COMMITTEE WORKSHOP

BEFORE THE

CALIFORNIA ENERGY RESOURCES CONSERVATION

AND DEVELOPMENT COMMISSION

In the Matter of:	)	
	)	
2008 Rulemaking on Appliance Efficiency Regulations	)	
	)	Docket No.
California Code of Regulations, Title 20, Section 1601 through Section 1608	)	07-AAER-3
	)	

CALIFORNIA ENERGY COMMISSION

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SACRAMENTO, CALIFORNIA

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P R O C E E D I N G S

1:06 p.m.

PRESIDING MEMBER ROSENFELD: Good afternoon. Welcome to the Energy Efficiency Committee workshop on televisions. I'm Art Rosenfeld, the Chairman of the Efficiency Committee. And to my right is Commission Chairman Jackalyne Pfannenstiel.

To her right is her senior advisor Tim Tutt. Good afternoon, Tim. And to my left is my senior advisor Dave Hungerford.

And, Jackie, do you have any comments you'd like to make, other than you are forced to leave at 4:00.

ASSOCIATE MEMBER PFANNENSTIEL: That's right. Well, thank you all for being here. This is a continuation of a discussion, and I hope that we're about at the point where we can move on to the next step.

Clearly this is an area that's of great interest to me, and to the Commission. So, we have in front of us a lot of good material. I am, unfortunately, needing to leave at 4:00. But I think that we have the whole afternoon ahead of us anyway.

So, thank you, Commissioner Rosenfeld.

PRESIDING MEMBER ROSENFELD: Any remarks, Tim or David?

Okay, Melinda, are you prepared to be introduced?

MS. MERRITT: Yes, I think we're ready to go.

PRESIDING MEMBER ROSENFELD: Okay.

MS. MERRITT: Good afternoon to everyone. I'm Melinda Merritt with the appliance efficiency program. As usual, I first need to go over some building logistic and safety information.

For those of you not familiar with the building, the closest restrooms are located out the door and to the left. There's a snack bar on the second floor under the white awning.

And lastly, in the event of an emergency and the building is evacuated, please follow our employees to the appropriate exits. We will reconvene on Roosevelt Park, which is located diagonally across the street from this building. We ask that you please proceed calmly and quickly, again following the employees with whom you are meeting, to safely exit the building. Thank you.

Today's meeting is the Efficiency Committee's public workshop regarding possible amendments to the appliance efficiency regulations related to televisions in the active mode.

There are copies of the meeting agenda, the Committee notice, and a limited number of copies of the staff report and presentations available in the foyer.

We ask that you fill out a blue card, also available in the foyer, if you wish to make oral comments today and you're not already identified as a speaker on our agenda.

The audio for this meeting is being broadcast, and regrettably we have an inoperable phone-in number that we are correcting. As soon as we have the correct call-in number we'll announce that over the microphone. That will probably be following staff's presentation.

All comments received to date have been posted on our website, and we will be posting the slide packs used in today's presentations, along with any additional comments received during today's workshop.

The Committee has asked for written comments or additional proposals be submitted by

this Friday, the 19th. This workshop is being recorded and a transcript will be available within two weeks.

The Efficiency Committee first established part C of the 2008 appliance efficiency rulemaking to specifically consider possible efficiency standards for televisions.

In its workshop notice the Committee directed staff to prepare a staff report for consideration at this workshop. So, at this point I will turn the microphone over to Harinder Singh and Ken Rider from the appliance program staff. And they will present staff's findings and recommendations.

MR. SINGH: Thank you, Melinda.

(Pause.)

MR. SINGH: Good afternoon, everyone. My name is Harinder Singh. I'm the program engineer with the appliance efficiency program. Staff is presenting an overview of the television energy consumption and draft efficiency standards for televisions for discussion. And staff is seeking comments for future television rulemaking.

The Efficiency Committee conducted a scoping workshop on January 15, 2008, and received

proposals to amend appliance efficiency regulations to include active mode standards for televisions.

PG&E, the Natural Resources Defense Council and others have recommended adoption of minimum energy efficiency standards for televisions in the active mode as an essential next step.

In April the Efficiency Committee set aside part C phase one of the 2008 appliance efficiency rulemaking to consider possible draft standards for the televisions.

On July 8, 2008, the Energy Commission received a revised television proposal from PG&E, and an alternate proposal from CEA, Consumer Electronics Association, and various comments from stakeholders.

On July 16th the Committee conducted a public workshop to seek comments from interested parties regarding proposed appliance efficiency standards for television in the active mode to be considered as possible amendments to the appliance efficiency regulations.

To date staff has analyzed all proposals, comments and transcripts to prepare the

staff report draft efficiency standards for televisions.

The current Title 20 standards effective as of January 2006 set the maximum standby power mode for all televisions at 3 watts. PG&E estimates that the total energy used by televisions including programming, recording and playback equipment, is approximately 10 percent of residential electric use.

PG&E proposes that Energy Commission consider energy efficiency standards for televisions in active mode. PG&E originally proposed standards for televisions on April 2, 2008, and the proposed standards are shown in the table here.

Second row show the tier one and tier two standards for non-high-definition televisions. Third row show tier one and tier two standards for high definition and full definition televisions. These standards were proposed in April by PG&E. And these are the previous original standards.

Here the P-max is the maximum on mode power consumption. And where it is represents the area expressed in square inches.

PG&E's study show that significant

energy can be saved in the future by requiring the sale of energy efficient televisions. After the existing analog stock is replaced, the active mode tier one tv standards would produce annual savings of approximately 3831 gigawatt hours.

And additionally, when the tier two goes into effect, there will be 2684 gigawatt hours of savings. And this estimate is based on the stock replacement by 2018 when all that stock is replaced.

Annual power use by each type of television technology is calculated here by multiplying the screen area in square inches with the average screen size as it's shown in the table.

PG&E estimates that existing television stock is made up of CRT televisions, 63 percent; LCD 30 percent; plasmas are 5 percent; and DLP, digital light processing televisions 2 percent. Currently statewide television energy consumption is estimated to be 8773 gigawatt hours a year.

In the absence of new standards this power consumption is expected to increase to 11,335 gigawatt hours a year.

As the current stock, mostly analog --

ASSOCIATE MEMBER PFANNENSTIEL: Excuse me. By when?

