your public awareness
5 of what's available. Because they do some great
6 things on the energy efficiency side in terms of
7 making people aware of what they can invest in,
8 what they can buy?

9 MS. COREY: Is that a question? You're
10 asking if we are using?

11 CPUC ADVISOR CAMPBELL: That's a
12 question. Are you considering that down the road
13 as an avenue through which to kind of do some of
14 the public outreach?

15 MS. COREY: I don't know the answer to
16 that.

17 MR. OLIVA: Well, I think -- Let me take
18 the second question and then go back to the first
19 question. On Flex Your Power, as I understand it
20 the CPUC is interested in taking a look at the
21 appropriate public awareness and education
22 campaign, including Flex Your Power, to promote
23 energy efficiency more broadly than it has been
24 promoted in the past. And I think that it also
25 includes the idea of demand response in all of

1 that.

2 So I think this year in 2009 coming out
3 there is going to be a study that looks at the
4 awareness campaign or the awareness approach that
5 may be broader, end up being much broader than the
6 Flex Your Power now campaign as we know it. In
7 fact there is a meeting in San Francisco talking
8 about that topic and now I have exhausted my
9 knowledge on that subject.

10 But with respect to other vendors or
11 manufacturers or other gadgets being developed,
12 there are a number of players big and small who,
13 you know, have approached Southern California
14 Edison about understanding, you know, the Zigbee
15 protocol and how do they fit. And they have been
16 involved with the, with the open forums on that.

17 And companies like Microsoft, Google,
18 Control 4, Greenbox and others. I mean, there's
19 countless others actually who are looking at
20 developing product. But it is, as Jana mentioned,
21 very early so there will probably be many more as
22 this becomes real and there's a real opportunity.
23 I mean, it is real to us because we are doing it
24 but in the marketplace or to those who are going
25 to be looking to sell product, three years out is

1 still, you know, that's the distant future to
2 some.

3 But general awareness of what is going
4 on. There are many conferences going on across
5 the country, in Europe and here about new
6 technologies, new approaches to demand response
7 and energy efficiency. Looking at AMI as the
8 conduit for enabling those things. And the
9 vendors are at those conferences talking about
10 their wares and it is increasing dramatically.
11 This year much more than the previous year and
12 it's a trend that seems to be or will be
13 continuing.

14 MR. TAYLOR: We do have a number of
15 other commentators interested in speaking on this
16 topic.

17 PRESIDING MEMBER ROSENFELD: Go ahead.

18 MR. TAYLOR: We'll start with Gayatri
19 and then we have Mr. Boland and Mr. Ames.

20 PRESIDING MEMBER ROSENFELD: David
21 disappeared and wanted to -- No, it was Tim.

22 MR. TAYLOR: Well we can, we'll take
23 more questions from the dais.

24 MS. SCHILBERG: I have a question, a
25 clarification about the reference design. What is

1 the time frame for deciding that reference design
2 and do we already know the characteristics of it?
3 Is it the same as the Title 24 reference design?
4 Because my understanding is that it is no longer
5 compatible with what the utilities are going to be
6 introducing with their PCTs and stuff. So I am
7 curious about this whole reference design that is
8 alluded to.

9 PRESIDING MEMBER ROSENFELD: My
10 understanding, Gayatri, of the reference design;
11 you asked two different questions. Is that it is
12 simply being translated into language to go into
13 these appendix. That it is frozen as of a week or
14 so ago.

15 With respect to the PCTs. There is the
16 question of the RDS one-way communication built
17 in, which has just been raised here. Apart from
18 that no changes have been made in it for a year as
19 far as I know.

20 MR. TAYLOR: Commissioner.

21 MS. SCHILBERG: So this is the same as
22 the Title 24?

23 PRESIDING MEMBER ROSENFELD: Yes. Go
24 ahead.

25 MR. TAYLOR: With regard to the PCTs.

1 The language in the PCT that was the subject of
2 some discussion about non-voluntary emergency
3 response has been removed.

4 PRESIDING MEMBER ROSENFELD: Oh yes, I
5 should emphasize that. That is, after the furor
6 of whenever it was last year it was explicitly,
7 the reference design was explicitly changed so
8 that any signal can be overridden and you go back
9 to where you were before any sort of emergency was
10 declared.

11 MS. SCHILBERG: But I believe it is the
12 case that the PCTs that are being installed or
13 planned for installation are not compatible with
14 that Title 24 standard, right? I remember, Larry,
15 we went over this in the Edison case.

16 PRESIDING MEMBER ROSENFELD: That's news
17 to me.

18 MS. SCHILBERG: You don't -- I thought
19 you were taking out the one port that did the one-
20 way communication and putting in the two-way port
21 into that PCT, right?

22 MR. OLIVA: Well I don't know that they
23 were non-compatible. And, you know, I'm sorry but
24 I really don't remember the specifics too well,
25 that was a while ago.

1 I think generally we were, we were
2 comfortable with the reference design with one
3 aspect. And I think that was that the default was
4 the RDS communication as opposed to allowing a
5 chip to be inserted for Zigbee. So I don't recall
6 the specifics with that. And I think we are kind
7 of talking about the same thing.

8 MS. SCHILBERG: Yes, because my
9 understanding was that there was all this evidence
10 about that Edison could only do a \$50 PCT if you
11 took out the port that did just the one-way
12 communication, the radio communication, and
13 instead you put that cost toward the two-way port
14 in the PCT. So my understanding is the device
15 that you are planning to install no longer has the
16 capability to do the Title 24 reference design.
17 Is that -- I mean, the ones that you are going to
18 be putting in the houses.

19 MR. OLIVA: I think we just don't know
20 that right now. I mean, we'd have to see where
21 the reference design is.

22 PRESIDING MEMBER ROSENFELD: Gayatri.

23 MS. SCHILBERG: I hope when you comment
24 you'll put that into your comments, whether that
25 is true or not.

1 PRESIDING MEMBER ROSENFELD: Gayatri,
2 the reference design definitely now includes
3 built-in an RDS receiver. I think the parts cost
4 \$2.50. We're down in the weeds as to whether that
5 \$2.50 is a good idea or not and we are going to
6 have a committee which will rule on that. That's
7 the only incompatibility as far as I understand
8 it.