MR. SINGH: This is five years from today's date, because looking at the sales number. So CRT televisions probably will be replaced in another five years.

In the absence of new standards this power consumption is expected to increase by 11,335 gigawatt hours a year, as the current stock, mostly analog CRTs, CRT tvs will be replaced approximately in five years by the newer technologies.

The additional energy consumption, because of existing CRT stock replacement, without adding the future growth, will be increased by 2563 gigawatt hours a year. These are approximate numbers.

The television energy consumption is calculated based on the average of 1907 hours per year. And it is a weighted average of residential and commercial televisions that are in use.

The estimated annual sales for 2008 are approximately 4 million. And the following table shows the sales by tv types.

Tv sales are growing rapidly, and this

trend will continue in the future. The energy consumption will increase rapidly. Having standards for televisions will help in reducing energy consumption.

To present and discuss the draft standards, I would like to request Ken Rider to please make his presentation. And we'll take questions after Ken's presentation.

Thank you.

MR. RIDER: Hi, my name is Ken Rider. And I'm a staff member of the appliance efficiency program.

Before discussing the standards, I would like to present some additional background information. There's several other factors that are affecting the statewide energy use of televisions. These factors are beyond reasonable regulatory control, but emphasize the importance of mitigating television energy use where we can.

The sale of televisions is estimated by the July 3rd PG&E case study to grow at a rate between 3 and 4 percent over the next three years. The average number of televisions per home is growing, and the numbers of hours used watching those televisions are expanding, as well.

As the prices of large, flat-panel displays are dropping, the average screen sizes are increasing. In addition, as people replace their old cathode ray televisions, they tend to buy larger flat screen to match their bulk.

Shown here on this slide are two televisions with identical viewable screen area, but not very comparable in size. Now, as you can see, the televisions look comparable in size, but actually the flat-panel screen has a much greater viewable area.

This slide illustrates some of the ways that LCD and plasma manufacturers are accomplishing energy efficiency today. And how they can meet the draft proposed standards.

3M's Vacuity technology alongside other innovations are improving the efficiency of the transformation of an LCD's backlight into a colored picture. Plasma manufacturers are developing new phosphor and electrode schemes that will both improve picture quality and energy efficiency at the same time.

Some televisions are manufactured with photosensors that automatically adjust the brightness of a television depending on ambient

light. This saves energy in dimly lit settings.

A few televisions are being manufactured with an energy saver mode which gives the user an option to reduce the energy usage of their set. Also, out on the horizon, are new types of energy efficient tvs such as OLEDs and laser television.

I will now summarize the content and intent of the draft standards for tvs presented in the television staff report.

This first paragraph is simply outlining that televisions must meet the immediately following requirements. The first date that you see, which is right here, refers to the effective date of our standby standards for televisions previously enacted, which were introduced in this first slide.

The first set of regulations proposed here are prescriptive and are divided into A, B and C. A requires that televisions be manufactured with either automatic brightness controls or a forced menu that asks users to select an appropriate home brightness setting upon using their television for the first time.

B requires that if the television is not receiving a signal on its selected input that it

shut off after 15 continual minutes in that state. An example of a time where that might actually save energy is if one were to watch a DVD movie, and the DVD stopped playing and maybe shut down. Then the television would continue to operate.

Well, with this standard the television would turn off after 15 minutes of no input.

C requires that the television enter a passive standby mode when turned off, and will only enter other modes if consciously selected to do so by a user. And this is a case where people really never know when they've turned off their television, or a lot of appliances these days.

And so this is a way to insure when you turn off the television, that it truly turns off and doesn't enter a mode such as stated here, data acquisition mode, which is a higher energy use mode than off. And this standard really just requires that someone consciously make the choice to go into that mode, rather than accidentally.

The next set of standards are performance based. The first row shows the current television standard of 3 watts in passive standby. That's right here.

The proposed effective date of the first

new standard tier one is January 1, 2011. This new standard reduces the standby level to 1 watt and sets a floor of 0.9 for power factor, and sets a maximum active mode based upon screen area.

Now, this equation is different than the one that Harinder presented. These are the latest proposed standards, and do not differentiate between high definition and low definition. The but equation is in the same kind of form. And I will discuss what power factor is in a later slide.

Just below that standard is an alternate tier one, which is essentially a slightly altered maximum active mode power usage equation. This is the alternate. And the next slide will provide a better view of the differences.

The last row describes tier two which essentially tightens the active mode requirements for tier one -- from tier one.

So this is a graph that displays tier one alternate, tier one and tier two. And you can see that the real difference between the tier one and the alternate proposed tier one is they made up here at 50 inches. And for televisions 50 inches and above the standard would be more

stringent for all of the alternative tier one. And less stringent for televisions less than 50 inches in size. And then tier two is more stringent across the board.

This slide demonstrates the feasibility of a 1 watt standard. The data you see plotted here are the standby use of televisions certified with the California Energy Commission within the last year.

As you can see, only 14 percent of televisions sold in California currently use more than 1 watt in passive standby mode. In addition, the average standby of televisions which do not meet the 1 watt standard is 1.58 watts.

Adopting a 1 watt roof for television standby mode will also match current EnergyStar requirements and harmonize with standby standards being developed internationally.

The data you see presented here is taken from televisions certified under the new EnergyStar television standards. The dotted line right here is the draft standard level. So, all the televisions above that line would meet the proposed standard.

What is a power factor? A power factor

is the measurement of real power divided by apparent power. This essentially translates to the ratio of power used by a device to the power it requires from the electrical grid.

Power factor translates to real costs to consumers in their energy bill, and indirect costs through the power quality issues presented to utilities.

The draft standards propose that power factor be a minimum of 0.9 for televisions manufactured in 2011 and beyond.

Thank you. This concludes the staff presentation. And at this time Harinder and I would be happy to answer any questions you may have about the standards or information presented here.

MS. MERRITT: And before we entertain the questions I do need to make a correction for the call-in number. The new call-in number is 1-800-857-4259. The passcode is appliance. The call leader is Melinda Merritt. And we're just going to take a minute to complete this.

(Pause.)

PRESIDING MEMBER ROSENFELD: Why don't you read the number once more.

MR. RIDER: Okay. The number is 1-800-857-4259. The participating passcode is appliance.

(Conference call instructions.)

PRESIDING MEMBER ROSENFELD: So while that's going on, I see a hand. Questions, comments?