9 MS. SCHILBERG: Yes. So hopefully
10 Edison will tell us if they had to take out that
11 part in order to meet their cost criteria.

12 PRESIDING MEMBER ROSENFELD: If their
13 costing is good to \$2.50 my hat is off to them.

14 ASSOCIATE MEMBER PFANNENSTIEL: And I
15 just want to point out that PCTs are not included
16 in Title 24 at this point.

17 MS. SCHILBERG: Right, I meant the old.

18 MR. TAYLOR: Mr. Boland.

19 MS. COREY: I just have a, I have a
20 quick clarifying question. Whatever is done for
21 LMS-3 will also be reflected in LMS-6 because they
22 both reference the --

23 PRESIDING MEMBER ROSENFELD: Same
24 communication.

25 MS. COREY: Thank you.

1 PRESIDING MEMBER ROSENFELD: Sure.

2 MR. TAYLOR: Mr. Boland from e-Radio. I
3 believe you have comments on both LMS-3 and LMS-6.

4 MR. BOLAND: Yes, Rick Boland from e-
5 Radio. I just wanted to make some clarifying
6 statements on the RDS capabilities. Our company
7 specializes in RDS technology.

8 And one thing I just want to make sure
9 that the Commission is aware of is that there are
10 encryption methodologies built into RDS that are
11 used worldwide right now. So it's the idea that
12 was never finished with the reference design, the
13 old Title 24 reference design I should say. Never
14 finished the encryption part. But there are
15 encryption technologies currently available in the
16 marketplace to allow secure messaging of messages
17 to a RDS-enabled device.

18 And on the subject of devices. The
19 reference design did contemplate a reference
20 design of the PCT. Contemplated a receiver that
21 looks something like this.

22 PRESIDING MEMBER ROSENFELD: I can't see
23 it from here.

24 MR. BOLAND: That's good, because it
25 used to be a lot bigger. But it is designed to be

1 embedded in high-volume manufacturing on
2 motherboards inside of the PCT devices.

3 The other interesting component that our
4 company is finding --

5 PRESIDING MEMBER ROSENFELD: I'm sorry
6 I'm going to ask you to back up.

7 MR. BOLAND: Yes.

8 PRESIDING MEMBER ROSENFELD: I need some
9 guess as to how much that extra receiver costs.
10 Can you back me up or back me down?

11 MR. BOLAND: Your estimate is accurate
12 in millions of units.

13 PRESIDING MEMBER ROSENFELD: Yes.

14 MR. BOLAND: And that's what we are
15 driving towards. But in small volumes obviously
16 it is more expensive.

17 PRESIDING MEMBER ROSENFELD: Of course.

18 MR. BOLAND: The second item I'd like to
19 just make sure that the Commission is aware of is
20 that a lot of device companies are looking at RDS
21 as a communications methodology that you don't
22 have to have a meter present to have the
23 effectiveness.

24 In particular we are working with
25 appliance companies. We are in a testing program

1 right now. And as this works out they would like
2 to go to market in 2010 with a whole suite of
3 appliances containing a receiver chip like this
4 that receive an over-the-air one-way signal that
5 doesn't communicate with a meter and doesn't
6 communicate back to the utility company. So the
7 privacy issues that Mr. Hungerford had raised
8 earlier are intact.

9 And then lastly I would like to also
10 mention that the time frame to build a statewide
11 network to support all 12 million consumers
12 potentially and 99 percent of the population is
13 about a nine month project. So it is very quick
14 to deploy, it is inexpensive and it is effective.

15 And I do want to add one more thing
16 before I leave. Messages that could be sent over
17 and above price signaling and reliability
18 signaling can include emergency notification
19 messages for severe weather, earthquakes, things
20 of that nature, as well as this is a perfect
21 application for Flex Your Power. To move Flex
22 Your Power and make it a more ubiquitous solution,
23 widespread broadcast over a statewide network.
24 Thank you.

25 PRESIDING MEMBER ROSENFELD: Thank you,

1 Mr. Boland.

2 MR. TAYLOR: Mr. Ames.

3 MR. AMES: Thank you. I'm Doug Ames, I
4 spoke this morning, from Transphase, concerning
5 thermal storage.

6 Specifically the proposed standards
7 currently state at page 48 or 49, no, 48, that
8 only time-of-use rates should be used to
9 incentivize thermal energy storage. This is an
10 issue with which the thermal storage --

11 PRESIDING MEMBER ROSENFELD: I'm sorry,
12 what page are you on?

13 MR. AMES: Okay, on page 48, Enabling
14 Technologies for Load-Shifting.

15 PRESIDING MEMBER ROSENFELD: Okay.

16 MR. AMES: And then it continues on to
17 the first sentence on page 49.

18 "The Committee recommends that
19 utilities provide information about
20 the potential for load-shifting
21 technologies to customers as they
22 are moved onto dynamic rates."

23 So there's no mention there about the
24 need for cost-effective incentives. There were
25 incentive programs approved by the Public

1 Utilities Commission in the '80s and early '90s.

2 There's currently a highly litigated
3 case at the PUC where there are evidentiary
4 hearings in the first week or the second week of
5 January of 2009 in the utilities' demand response
6 applications where the thermal storage industry
7 has proposed a California Thermal Storage Standard
8 Offer. And we are very concerned that this
9 Commission could come out with standards that
10 would, in effect, negate that.

11 Certainly incentives, particularly where
12 the time-of-use rates are not fully developed and
13 marginal cost pricing can be very cost-effective
14 and positive in terms of promoting thermal energy
15 storage.

16 Now with respect to the proposed
17 revision by the Chairman to the draft Load
18 Management Standard number 6. This is much more
19 positive and could be used to potentially support
20 an incentive. It doesn't specifically mention
21 thermal energy storage, which is one concern.
22 Under Provision number 2 it talks about certain
23 technologies. We strongly recommend that, and
24 will provide written comments specifying that we
25 recommend that thermal energy storage should be

1 included there as a technology.