MR. SHARP: May I direct a question to the --

PRESIDING MEMBER ROSENFELD: Why don't you go up at the mike so we can all hear you.

MR. SHARP: My name is Mark Sharp; I'm with Panasonic. Question of the staff report. I wanted to clarify one of the figures.

In the table where you cite the average power use in watts by technology type, do you want to pull --

MR. RIDER: I think, do we have that? We had a similar table here. This one, right?

MR. SHARP: Yes, that's the one. I'm curious for the average size of a unit, what you went with for plasma, as well as LCD. It's not specified here.

MR. RIDER: It was pulled from a display search study that was provided to us by PG&E.

MR. SHARP: But my question is are you talking 40 inches, 45, what is the average size that you're talking about?

MR. RIDER: Well, we can do the reverse math. If you take 101 watts and divide it -- or, for plasma, it would be 361 watts divided by, that looks like 100 -- 1000 inches, 1000 square inches, which translates to -- I have a graph here that -- so 1000 inches, just bigger than 46 inches.

MR. SHARP: Okay, thank you. The reason for the question, at 361 watts we think this is a big exaggeration of the typical plasma energy consumption.

For example, 2008 Panasonic model 58 inch is 355 watts. And the average sales breakdown by size of units, it's at least ten-to-one smaller than 58 inches.

So, we think this is probably exaggerated on the -- oh, probably 50 to 60 watts, which, of course, when you figure out the kilowatt hours per year; and the potential energy savings is also inflated as a result.

And I think if you go to the EnergyStar database you'll see the plasma tvs at 361 watts they're going to be at least 60 inches. And you

just did a quick calculation off the cuff of 46 inches. So, again, I think this figure is a little bit high.

MR. RIDER: I'm not sure if that data was calculated using EnergyStar. But we'd be more than willing if you would like to submit --

MR. SHARP: Okay, it's --

MR. RIDER: -- or reference that.

MR. SHARP: -- possible it's old data. I'm citing 2008 model data. Again, our particular model, 58 inches is 307 watts. And this says the average is 361 watts. So, again, --

MR. SINGH: Yeah, the Panasonic plasma is new compared to this data there. I think you were talking about recent.

PRESIDING MEMBER ROSENFELD: I'm sorry, Harinder, --

MR. SINGH: And other manufacturers --

PRESIDING MEMBER ROSENFELD: Harinder, I can't hear you. Can you move closer to the mike.

MR. SINGH: Sure. The Panasonic plasma televisions are fairly new, recently came to the market. And there are other models in the market, other manufacturers which probably has higher power usage. So this is --

MR. SHARP: We began our --

MR. SINGH: We definitely are willing to look at it, but this is what we, you know, have from all the -- doing the bigger average size, you know, from different manufacturers.

MR. SHARP: Yeah, I would ask that you reconsider, recalculate those numbers.

MR. RIDER: Also, if you'd like to provide some sort of information as to, like you said, ten-to-one sales from 58 inches to 40 inches, I'm not -- or higher than 58 inches versus below. That kind of --

MR. SHARP: I'm saying a proportion of our sales, --

MR. RIDER: Right.

MR. SHARP: -- and I would assume that other manufacturers are similar for plasma.

MR. RIDER: Right, if --

MR. SHARP: For portion of under 58 inches is probably at least ten-to-one versus 58 inches and above.

MR. RIDER: If you could provide any such data we would love to consider it for the next staff report.

MR. SHARP: Okay, thank you.

MR. SINGH: Thank you.

PRESIDING MEMBER ROSENFELD: Thank you, Mark. Other hands, other questions or comments on the staff report? Yes, please come up.

MR. DuBRAVAC: I am Shawn DuBravac; I'm the Chief Economist for the Consumer Electronics Association.

PRESIDING MEMBER ROSENFELD: Can you spell your last name.

MR. DuBRAVAC: Sure, it's DuBravac, D-u-B-r-a-v-a-c.

PRESIDING MEMBER ROSENFELD: Thank you.

MR. DuBRAVAC: And just following up on Mark Sharp's comment from Panasonic. There has been, I would say, a shift over the recent months in the size of sets that are being shipped into the markets, and we were having to provide that data as well.

I would say last year at this time over 50 percent of sets being shipped into the market, flat panel televisions, were over 40 inches. That ratio has come down significantly as households have responded both to the current economic environment, as well as to the movement of those sets that they're now purchasing into other rooms.

Other, what I would consider, non -- traditionally nonviewing rooms.

So they bought maybe a large screen for their family room or the living room. They're now buying smaller flat panel televisions for their kitchen or their bedrooms.

And so that will, I think, be helpful as well.

PRESIDING MEMBER ROSENFELD: So you'll provide that in writing?

MR. DuBRAVAC: Sure, we're happy to provide that in writing.

PRESIDING MEMBER ROSENFELD: Thank you.

MR. SINGH: Commissioner, I want to add that -- this is Harinder Singh. The average use 1907 hours is weighted average use which is based on three or four televisions in a residence. And the first television is five hours, and then the second and third, you know, have a lower usage number.

So this is the data that's been fairly researched and it has all different sizes. So the energy consumption is based on fairly extensive research. So I just wanted to add that. Thank you.

PRESIDING MEMBER ROSENFELD: Thank you. Any other questions or comments on the staff report?

Gary, I guess you're next on the agenda. Would you introduce yourself.

MR. FERNSTROM: Sure. Good morning, Commissioners, Advisors, Staff, interested parties. I'm Gary Fernstrom representing the Pacific Gas and Electric Company.

PG&E is pleased to have the opportunity to be here today to continue its advocacy for improved television energy efficiency standards.

We're joined in this case study by the Southern California Edison Company, the San Diego Gas and Electric Company and the Southern California Gas Company. Additionally, there are other advocates in the room, including the Natural Resources Defense Council, the Appliance Standards Awareness Project, the Sacramento Municipal Utility District and the Oregon Department of Energy.

PG&E recognizes that televisions are a major energy use in the State of California, and one that is growing. Therefore, are a good candidate for energy efficiency regulation.

PG&E is also delighted to see that some manufacturers in particular, and the industry in general, have announced plans and are moving to produce televisions that converge with the proposed energy standards. So we have every expectation, based on the recent research that our consultants have done, that televisions will be readily available that meet or exceed the proposed standards that we're bringing to you.

I notice that industry has offered, just a moment ago, to provide new information on market share. I'd like to assure you all that our consultants have used the best information on market share and television performance that we've been able to obtain.

We've repeatedly requested specific detailed information from industry. And where we've been able to get that, we've utilized that information. So it would seem to me that at this proceeding we have a continued promise to bring more information. But at some point we have to make a decision and rely on the information provided up to a specific point. Otherwise the proceeding would go on indefinitely.

I'd like to compliment some specific

television makers, and the industry in general, for the improvements that have been made in energy efficiency. And the improvements that have been announced in press releases that outline technology that will allow sets to meet these standards in the future.

And with that brief introduction I'd like to introduce our consultant, Alex Chase, from Energy Solutions, who will be providing you the details of what we've spoken about.

MR. CHASE: Hello, again. My name is Alex Chase with Energy Solutions. I'm pleased to represent Pacific Gas and Electric. As Gary mentioned and I'd like to mention again, this presentation and the proposed levels are endorsed by the other California IOUs, the Sempra Energy Utility, which consists of San Diego Gas and Electric and Southern California Gas Company, in addition to Southern California Edison.

If I'm correct, combined the three IOUs represent, I believe, over 85 percent of the population of California.

Today what I'd like to cover is first show a quick slide on the emerging consumer trends and demand for energy efficient televisions. I'll

spend a few slides providing some background on the proposal from PG&E and endorsed by the other IOUs.

Then I'd like to get into some of the new EnergyStar data that has been released since we last met in July, which has informed our decisions going forward.

I will then spend a few slides specifically showing examples of tvs across various size categories and available from various brands that meet the tier two level today.

Then I'll shift into a continued discussion on LCD efficiency developments, and plasma efficiency developments, and kind of where we see the roadmap for efficiency going.

And then I'll step back and provide a kind of a higher level motivation in terms of some of the energy efficiency and greenhouse gas reduction goals that California is faced with over the next several years and decades.

And then I'll follow up with conclusions and recommendations.

So I thought I'd start the presentation by highlighting a recent press release that was released December 10th, I believe, last Wednesday

or Thursday, from the Consumer Electronics Association, titled, consumer desire for green electronics on the rise.

And specifically they surveyed, I believe, 1000 United States adults, in asking them this particular question was kind of their wish list for the next tv purchase. And they listed energy efficiency, better picture quality, thinner shape, larger screen size. Various components that may go into a purchasing decision.

And according to the report that was just released, titled, going green and examination of the green trend and what it means to consumers in the CE industry, the highest response, 89 percent, of households wanted their next television to be more energy efficient. And I thought that was notable, since that's ultimately, I think, where PG&E is trying to encourage that market going, and we're seeing that consumers are demanding that, as well.

So, the thrust of this presentation will be mostly focused on the Title 20 standard side, but immediately following me will be Tim Michel, the program manager from PG&E. And he will describe the voluntary incentive program that PG&E

and other utilities are involved in, in terms of providing incentives now, starting this November, for the most efficient televisions on the market.

A quick discussion on the background for folks that aren't as familiar with the progress. The process, over the last basically 11 months. Eleven months ago, January 15th, PG&E first indicated that it was working on a case report.

We submitted that and it was docketed on the CEC website April 1, 2008. On July 3rd we submitted a revised proposal, which, again, was endorsed by the California IOUs. And that's where we recommended a two-tier standard with effective dates July 1st -- or sorry, January 1, 2011, and January 1, 2013. The CEC Staff draft report that was released this month includes those two standard levels.

For additional background on that proposal I would encourage people within this workshop and listening in to download PG&E's presentation given at the July 16, 2008 workshop. I include the link at the bottom of this slide.

A lot of that set the stage in terms of market trends and what type of market information we used to set our proposal levels. We don't have

time to rehash all of that, so I encourage people to look at this link for additional background.

But on a very high level we considered the market transition to high-definition flat-panel tvs. We considered increasing average screen size and usage. And we also really focused on where we thought industry was going in terms of advancements in energy efficient technologies.

Based off the time of those proposals we relied on over 760 active mode power test results to inform those tier one and tier two decisions. And we also gave significant consideration to the ambitious greenhouse gas reduction goals and energy efficiency goals within California.

Now, since that workshop we have a lot of new data, thanks a lot in part to the EnergyStar specifications being released in November, and published power data within their -- available on their website. There's over 400 new test results that we've relied on. Again, this further confirms the proposed standard levels within the CEC Staff report are cost effective and feasible.

And this is really what I want to focus on today's presentation. I want to highlight the

positive developments within the industry and showcase a lot of the innovative technologies that are available now, and that are meeting this rising consumer demand for energy efficient televisions.

As I mentioned, EnergyStar became effective November 1st of this year. This was a notable specification where it included active mode power. As of last Monday, December 8th, there was 396 televisions listed on the EnergyStar website; 87 percent of those, 344, meet the proposed tier one levels. And 26 percent, over 100 models, meet the tier one levels.

Now this is --

PRESIDING MEMBER ROSENFELD: Meet the tier two levels.

MR. CHASE: I'm sorry, thank you for the correction. Meet the tier two levels. EnergyStar is posting its tv lists on a weekly basis, sometimes twice a week. It expands significantly every time I download it. So I imagine these numbers will continue to grow over the next couple weeks, to months.

Tier two tvs are available from many brands. I list them here. You'll recognize some

of the more, perhaps more common brand names that most consumers would be familiar with. But also it's notable that there's some names on here that your average consumer may not recognize, as well. So it contains a wide variety of different brands that meet the tier two levels.

This is a figure that shows screen area on the X axis, and it plots just the EnergyStar data that has been released since November. So this is the 396 datapoints that I just mentioned. Maximum on-mode power is plotted on the Y axis. And the three levels here are the EnergyStar level, which is the green line. Anything that falls below that level meets that specification. Since these are all EnergyStar tvs, they all fall below that line.

You can see it increases on a linear, until about 40 inches, where it does a step increase. And then increases with screen area and then does another step increase at just about 49 inches.

The post tier one level is shown in the dotted orange, and the proposed tier two is shown in the dark blue.

Some of the common threads. The first

thing that you notice here is just the large majority of datapoints that fall below the tier one line. And it's important to note that a lot of the datapoints overlap and appear as one point. Just if you see one particular point that doesn't necessarily represent just one television.