2 And under number three it states:

3 "Utilities may choose to provide financial
4 incentives --" Well, utilities will often choose
5 not to provide financial incentives. We just want
6 to make it clear that if the Commission, if the
7 Public Utilities Commission were to so determine
8 and order that financial incentives were cost-
9 effective for thermal energy storage that that
10 would be adopted.

11 PRESIDING MEMBER ROSENFELD: I would
12 like to ask Commissioner Pfannenstiel. If the PUC
13 orders support for thermal storage does that seem
14 to conflict with your language that says the
15 utilities can advertise it?

16 ASSOCIATE MEMBER PFANNENSTIEL: It says
17 the utilities can advertise it?

18 PRESIDING MEMBER ROSENFELD: Well can --
19 Utilities may choose, as opposed to --

20 ASSOCIATE MEMBER PFANNENSTIEL: Oh, may
21 choose to incent. Well, let me put it this way.
22 If the PUC tells the utilities to spend the money
23 to incent thermal storage, I think they'd choose
24 to then comply with the PUC order.

25 But from our standpoint I don't want us

1 to be telling them to incent any specific
2 technology. That was my point, is that I didn't
3 think our role was to be promoting a specific
4 technology or the Energy Commission's role. If
5 the PUC so chooses to promote a specific
6 technology at a specific level of incentive that
7 is their decision on how to use ratepayer money.

8 MR. AMES: Right. Well my concern is
9 that the language might be interpreted and in fact
10 seized upon to say, well the Energy Commission is
11 not supporting financial incentives for thermal
12 energy storage. And so I am just looking for it
13 to be neutral. And allowing the Commission, the
14 Public Utilities Commission if it determines that
15 financial incentives are cost-effective and
16 appropriate, to so allow that.

17 ASSOCIATE MEMBER PFANNENSTIEL: I don't
18 see anything in there that would keep the PUC from
19 making that determination.

20 MR. AMES: Well one thing would be is
21 under number two where it talks about the
22 different technologies.

23 ASSOCIATE MEMBER PFANNENSTIEL: To put
24 thermal, yes, energy storage as an example
25 technology.

1 PRESIDING MEMBER ROSENFELD: Except it
2 says, are available from retail sources and
3 thermal storage is not.

4 ASSOCIATE MEMBER PFANNENSTIEL: It's not
5 retail sources.

6 PRESIDING MEMBER ROSENFELD: I think we
7 are pretty neutral.

8 ADVISOR TUTT: Thermal storage is not,
9 you know, it doesn't require AMI, necessarily,
10 it's sort of a separate kind of technology. And
11 it is mentioned earlier in the draft in the
12 report. I don't think there is anything negative
13 about thermal storage in there. I just think it
14 is neutral.

15 MR. AMES: Well, for example, on page 69
16 under LMS-2 it states at the top of page 69 number
17 4:

18 "Peak Time Rebate designs or
19 any other rate built around a
20 rebate structure are considered the
21 least effective and least preferred
22 method of dynamic rate design --"

23 ASSOCIATE MEMBER PFANNENSTIEL: Yes,
24 that is specifically about rate design, that is
25 not really about enabling technologies. In fact,

1 it is not at all about enabling technologies, it
2 is about a specific kind of rate design that we
3 were taking issue.

4 MR. AMES: Well, it talks about a rebate
5 structure.

6 ASSOCIATE MEMBER PFANNENSTIEL: A part
7 of the rate design is -- it's a rebate kind of
8 rebate design. It had nothing to do with the
9 technology associated with it. It's the price
10 that customers would pay for electricity.

11 PRESIDING MEMBER ROSENFELD: And it only
12 applies to one, an estimated one percent of real-
13 time and it is not going to make any economic
14 difference on thermal storage, which needs high
15 prices every summer afternoon. I think you have
16 just mixed up two different issues.

17 MR. AMES: Okay.

18 PRESIDING MEMBER ROSENFELD: I think we
19 are pretty neutral on thermal storage.

20 MR. AMES: Okay, thank you.

21 PRESIDING MEMBER ROSENFELD: It is
22 certainly our intent to be neutral.

23 ASSOCIATE MEMBER PFANNENSTIEL: Yes.

24 PRESIDING MEMBER ROSENFELD: Tim.

25 ADVISOR TUTT: I guess I'd say, as you

1 said before, Art, we have always supported thermal
2 storage. The report is neutral on a standard for
3 it and a variety of things like that but we
4 continue to support the concept of thermal
5 storage.

6 PRESIDING MEMBER ROSENFELD: And I am
7 even confident that as we get time-of-use rates
8 with a substantial number of hours at high prices
9 that thermal storage will come in big with the
10 degree of interest that it had in its first --

11 MR. AMES: First round.

12 PRESIDING MEMBER ROSENFELD: Round, yes.

13 MR. AMES: Okay, well thank you very
14 much.

15 PRESIDING MEMBER ROSENFELD: Thank you.

16 MR. TAYLOR: Mr. Greg Ames. I'm sorry,
17 Mr. Greg Hood. Thank you, Mr. Ames.

18 MR. HOOD: Good afternoon, I'm Greg Hood
19 with GreenSwitch. I'm one of those companies that
20 you were referring to that comes and takes their
21 products to utilities and tries to get them to see
22 our way of thinking.

23 We are, just to give you a brief summary
24 and not to over-pitch what our product is, but we
25 are a wireless home automation system. We use the

1 Zigbee protocol. And we have simplified it down
2 to one action, flipping one switch in order to
3 save energy in a home. So when a customer exits
4 the home they turn off a switch, when they go to
5 bed at night, turn off one switch. It shuts off
6 all that phantom power, light switches that are
7 hard to get to, and also sets back the thermostat
8 to an economy setting.

9 So what we are attempting to do is kind
10 of cross paths with the HAN stuff and working with
11 the PCT idea and the PCD idea that the utilities
12 -- to embrace what they are trying to do. Because
13 what we have, we offer two separate products all
14 in one. And what our goal is to offer that one
15 simplified product to the customer, but also run a
16 parallel network that is able to communicate with
17 the meter to be able to enter into the demand
18 response area when it's necessary.