Also notable is there's a large percentage of smaller tvs that meet the tier two level, shown in the bottom clump around 200 to 300 square inches in screen area. But as you move up in the more popular sizes, in the 32-inch, the 42-inch, the 46-inch, the 50-inch and beyond, there's tvs on the market today that meet tier two levels. And that's what I want to focus on these next slides.

So first I'll show, highlight a couple manufacturers that have really gone beyond the EnergyStar levels. This is a press release that came out just last week, as well, December 11th, from JVC. And they've done a tremendous job of providing energy efficient LCD tvs.

In fact, in most every size category they usually have the top LCD tv in terms of lowest power compared to other brands listed. Overall their LCD tvs outperform the EnergyStar

level anywhere from 29 to 60 percent.

These are their models plotted, based off the EnergyStar data. Again, several of the points overlap. But they have 13 televisions that exceed tier two levels, ranging from one 32 inch, four 42 inches, one 46 inch. They have four 47 inch models, and they have three 52 inch models.

And I include the web link to their product specifications where they talk about the pathway of getting here. They have a 40 percent smaller LCD panel. They've optimized the light diffusing plate. They optimized the light reflecting plates. They're using a smaller, more efficient power supply, which enables them to use a fanless heat dissipation system.

I also believe that they're using an option for automatic brightness control, which lowers the power for when the ambient light gets darker. So, again, we're seeing a trend of tvs available at various screen sizes that meet tier two levels.

Here's another example, Vizio. They're one of the fastest growing LCD tv manufacturers. I believe they're one of the top three manufacturers in the U.S. They've announced that

all of their LCDs exceed or meet EnergyStar levels. And not just EnergyStar levels, but they actually have six models that meet tier two levels today. They have one 19 inch model; they have three 22 inch models; they have a 42 inch model and a 46 inch model.

I haven't plotted their other televisions, but they have a few other that are just above the tier two line. And I think with some modifications within the timeframe, should be able to meet the tier two levels, as well.

The next few slides I'm going to start from a 52 inch and work my way down to a 19 inch tv. And they're all specific models that you can go out and purchase right now. They all meet tier two. And just to be transparent, I've listed my methodology; I won't go into it in super detail here, but on a very high level all the on-mode wattage values that I'm using were taken from last week's EnergyStar list.

The lifetime energy savings assumes a ten-year life of 14-cent-per-kilowatt-hour rate. A 3 percent discount rate for CEC methodology. The retail costs, again we've tried to get the most accurate data out there that's available to

us.

We've used NPD Group, a leading market research firm, for sales from August to October of this year. If that did not list the average selling price for that particular model, we've used an average of the average retail price for models available from Best Buy, Walmart and/or Fry's. Some of the leading consumer electronics retailers within California. And the sample size for how we're pulling our averages included here.

Here's a 52 inch 1080P, full high definition, LCD made by Sony. It has 120 refresh rate, which doubles the conventional 60 refresh rate, which is what a lot of the televisions the consumers are purchasing these days.

I'm going to take you through this particular slide so I can, due to time limitations I won't go into detail in the next few slides. But the bottom left there, I've plotted this particular model based off the EnergyStar data. You can see the 52 inch, it's the blue dot there. And it falls just below the tier two line.

The table shows the non-tier two average compared to, in this particular case, what I'm calling the tier two tv example. And for this

slide, this is the Sony 52 inch.

The non-tier two average for 52 inch LCDs was $2381. The average, whether from Best Buy, Walmart of Fry's, for this particular Sony was less than that. So it was $156 less than the average for the non-tier two tvs, at $2225.

The on-mode wattage, the non-tier two average was roughly 261. This particular 52 inch uses 158 watts. Over the lifetime we'll see a change. The non-tier two average is a little bit under 5000 kilowatt hours. For this particular tier two, 52 inch tv, it's just above 3000 kilowatt hours.

A typical user, so assuming that you go out and you purchase this television; you set it up in your family room or living room. Over the typical lifetime of a ten year, assuming, a person would spend about $361 to operate this particular television. That's compared to just below $600 for a non-tier two tv.

So when you look at the savings of retail costs, the consumer is saving $156. And, again, this is just for this particular tv based off the averages that I described in the previous slide, saving over 100 watts. The lifetime energy

savings is 1952 kilowatt hours, so you have a 39 percent savings. And the average Californian buying this is saving $233 to operate this television, without sacrificing the features that a lot of people are buying. So it's a full high definition tv, with again with 120 refresh.

Here's a Vizio 42 inch. Again, it's a 1080P, full high definition with 120 refresh. For this particular, compared to the average 42 inch television, energy savings are 36 percent. And a consumer would save $150 to operate this. Again, for this particular model the retail cost was $34 below the non-tier two average.

Here's a 32 inch from Sylvania. I tried to highlight various companies. We have other examples that I include, but I just, for brevity, wanted to show different companies at different size categories.

This particular 32 inch tv is $190 below the non-tier two average. A 36 percent savings in terms of lifetime energy. And a little bit under $100 in terms of savings to the consumer to operate the television.

Here's a 22 inch television. The consumer is saving 31 percent lifetime energy and

about $50 to operate the television. And here's a 19 inch.

So, in general, I think we are seeing average screen sizes increasing. But as the chief economist of the CEA mentioned, average screen size is increasing, but as the screens are getting flatter, people are finding more places that they can put these. In their kitchens and the guest bedroom, the bathroom, various places that a previous CRT would not fit. So this is a -- the 19 and the 22 inch is also an important category here. Since they're smaller, they use less energy. So the savings percentage is about equal, 33 percent on this particular model. The energy cost savings is still $46 for this particular example.

So those are televisions that meet tier two. The averages cost less to the consumer to purchase the television. And to operate it, it costs less again. So, again, I wanted to highlight tvs showing that it's feasible to meet the level, and it's cost effective.

In addition to tvs that are available now, I also wanted to highlight some of the LCD efficiency trends. And I showed some of these

slides at our last July workshop. And since then there's been more similar slides.

So, what I showed is typically a lot of manufacturers have been proudly displaying the improvements in their technologies, and they're calling them their green tvs, their eco-panels.

Key aspects are, you know, they're making -- they have more efficient backlights which results in they can use less of them. They have an improved light diffusion. They're utilizing brightness enhancement films. They have smaller and more efficient power supplies. They're using an automatic brightness control.

So most of the photos I'm going to show you are from industry conferences from around the world where typically what they show is a conventional television, so call it their 2007 or 2008 model, compared to their advanced eco or green tv.

And right next to the display they show the on-mode wattage. And what they're trying to convey is they're showing the same screen content for a typical viewer, as I look at it and took some of these photos. You can't tell the difference between the two displays.

The key difference that you can see is the on-mode wattage. So for this particular example, this was a picture I took at the display week conference in Los Angeles, back in May, this is AUO, which is one of the leading LCD panel makers. They have a 46 inch eco-friendly technology.

The conventional tv is shown on the bottom at 252 watts. And the eco-friendly technology is 122 watts. So same picture content, 50 percent power reduction.

I'll go through these slides fairly quickly, but I think you'll start to get the point. Samsung had a 52 inch green tv. At this particular moment when we snapped the photo, it was a 42 percent reduction shown between the two tvs. And, again, that percentage is going to vary depending on the screen content. But you start to get a relative idea of where the industry's going.

With a dimmer screen content some of the reductions are even more noticeable with this Samsung 46 inch with three-way dimming. So it dims the backlights depending on what the content is available -- or what content is being showed. This particular setup shows a 74 percent reduction

between the conventional and the advanced television.

These are two more, as mentioned in the staff presentation, 3M has a technology that they were showcasing. This is a 40 inch going from 195 to 92 watts; 53 percent reduction. Here's a 60 watt television for 32 inch, showing a 23 percent lower wattage than the maximum tier two level for a 32 inch television.

Since the July -- yeah?

PRESIDING MEMBER ROSENFELD: How do you go about, if you're 3M or whatever, how do you go about marketing the more, the energy. Would you reduce the first cost, or --

MR. CHASE: I think generally there's, from what I've seen in terms of their marketing, what you asked, is a cost-neutral approach, where you're adding some components such as the brightness enhancing.

But what you can do is reduce the number of backlights. You can utilize --

PRESIDING MEMBER ROSENFELD: No, I meant a much more naive question, not what the technology is. But if you're a manufacturer, you're Samsung or something, and you have two

identically appearing tvs. And one uses a lot less power than the other. What do you do to sell it? Do you reduce the first cost?

MR. CHASE: I would pose that to industry. I think there's going to be varying ways to --

PRESIDING MEMBER ROSENFELD: We'll get some comments.

MR. CHASE: -- market that. Right now there's still consumer education is a big point. And after this presentation, Tim Michel will describe some of the voluntary effort to provide incentives and to focus on consumer education.

So I know manufacturers are going to be promoting the green attributes of their televisions. And the utilities are going to help them do that, as well.

PRESIDING MEMBER ROSENFELD: Thanks.

MR. CHASE: This is a picture taken from the ISA Consumer Electronics Show in Berlin in 2008. This is a Vestio eco-design, 32 inch. I had to look up Vestio, I believe it's a manufacturing firm in Turkey. They're showing a 32 inch LCD, 50 percent power reduction from 109 to 55 watts.

Again, this is C-Tech display conference in Japan, late September, early October. The Hitachi had a dynamic power control showing over 50 percent power reduction. Sony was showing a 32 inch; this particular screen, it's a dimmer content when this picture was taken. But there's a 63 percent reduction between the two tvs.

So those are some of the LCD efficiency trends that I just highlighted. And I will also want to -- which is important, as the LCD market share is, I believe, roughly hovering anywhere between 60 and 80 percent, depending on the market. So in terms of real energy savings, that's where most of them are going to come from, from a proposed Title 20 standard and a voluntary effort.

But plasma, historically has been roughly, I believe, anywhere around 10 percent, give or take a few percentage points market share. And I wanted to highlight some of the efficiency trends from this technology, as well.

So, a very high level, the current plasma tvs can exceed tier two levels today. The two top selling plasma tvs, based off the market research that I've seen, from the August to

October timeframe, both exceeded tier one levels. That was a 42 inch and a 50 inch television.

And I agree with Mark Sharp who mentioned that the average on-mode power in plasma is decreasing. And the values that were shown in the staff report were probably an average of previous models. So that's an encouraging development, and I think we're seeing trends that actually leads towards a more cost effective and feasible solution for plasmas meeting tier two levels.

Most plasmas today have a luminous efficiency of anywhere around 2 to 2.5 lumens per watt. In 2005 the Advanced PDP Development Center Corporation, or APDC, developed a technology making it possible to achieve luminous efficiency in excess of 5 lumens per watt.

This APDC was established in July 2003 basically to co-development technology for advanced plasma displays in cooperation with five plasma companies.

The top funders included Hitachi, Panasonic and Pioneer. A couple years later, so at the beginning of 2008 Panasonic showcased a tv that actually met these levels, roughly 5 lumens

per watt. Based off my understanding they should be expected to be in production second quarter of 2009.

We think based off of the claims that a 5 lumen or watt -- sorry, 5 or greater than lumens per watt plasma tv should meet tier two levels. And now the next goal for the APDC is 10 lumens per watt.

And this is in addition just to reduce power, it also increases performance. And the cost can lower when you start to reach these levels. And that should easily exceed tier two levels.

Here's -- just so you don't have to believe me -- here's the APDC, the executive president and the general manager for their central research laboratory quoting, talking about how they've developed this 5 lumen per watt technology, and how they've been in cooperation with five plasma companies.

You can read the quotes, but what I thought was notable was the general manager of the research laboratory, you know, envisioned the day when plasma tvs becomes the synonym for low-power tv.

Here's Panasonic's website talking about their double efficiency technology. And which was showcased January 2008 in Las Vegas at the consumer electronics show. And expected to be on the market in mid 2009.

They showed the same technology at the IFA show in Berlin. Again, similar to the LCD photos that I was showing you, the tv on the left is developed using the high luminous efficiency technology, and the tv on the right is their 2007 model. So, again, same brightness using half the power.

And as I mentioned, the next goal for this joint venture by the leading plasma companies is 10 lumens per watt. This is taken from their website. In addition to energy saving, there's other benefits. It allows their plasma displays to get bigger, thinner, and also smaller with higher resolution. And it can also lower cost.

Industry expert Ross Young, who's the founder and chief research officer of Display Search, which is a leading market research firm for televisions, in March 2008 at the San Diego Display Search conference, he estimated when you get to 5 lumens per watt, costs fall by 9 to 11

percent, depending on the size and resolution. At 10 lumens per watt manufacturing costs can be cut by anywhere from 37 to 38 percent.