19 But our real challenge here, not to be
20 product specific but I think a challenge of our
21 industry is how do you get mass market acceptance.
22 And I think that if you are relying upon us to go
23 into Home Depot or a Lowe's to sit on a shelf and
24 be a home automation system for, in our particular
25 case, \$800 to \$900 to achieve that goal, I think

1 it is going to be a dismal failure. Because it
2 looks like a thermostat, switches, plugs. It
3 looks like anything else that we are replacing.

4 The advantages of the products that are
5 now being developed with Zigbee, in our particular
6 case installation of our network is generally less
7 than an hour in a average home. So it
8 theoretically could be a product that a do-it-
9 yourselfer could do.

10 Although, once again to get back to the
11 mass acceptance, it has to come from the
12 direction, we feel, from the utility side.
13 Because just throwing a rebate at something and
14 putting it on a shelf, we'll probably not be able
15 to reach that capability.

16 And having a separate network. One of
17 the concerns was that you mentioned you were
18 talking about inferring with the PCT idea that
19 there is a lot of pushback or backlash from the
20 end-user that maybe it's Big Brother in there and
21 communicating information back and forth.

22 We think we have another product that's
23 coming with it. It's a dashboard-type product
24 that will inform the customer what's happening at
25 home as well as be able to, once they find out,

1 hey, I'm in peak time, I'm paying this amount of
2 rate, I can go in and sit in my chair and I can
3 touch these buttons to turn off designated items
4 in my home and be able to save energy real-time
5 while that process is happening.

6 So there needs to be a form of two-way
7 communication between us and the meter. But the
8 only way it's going to happen in the terms of
9 success from the utility from the control side,
10 demand side, is to offer a customer some value.
11 And I think a value-added proposition to this --

12 And we have talked to PG&E and I've
13 talked to utilities across the country, a lot of
14 them. In California's state we think that using
15 it as a capital improvement is a much better way
16 to go. It's profitable for the utilities, there's
17 money that is available to do these kinds of
18 projects. It has mass acceptance that goes into
19 the community to be able to deliver.

20 But not only entering into the area of
21 demand response, just a convenience product for
22 people to save money year-round on utility bills.
23 So if you to me and say, hey, we want to be able
24 to touch your thermostat in an emergency but we
25 are going to give you this product here, or at

1 least heavily incentivize it or finance it or do
2 whatever we do to be able to put it in your home,
3 if we need the help can we have it.

4 Most people would say yeah if they could
5 save 20 or 30 percent off their utility bill. If
6 you are say to them, hey, we'll give you \$25, you
7 know, that's not going to fly in my house. My
8 wife being on the other side of me if they are
9 going to change the setting in the middle of
10 summer. For \$25 I'm going to be in trouble.

11 So my statement here today is that we
12 would like the utilities to help us in trying to
13 embrace the idea of moving forward, maybe in a
14 capital improvement area that would benefit them
15 in the long run and benefit companies like ours
16 that can help push this stuff forward. Thank you.

17 PRESIDING MEMBER ROSENFELD: Mr. Hood,
18 the idea of GreenSwitch, I've heard about you and
19 it sounds like having a control box near the front
20 door which you can hit as you leave. It's a
21 wonderful idea.

22 MR. HOOD: It's just we replace your
23 switch with our switch.

24 PRESIDING MEMBER ROSENFELD: But I am
25 not quite sure what you want us, the Energy

1 Commission --

2 (Laughter)

3 MR. HOOD: I'm kind of talking this way
4 here.

5 PRESIDING MEMBER ROSENFELD: It seems to
6 me that there are the people you should be
7 addressing.

8 MR. HOOD: I'm looking this way but I'm
9 talking this way.

10 ASSOCIATE MEMBER PFANNENSTIEL: He is,
11 he's talking to them. He's just using our forum
12 to talk to them.

13 MR. HOOD: It's a combination of both.
14 I mean, it is your interaction with them that
15 helps design the ideas and the standards of what
16 move forward. But also in order to meet the goals
17 that you have discussed, things that you are
18 talking about, they are going to have to embrace
19 it. And it can't be, we are going to allow the
20 market by putting it in a retailer, to get the job
21 done.

22 The interest level we think of the
23 customer probably -- we do have interest level.
24 We are selling it on a retail basis and we are
25 having some pretty good success across the

1 country. However, if you look at it from the
2 standpoint of millions and millions of them, it's
3 not there yet. And if you talk to the Control 4
4 people -- And I know Parks and Associates did a
5 big survey on it. And they don't think home
6 automation is ever going to reach full stride
7 unless there is the support of the utility side in
8 order to get that job done.

9 PRESIDING MEMBER ROSENFELD: Well I sure
10 hope the utilities are listening.

11 MR. HOOD: Appreciate your time.

12 PRESIDING MEMBER ROSENFELD: Thank you.

13 MR. HOOD: Thank you.

14 MR. OLIVA: We are listening.

15 PRESIDING MEMBER ROSENFELD: Thank you.

16 MR. OLIVA: And working with many, you
17 know, many potential vendors.

18 MR. TAYLOR: Do we have any other
19 comments from the audience on the AMI and load
20 management technologies section? Scarlett from
21 the CPUC.

22 MS. LIANG-UEJIO: My name is Scarlett
23 Liang-Uejio, I'm from the Energy Division of the
24 CPUC. I just wanted to -- I have a follow-up
25 question for the gentleman, the GreenSwitch. I

1 wanted to know, you said you need help from the
2 utilities. Would that be also a help if it became
3 a standard for the state of California? It would
4 have a bigger help?

5 MR. HOOD: It would be much bigger.

6 Title 24 --

7 MR. TAYLOR: Mr. Hood, please come to
8 the microphone so that your comment is on the
9 record.

10 MS. LIANG-UEJIO: Sorry. Also --

11 MR. TAYLOR: You can sit at the table
12 there.

13 MR. HOOD: Sure.

14 MS. LIANG-UEJIO: I just want to clarify
15 the question. That with the utility and with the
16 AMI, and definitely my impression, your message is
17 definitely help. But I am just thinking in terms
18 of relating to this load management standard for
19 enabling technologies if it becomes a standard.

20 MR. HOOD: Well it would certainly help
21 us from the new construction side but there's a
22 lot bigger market out there in the retrofit market
23 available. So yes, we would certainly like that
24 to be involved but there's the other, bigger
25 segment of the market where we think it has

1 greater acceptance as well.