So, stepping back, some high level motivation as I'm sure the Commissioners are aware, and the advisors, last Thursday the Air Resources Board approved California's plan to reduce the state's greenhouse gas emissions to 1990 levels by 2020. It's called the climate change scoping plan.

And in September 18th of this year the California Public Utilities Commission adopted California's first long-term energy efficiency strategic plan.

I'm going to highlight some aspects of both of those plans and how it relates to this workshop today, and the proposed television efficiency standards.

For the climate change scoping plan, which was adopted, the first bullet point in terms of how the state's going to meet those goals is the expansion and strengthening of appliance standards.

They specifically say that future appliance standards should address the energy

consumption of electronic devices that offer significant potential for efficiency improvements such as flat screen tvs.

And our Governor has been a vigorous advocate for the plan, vowed that it would unleash the full force of California's innovation and technology for a healthier planet. And in talking about today's depressed economy, he mentioned that green tech is one of the few bright spots out there.

The energy efficiency strategic plan sets, again energy efficiency as the highest priority for California to meet its resource needs. One of the big bold initiatives for that is all new residential construction in California will be net zero energy by 2020. And that includes the plug loads within those.

So, televisions being one of the largest end uses in terms of drawing electricity, it's important to reach that goal. It also encourages utilities to get beyond a short-term focus, but to really focus on a market transformation.

And that's how PG&E has approached this concern of rising end use electricity consumption from televisions. In addition to the codes and

standards activities that we're discussing today, PG&E is actively involved in being a leader in the United States in terms of developing an incentive program to provide retailers and OEMs with incentives for selling high efficient televisions. And education a big part of that, as well.

So without a Title 20 standard, even considering some of the new efficiency improvements that we've seen posted on the EnergyStar website, which are great advancements, but given the larger screen sizes, the fact that there's going to be more households within California; people are watching television for longer, and the screen sizes are increasing.

Even with those efficiency advancements we could see a net increase in energy consumption for televisions, which we forecasted on the left graph here.

If you do implement a tier two level, energy consumption and greenhouse gas reductions, we think, will roughly level. So you have increased usage, you have increased screen sizes, you have an increased number of households. But the average watts per square inch of a television decreases down to the tier two level, you can

actually level energy consumption from televisions without sacrificing functionality of those television sets.

So this is crucial for California to meet its greenhouse gas and energy efficiency goals. With the absence of this type of level, if a scenario unfolds like the graph on the left, it could erode some of the achievements that the Energy Commission has made lately in terms of adopting efficiency standards for general service incandescent lights, pool pumps, and metal halide fixtures, which were just adopted two weeks ago.

So, in conclusion, I showed the consumer demand for efficient televisions is high. By one survey by the CEA, 89 percent. Consumers want their next television to be efficient.

The new EnergyStar data, over 400 datapoints confirms that most tvs being sold today can meet or exceed the tier one level. Cost effective tier two tvs are available today, and I highlighted those for various screen sizes. And without sacrificing functionality.

Industry is highlighting innovative efficient technologies that further supports the tier two levels. And I did mention the tier two

level will be necessary to meet these ambitious California goals.

So, our recommendations are to adopt the standard levels as proposed in the CEC Staff report. And we really encourage the Commission to finalize and publish standards so the industry can prepare for those well in advance of the effective dates. And we would recommend that we finalize this rulemaking in early 2009.

Thank you.

PRESIDING MEMBER ROSENFELD: Thank you for a very encouraging and thorough report.

First, comments from the dais.

ASSOCIATE MEMBER PFANNENSTIEL: No.

PRESIDING MEMBER ROSENFELD: Comments from the room? No.

Then I guess we'll thank Alex Chase and go on to Tim Michel, who is going to talk about the incentive programs. Michel, sorry.

MR. MICHEL: Good afternoon, Commissioners, Staff and interested parties in the room today. I appreciate the opportunity to be here. My name is Tim Michel; I'm a Senior Program Manager at Pacific Gas and Electric Company responsible for the implementation of our

voluntary incentive programs.

I also want to recognize the Sacramento Municipal Utility District who we have this program in partnership with.

When I was last here in July we talked about the theory of a program that we would be launching in the fall of 2008. And I'm here today to talk to you about the execution of that program.

Effective today, really going back to November 1st, retailers were -- incentives were available for televisions that exceeded an EnergyStar specification by 15 percent. Or it is equal to the CEE or Consortium for Energy Efficiency tier two specification that was adopted in August of 2008.

At the time of these proceedings in July we were working with the Consortium for Energy Efficiency to try to move them into the adoption of that standard. And we were very pleased to see them adopt that standard.

As we moved through the course of fall we started working more aggressively with the retailers, both small and large, to get them involved with the program.

And one of the issues at the time was the unknown assortment of EnergyStar televisions that would be newly certified with the EnergyStar 3.0 specification that took place November 1st.

And I think, as you could see in Alex Chase's presentation, there is a large assortment of those televisions in the market today.

As we moved through the course of the fall, even before our program started, through the efforts that we were making with retailers, we were able to get some of the retailers to make some very important market transformation impacts for this program.

Some retailers changed suppliers to have televisions available for these incentive programs. And we believe had a strong something to do with the larger assortment than we originally anticipated that would meet the EnergyStar 3.0 specification.

As you've just seen, energy efficiency is going to be a very important component of investor-owned utility programs. We certainly hope municipal utility programs, as we look towards the future. We don't envision this as being kind of a flash in-and-out kind of

situation, but we view this as a long-term solution as we move through the next decade.

And while we envision having a number of products within our consumer electronics program, certainly televisions is one of those key components. And we look forward to seeing how energy efficiency evolves in this particular segment of the market.

I've indicated our incentives are at $20 per tv. We're working with a wide variety of retailers. And we look to expand our retail interaction to working directly with manufacturers in the distribution channels as we consider moving into a commercial television space in 2009.

We're still trying to understand how the commercial tv market works. Once we understand how it effectively works, we'll develop a strategy to get involved in that particular space.

As I've indicated initially, our program is launched with our partners at SMUD, and we hope to see, as we move into the course of early 2009 our partners, the southern IOUs. Southern California Edison and San Diego Gas and Electric. also implementing programs in this particular space.