2 MS. LIANG-UEJIO: Thank you.

3 MR. HOOD: You're welcome.

4 MS. LIANG-UEJIO: And my second question
5 is for the e-Radio gentleman. I hear many
6 questions regarding the RDS standards. It has to
7 do with the cost, whether the cost is justified
8 for having a duplicate standard. Also security.

9 My question to you is the security. Can
10 someone, some kid, teenager out there could send
11 out a signal, a kind of false price signal to the
12 home to that device or there's security built into
13 the RDS?

14 MR. BOLAND: We are using FCC licensed
15 radio stations that have equipment secured
16 throughout their transmission cycle from the
17 origination of a message to when it is transmitted
18 over the air. Over their antenna, so to speak.

19 There's standards that have been
20 developed for the sending of real-time traffic
21 information over the air to radios and navigation
22 systems in your car that are encrypted and secure.
23 And that's the type of technology that we would
24 advocate be put into the reference design of the
25 PCD as it moves forward from where it was kind of

1 left off about a year ago.

2 MS. LIANG-UEJIO: Thank you. And
3 another question to follow-up regarding the cost.
4 You said it doesn't cost a lot to put the
5 infrastructure there. Is it that all radio
6 stations are equipped or is the radio required to
7 make additional capital investment with their
8 radio, whatever equipment, in order to broadcast
9 the utilities? I mean, this is from the radio
10 side, not the utility costs to develop those
11 information and pass on to the radio. But on the
12 radio side does it cost? And how many radios are
13 there in California that are able to -- say if
14 this becomes a standard to provide.

15 MR. BOLAND: I think I understand your
16 question. Our company has developed a software
17 solution for the utilities to send messages over a
18 network of radio stations just like Vikki did this
19 summer at the SMUD pilot.

20 Using that software we connect from the
21 utility company to the radio station. And we have
22 identified somewhere between 30 and 35 radio
23 stations are required to cover the entire state of
24 California with a signal. That includes the
25 remote areas of the state that other technologies,

1 for example paging, which is widely used as a one-
2 way solution, cannot cover. So where you have a
3 radio signal, if you can drive, you can see it in
4 your car or you can listen to it. Essentially
5 that's what we would be using to cover the state.

6 MS. LIANG-UEJIO: So those radio
7 stations either develop their software or have to
8 buy software from the company?

9 MR. BOLAND: No, it is our software and
10 we actually install equipment at the radio
11 station. The equipment cost is roughly \$2500 per
12 radio station. And our business model is we use
13 National Public Radio-affiliated stations that are
14 non-commercial because they need the revenue from
15 somebody like us to sign them up as a network
16 affiliate. We give them the equipment and we pay
17 them compensation. But it is a low-cost solution.

18 MS. LIANG-UEJIO: And can other
19 entities, people can develop the software or is it
20 based on an open standard?

21 MR. BOLAND: It is a open, global
22 standard that other people use for other
23 applications. We just happened to use it for the
24 utility business. There are other companies. For
25 example Clear Channel Communications, the largest

1 FM radio station operator in the United States,
2 they have a traffic division and they originate
3 traffic content and send it over their network of
4 radio stations to approximately 100 markets
5 nationwide.

6 MS. LIANG-UEJIO: Thank you. Those are
7 my questions.

8 PRESIDING MEMBER ROSENFELD: Thank you,
9 Scarlett. Thank you, Rick.

10 MR. TAYLOR: Are there any further
11 comments on this session from the dais or from the
12 panel?

13 Seeing nothing further, we do have a
14 short break on the agenda. Would the
15 Commissioners like to take a short break?

16 PRESIDING MEMBER ROSENFELD: Yes, how
17 about ten minutes.

18 MR. TAYLOR: Okay, ten minutes it is.
19 We will be back here at five after three, please.

20 (Whereupon, a recess was
21 taken.)

22 PRESIDING MEMBER ROSENFELD: Me thinks
23 the ten minute break has gone on long enough.
24 Could you folks take your seats please. Oh my
25 goodness, I hope Gabe is here now.

1 ASSOCIATE MEMBER PFANNENSTIEL: There he
2 is, he's in the back.

3 PRESIDING MEMBER ROSENFELD: Gabe, we
4 are ready for you.

5 MR. TAYLOR: We are missing one or two
6 people here still but I think we are probably
7 ready to get started.

8 Okay, we are going to move on to our
9 last session of the day, our peak load efficiency
10 session. The first standard is LMS-4, the Home
11 Energy Rating System standard. This requires the
12 utilities to provide HERS information to their
13 customers. Janet, do you want to start off?

14 MS. COREY: Sure. For PG&E, we believe
15 that all of the requirements of this load
16 management standard are reflected in our energy
17 efficiency program that we currently have in place
18 at PG&E. And that's really the only comment I
19 have.

20 PRESIDING MEMBER ROSENFELD: I guess I
21 have a question on that. Part of the motivation
22 for putting this into the load management
23 standards is that it is obviously more than energy
24 efficiency, much of which is going on thanks to
25 you. But home energy rating systems are sort of

1 new on the block. You can't have been doing a lot
2 with home energy rating systems because I think
3 that they have just sort of barely been made
4 available.

5 MS. COREY: I am under the impression
6 that our CEE program does support this type of
7 service. And I don't know if it's specifically
8 called in our energy efficiency program by that
9 name but they have assured me that it supports
10 this type of program.

11 PRESIDING MEMBER ROSENFELD: So are you
12 saying you support all this in principle but it is
13 really already being done by the IOUs under the
14 energy efficiency programs?

15 MS. COREY: That's what I have been told
16 by our energy efficiency group. I can check
17 specifically on HERS and we can comment on that in
18 our comments.

19 PRESIDING MEMBER ROSENFELD: Okay.

20 MR. MARTINEZ: Hi, Art. Just for the
21 record it's Mark Martinez filling in for Larry,
22 temporarily.

23 PRESIDING MEMBER ROSENFELD: Welcome.

24 MR. MARTINEZ: Thank you. I agree with
25 Janet's comments as well. I think we are going to

1 address specifically the citations in our energy
2 efficiency filing and past work that we have done
3 that specifically address these two issues. So
4 we'll reflect those in our comments.

5 PRESIDING MEMBER ROSENFELD: That was
6 quick. Mark.

7 MR. GAINES: SDG&E has similar comments,
8 although clarification --

9 PRESIDING MEMBER ROSENFELD: I'm sorry,
10 just a little -- Do you have the mic turned on?

11 MR. GAINES: Yes it's on. I'm not
12 speaking into it.

13 PRESIDING MEMBER ROSENFELD: Now it's
14 closer.

15 MR. GAINES: Okay. The Home Energy
16 Rating System, the HERS raters, the ones that rate
17 homes when they're called in, if that's what you
18 are referring to, we have been doing that for
19 quite a while. I was confused perhaps you were
20 referring to the green-billed ratings and the
21 various ratings that give you number for the home.

22 PRESIDING MEMBER ROSENFELD: No, I was
23 just referring to HERS raters.

24 MR. GAINES: Okay. So we include that
25 in our current programs as well as the rest, the

1 items listed here. Except for number five, and
2 maybe some clarification on that. Again it gets
3 back to how specific you want the information, the
4 availability of financing options. Do you want
5 providers of that to be listed or just statements
6 along the lines that there are green-related loans
7 available if you are looking for them?

8 PRESIDING MEMBER ROSENFELD: Gabe, you
9 wrote this section. I think you can answer Mark's
10 question better than I.

11 MR. TAYLOR: The question is about LMS-4
12 number 5?

13 MR. GAINES: Number 5. How specific are
14 you looking for the availability information on
15 financing options?

16 MR. TAYLOR: I'm a little confused.
17 Specific enough to allow a homeowner, considering
18 these are residential customers, to be able to
19 take advantage of those financing options.

20 MR. GAINES: Well the issue is we don't
21 provide any for residential customers so it's a
22 question of, do we list the various brands of
23 financing organizations out there. If that's the
24 expectation then I think we have problems with it.
25 If it's a discussion of just that you can check

1 with your local bank and look for green-oriented
2 loans then that's fine.

3 MR. TAYLOR: You are concerned about the
4 perception of advocating certain financing sources
5 over others, perhaps?

6 MR. GAINES: Yes, perception and legal
7 issues associated with it.

8 MR. TAYLOR: Legal issues. Okay,
9 understood. We'll take that under advisement in
10 the future language.

11 MR. GAINES: Okay.

12 MR. TAYLOR: I did want to clarify, the
13 HERS proceeding is ongoing and I believe this
14 Commission will adopt the Home Energy Rating
15 System next week in the Business Meeting; is that
16 correct? So this is as yet unadopted. But the
17 intent here is to provide some requirement for the
18 utilities to support this.

19 MR. PARKS: Jim Parks from SMUD and SMUD
20 is supportive of LMS-4. We have been long-term
21 supporters of HERS, mainly through CHEERS. And we
22 do have a board member and helped kick that
23 organization off until the time that they became
24 financially viable on their own and didn't need
25 help from the utilities. We support this.

1 MR. JORDAN: I don't have anything to
2 add.

3 PRESIDING MEMBER ROSENFELD: You're kind
4 of neutral or?

5 MR. JORDAN: Well no, I'm kind of
6 ignorant. Between now and the time we file --

7 PRESIDING MEMBER ROSENFELD: Join the
8 club.

9 MR. JORDAN: -- now and the time we file
10 written comments I'll endeavor to get more of an
11 idea of where the breadth of our membership is on
12 this issue.

13 PRESIDING MEMBER ROSENFELD: All right.
14 In fact Gabe can tell me that's not what he had in
15 mind but I think the IOUs already have very
16 aggressive programs. And SMUD, of course, always
17 has an aggressive program for these things. This
18 is aimed at a certain extent at the POUs.

19 MR. JORDAN: Thanks.

20 MR. TAYLOR: Just as a quick interlude.
21 I put this graphic up here to emphasize the fact
22 that home energy efficiency, existing building
23 efficiency. This is both the residential sector
24 and also commercial existing building efficiency.
25 These are all issues that the Energy Commission

1 and other utilities I believe have been working on
2 for many, many years.

3 And with respect to load management
4 standards, the standards are for cost-effective
5 improvements to the way we generate and distribute
6 energy and use energy and any efficiency
7 improvements that you have in an existing building
8 or in new construction that improves the load
9 shape. So this is efficiency that would reduce
10 perhaps cooling load in a hot climate or any
11 efficiency improvements that would reduce the peak
12 load in other climates, would be perceived as an
13 improved load management. So that's the concept
14 behind this and the next load management standard,
15 number 5.

16 MR. JORDAN: Excuse me. Are you saying
17 that there is a distinction between cost-effective
18 load management standards and the fact that all
19 utilities in the state are required to do all
20 cost-effective energy efficiency?

21 MR. TAYLOR: The authority that we have
22 here for load management standards is specifically
23 directed at cost-effective load management
24 standards. I am simply emphasizing that.

25 MR. JORDAN: But you don't believe that

1 would fall under SB 1037 or AB 2021 otherwise?

2 MR. TAYLOR: There is an overlap but a
3 not a complete overlap. There are cost-effective
4 energy efficiency improvements that are not load
5 management.

6 MR. JORDAN: No, I understand. But if
7 by definition under that legislation, if there was
8 a cost-effective load management program wouldn't
9 that also be required already?

10 MR. TAYLOR: Well we have already
11 discussed, I believe, various forms of rate load
12 management standards and other load management
13 standards that are not efficiency load management
14 standards. I'm sorry, I mean not efficiency
15 standards. There are forms of load management
16 standards which shift load and could, in theory,
17 increase energy consumption but would reduce peak
18 energy consumption. So while efficiency is in
19 many ways a subset of load management there are
20 efficiency requirements that are not load
21 management and vice versa.

22 ASSOCIATE MEMBER PFANNENSTIEL: And this
23 is -- What Gabe is articulating is in fact one of
24 the issues that we are really facing here. When
25 we had our earlier workshops, the six workshops we

1 had this whole year, we didn't talk about HERS
2 rating or putting this as part of the load
3 management standards. And I feel very strongly
4 that we need to get people here to think about it.
5 To think about whether this belongs in the load
6 management standards.

7 Now the investor-owned utilities and
8 SMUD sort of already are here on this one and in
9 fact the next standard that you'll see but not all
10 of the publicly-owned utilities are. And the
11 Energy Commission does have the authority to set
12 cost-effective load management standards. So we
13 want to, we are raising to the stakeholders our
14 supposition that that authority allows us to do
15 this and to do whatever the next load management
16 standard number is that is also efficiency.

17 MR. JORDAN: I'm not sure that is an
18 accurate characterization. You know, going back
19 30 years ago when a lot of our utilities were --
20 all or part of our customers were either Edison or
21 PG&E, they had what was called a ratchet rate and
22 so they had very strong incentives. So there's a
23 very long history in municipal utilities of load
24 management. And in other forums we have been
25 criticized by well-known environmental groups for

1 caring more about load management than energy
2 efficiency. So I am just trying to clarify where
3 the criticism is lying at this point.

4 ASSOCIATE MEMBER PFANNENSTIEL: Well if
5 you have any concerns I expect to see them in
6 written comments then.

7 MR. JORDAN: You certainly will.

8 ASSOCIATE MEMBER PFANNENSTIEL: Thank
9 you.

10 MR. TAYLOR: And I would like to open up
11 the floor to comments on LMS-5, Existing Building
12 Energy Efficiency Improvements. I guess Jerry
13 already spoke. Okay, we'll move to Jim.

14 MR. PARKS: On LMS-5, speaking
15 selfishly. I am looking through the seven
16 standards and there's four required proposals,
17 plans or reports to the Commission. And I'm
18 looking at this and going, well, we're already
19 doing this stuff. Is there any way I can get out
20 of submitting another report to the Commission and
21 provide that information through some other means.
22 You know, a link to our website or something that
23 would show that we are doing this. We looked at
24 this and said, yeah, we're doing this stuff.

25 I did have a question on the information

1 gateway. One of the staffers that I talked to
2 said that they felt like it was too restrictive to
3 have this one gateway, the single gateway, but I
4 am not sure if that was the intent of this. If
5 the staff maybe misread that.

6 PRESIDING MEMBER ROSENFELD: I'm sorry,
7 which line are you on, Jim?

8 MR. PARKS: Where it says on item one
9 there, within six months we shall submit to the
10 Executive Director information on the gateway
11 program, information gateway program. I'm not
12 sure what that meant. Is there some special
13 gateway? Or is it just more of an information
14 program and gateway is thrown in there?

15 MR. TAYLOR: I can provide more
16 information on the specifics. That came from our
17 staff, the concept of an information gateway.
18 It's essentially a one-stop source for the
19 information listed here so that a --

20 MR. PARKS: Okay. So it's not
21 necessarily an Internet gateway or some technical
22 gateway.

23 MR. TAYLOR: I don't believe that's the
24 intent.

25 MR. PARKS: Okay, then ignore that last

1 comment. So I would like to get out of providing
2 an extra report if I could in some way. That's
3 all.

4 ASSOCIATE MEMBER PFANNENSTIEL:
5 Reasonable.

6 PRESIDING MEMBER ROSENFELD: Very
7 reasonable. We'll pay attention to that.

8 MR. TAYLOR: I don't think the intent
9 was to require a report from those who have
10 already done -- would report this.

11 MR. GAINES: I just have a couple of
12 comments. I think we're fine with recommendations
13 one through four. I had a question on number five
14 where it states, coordinate energy ratings with
15 utility incentive programs. I'm not sure what the
16 intent of that is. Maybe some clarification there
17 would be helpful.

18 And then on six it gets back to the same
19 issue. And you can probably tell I have been beat
20 on by our lawyers on numerous occasions on this.
21 But it talks about connects customers with
22 financing programs administered by the utility,
23 which is fine. We do have financing programs for
24 non-residential customers. But it also says, or
25 other institutions. So again, it gets back to

1 what specificity is required there. We cannot
2 recommend institutions to our customers. So some
3 clarification on what the expectations are.

4 ADVISOR TUTT: Mark, does that mean you
5 can't recommend, for example, bank to your
6 customers? Particular financing, private banks
7 and institutions.

8 MR. GAINES: By name, yes. I mean, we
9 can say, look in the Yellow Pages.

10 ADVISOR TUTT: What about recommending
11 or providing information on the property tax
12 financing method that the City of Berkeley
13 started, the City of Palm Springs is, I think
14 developing.

15 ASSOCIATE MEMBER PFANNENSTIEL: Palm
16 Desert.

17 ADVISOR TUTT: Palm Desert.

18 MR. GAINES: Yes, I think those would be
19 fine through our city partnerships especially.
20 Yes, where it is not a competitive business.

21 PRESIDING MEMBER ROSENFELD: That would
22 be fine?

23 MR. GAINES: That would be fine.

24 PRESIDING MEMBER ROSENFELD: Okay. Well
25 I think that is kind of what we had in mind.

1 ADVISOR TUTT: I believe so.

2 MR. GAINES: I think the distinction is
3 if we are recommending a competitive business, one
4 versus another, then it causes us problems. But
5 if it is a city financing, it's for their city,
6 then that would be fine.

7 MR. TAYLOR: That's a very good point.
8 I'll definitely take it up with our legal staff
9 and clarify it.

10 MR. MARTINEZ: Hi, Mark again. Just to
11 kind of go back to Mark Gaines' comments. Those
12 are something called affiliated guideline rules
13 that we all adhere to, which do prevent us from
14 offering what we would call preferential treatment
15 to all service providers. So we do try to avoid
16 that.

17 With regards to existing buildings for
18 Edison. We support these programs. We do have
19 energy efficiency programs such as Savings by
20 Design, new construction and so forth, that cover
21 a lot of this. Incentives such as the statewide
22 performance contracts. So we feel we are fairly
23 compliant with a lot of these and we will sort of
24 itemize those compliance via specific programs in
25 our written comments.

1 And I would sort of concur with what
2 Gabe was talking about before just as a side
3 comment. That energy efficiency is linked with
4 load management and demand response. We feel that
5 you can't have one without the other. And we are
6 actually in a proceeding now to integrate all of
7 those programs. I think it is important that it
8 is mentioned and also taking a look at them.

9 ADVISOR TUTT: Thanks, Mark. In this
10 proceeding, the way I understand this proceeding,
11 the place where energy efficiency programs did
12 come up is in the customer education and needs
13 workshop and it was related to the links and the
14 integration between them and load management
15 programs so it is very pertinent.

16 MS. COREY: My comments are similar to
17 the ones I made on LMS-4, which is we believe our
18 energy efficiency programs really cover for us all
19 the dimensions that you mentioned here. We also
20 are looking at on-bill financing for investments
21 in energy efficiency. We haven't loaded that
22 product yet but we are involved in developing
23 that.

24 PRESIDING MEMBER ROSENFELD: Including
25 for the residential sector?

1 MS. COREY: I'm not really sure who the
2 target market would be for that. My guess is it
3 is for larger installations.

4 PRESIDING MEMBER ROSENFELD: Right.

5 MR. TAYLOR: Are there any comments from
6 the audience on this topic, Peak Load Efficiency?

7 Are there any comments on the phone?

8 MS. FONTANILLA: No.

9 MR. TAYLOR: No, okay. I'm both excited
10 and a little disappointed that we ended early so
11 we have some time for some public comments. But
12 none of those.

13 Any comments from the dais? I do have a
14 few more.

15 ASSOCIATE MEMBER PFANNENSTIEL: I'll use
16 the opportunity to just reflect a little bit. We
17 have been working in load management, or as we
18 called it, demand response, since I have been on
19 the Commission so it has been a full five years.
20 And I know Art and David and Tim and many others
21 have been working on it a lot longer than that.

22 And I am feeling that we are actually
23 moving towards the point where we are going to
24 actually use all of these concepts we have talked
25 about and I fundamentally think it comes down to

1 the three. We need the meters, we need the rates,
2 we need the enabling technologies.

3 And the meters, thanks to the good
4 partnership at the PUC and the utilities really
5 stepping up to the plate on this. And that's the
6 investor-owned utilities and SMUD. The meters are
7 finally going in. That's going to make an
8 enormous difference. Not just in load management
9 but it's going to make an enormous difference in a
10 lot of things on the customer side of the meter.

11 Then we need the rates. And that, as
12 everybody knows, is not our function. We don't do
13 rates, we don't do rate design. Just as well.
14 But we do work with the PUC and we can and we
15 should and we are in this proceeding setting out
16 what that is going to look like.

17 And then the enabling technologies piece
18 and that's developing as we speak. And my concern
19 there is not that we are not going to pick it up
20 fast enough, it's that we don't want to get in the
21 way of what the market is going to do for any one
22 technology. Once the rates are there and the
23 meters are there the market is going to provide us
24 with ideas on enabling technologies that I think
25 people in this room have never thought of.

1 So with that I am greatly encouraged.
2 We need to get this -- We need to get the load
3 management standards package improved such that it
4 is helpful to the state. We don't want it to get
5 in the way. We want it to move all of us along.
6 We want us to be on the same, the same page. And
7 I think we are much closer than I would have dared
8 to hope at this point.

9 So we really do look forward to your
10 comments. We need them. We need to improve this
11 package. We would like to get it out the door at
12 some early point over to the Office of
13 Administrative Law. We all know it needs clean-up
14 before it goes there. But in terms of the
15 concepts and the big picture of trying to get load
16 management or demand response in place in
17 California to make the enormous difference we all
18 know it can make, we appreciate your being here
19 and your willingness to work with us on that.
20 Thank you.

21 PRESIDING MEMBER ROSENFELD: So I speak
22 for having worked on it for more than five years.

23 ASSOCIATE MEMBER PFANNENSTIEL: Well I
24 really would say, by the way, that my first job in
25 the whole utility field was on time-of-use rates

1 30-plus years ago.

2 PRESIDING MEMBER ROSENFELD: You win. I
3 am also very pleased. The way I see it in terms
4 of Jackie's three-legged stool. The meters are
5 going on and that's great news. I think it's
6 probably more smart meters than anywhere else in
7 the United States, that's wonderful.

8 The rates are going in for 80 percent of
9 the -- for the IOUs at a date certain and that's
10 wonderful.

11 We have a lot of thinking to do to get
12 anywhere near 12 million thermostats in place.
13 That's going to require a lot of education and
14 incentives and so on. That's the next challenge.
15 But we are certainly leading the world as far as I
16 can see with a complete system. So I am very
17 happy and I thank you for your time and your long-
18 term collaboration.

19 Gabe, do you have any comments?

20 MR. TAYLOR: I just wanted to --

21 PRESIDING MEMBER ROSENFELD: Look at all
22 that progress.

23 MR. TAYLOR: There we go, schedule. I
24 just want to remind everybody that the comments
25 are due on December 19, that's next Friday.

1 Please feel free to call me, contact me, e-mail me
2 anytime between now and then or after if you have
3 questions or want to discuss anything.

4 After I receive your comments I will be
5 reviewing them all and I will provide both them
6 and summaries to the Committee. And I will be
7 contacting each of you and anybody else I have
8 heard of who is interested in this proceeding to
9 discuss them so that hopefully by sometime in
10 January we can prepare a much more polished
11 version of this document. Thank you very much.

12 PRESIDING MEMBER ROSENFELD: Thank you
13 for all your hard work putting this meeting
14 together and thank you all for coming. We are
15 adjourned.

16 (Whereupon, at 3:35 p.m., the Committee
17 Workshop was adjourned.)

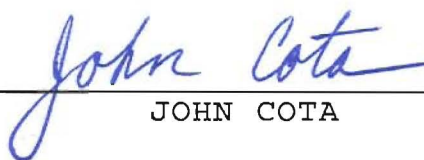
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CERTIFICATE OF REPORTER

I, JOHN COTA, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Committee Workshop; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said workshop, nor in any way interested in outcome of said workshop.

IN WITNESS WHEREOF, I have hereunto set my hand this 26th day of December, 2008.



JOHN COTA