We view education as to be an extremely important element of this program for a few reasons. And one of them is that when we initially started looking at this program in spring of 2008, we went to some manufacturers and we said, you know, how come we don't see bigger mixes of products available at retail for energy efficiency.

And the answer that we got more times than not was that the retailers aren't asking for it. When we went to the retailers and asked them, you know, how come you're not asking for more greater, bigger assortments of energy efficiency, the answer that we got more times than not was that, well, the customers really aren't asking for it.

So we then went to the customers and did research to say, well, why is it that you're not asking for it. And this is a very important point. It wasn't that customers didn't care about energy efficiency or that it wasn't important in their decisionmaking. What we learned was that most customers felt any new electronics products that energy efficiency was an inherent component of those new electronics products. Which we know

is not the case.

So, raising customer education awareness in this particular segment becomes extremely important. I think whether it's from a codes and standards aspect, or from what I'm involved with, on voluntary programs.

So, in conjunction with our voluntary program effort, we're implementing point of purchase material so that we can call out the most efficient televisions at retail in this particular space. And we've developed shelf hangers and corner cling sticks using the save-more concept, which is a hybrid of the EnergyStar branded logo.

So we're working with folks like at EnergyStar and the Consortium for Energy Efficiency to try to call out and point to the customers that these are, in fact, energy efficient products.

Although our incentives are not going to the customer, they're going to the retailer, we still think this is an effective strategy to drive more sales in these particular cases.

ASSOCIATE MEMBER PFANNENSTIEL: Excuse me, Tim, I'm sorry to interrupt you.

MR. MICHEL: Sure.

ASSOCIATE MEMBER PFANNENSTIEL: But that just, I didn't understand that. Where does the $20 come from? How did you decide on $20? And it goes to the retailer, not to the customer?

MR. MICHEL: It goes to the retailer. So, --

ASSOCIATE MEMBER PFANNENSTIEL: Could you talk a little bit about that?

MR. MICHEL: Absolutely. I apologize I didn't get into it more quickly. We came up, based on the energy savings on a per-unit basis. The most we could justify based on present data is a $20 incentive.

The reason that we didn't direct this $20 incentive downstream or a customer rebate is that when you look at the effectiveness of rebate redemptions, which is the investor-owned utilities' mechanism to claim savings in a downstream product, the redemption levels would be extremely low.

We would project, based on past history, that at $20 we would lose about 90 percent of our total customers through a process known as rebate breakage.

It might be that our $20 was effective

in getting the customer to do what we wanted them to do, but at $20 they wouldn't submit -- 90 percent of the customers would not redeem their rebate.

ASSOCIATE MEMBER PFANNENSTIEL: And that's a bad thing?

MR. MICHEL: It's a bad thing if you're an investor-owned utility that has to claim energy savings. We wouldn't know --

ASSOCIATE MEMBER PFANNENSTIEL: But if they'd already bought the product and they're getting the energy savings from the product why can't you claim those energy savings in the product? And then you save your $20 --

MR. MICHEL: Because we have no --

ASSOCIATE MEMBER PFANNENSTIEL: -- for somebody who wants it.

MR. MICHEL: Essentially what the rules, as I understand, as a regulated utility, we have to prove to our PUC who the customers are, or we have to have some mechanism of proof that those sales, in fact, occurred.

Our only mechanism of proof in a downstream capacity is an actual rebate that comes in. That's the mechanism that allows us to claim

savings and justify the payment to that particular customer.

In the event that we don't get that rebate application to come in, we have no way to prove that that customer, in fact, made a purchase or claimed any savings connected up with it.

ASSOCIATE MEMBER PFANNENSTIEL: You don't have anything through the retailer to say these customers bought X numbers of these energy efficient televisions.

MR. MICHEL: So that's -- to specifically answer that question, because we can't get that customer data in a downstream capacity, because the rebate value is too small to justify, in a lot of customers, 90 percent of the customers, to redeem that, we move the program into the midstream channel so that we could go to the retailer; pay that retailer that same amount of money, and then get data back on all sales that are coming through their particular channels.

That's a way to elevate the redemption levels and drive change we value.

ASSOCIATE MEMBER PFANNENSTIEL: And then, again, going back to the examples that Alex gave in his very comprehensive presentation

previously every example he showed the cost, the purchase price for the efficient tier two level television was cheaper than the average of non-tier two televisions.

And so why do we need the $20 bribe for customers to do this?

PRESIDING MEMBER ROSENFELD: Yeah, I guess that was my question, too. But it's appropriate now.

MR. MICHEL: Well, sure. I think, you know, PG&E doesn't -- you know, we're not working in a funnel, we're keenly aware of what's going on with our codes and standards team. We work and try to harmonize our efforts to try to drive a market in a particular space.

I think in the event that the California Energy Commission deems it important to incorporate a television standard, whether it's a one-tiered or two-tiered system, at such time we would look at on the voluntary program side would we jump that standard and try to drive the market even further. Or would we deploy an exit strategy out of that.

But in the absence of that --

ASSOCIATE MEMBER PFANNENSTIEL: I'm just

a little confused. If there are two television sets, and on is more energy efficient than the other, --

PRESIDING MEMBER ROSENFELD: And cheaper.

ASSOCIATE MEMBER PFANNENSTIEL: -- but the customer may not understand that one is more energy efficient than the other, but one is cheap. The more energy efficient one is cheaper than the other.

I'm trying to understand why an additional $20 is going to make -- I mean does it have to be not only more energy efficient and cheaper, but more than $20 more cheaper? I don't understand why you're giving the $20.

MR. FERNSTROM: Commissioner, if I could perhaps try to respond to that. It's complicated. It has to do with what the retailers choose to stock. And the products that they order well in advance to have on the floor.

So, the PG&E program serves to get the retailers to demand more efficient appliances and stock and show them on the floor so that consumers, when they come, have the opportunity to find them.

Indeed, we've made the argument that higher efficiency televisions are available and in many cases less expensive. But that doesn't necessarily mean they would show up in retailers' stores or be available to consumers.

Now, Commissioner Rosenfeld, a little earlier asked a question about what the plan might be to market these more efficient televisions. At present you don't see any reference whatsoever to energy efficiency in showroom floors.

ASSOCIATE MEMBER PFANNENSTIEL: I absolutely agree with that. And I think that that is a fundamental problem. I think that that is perhaps the fundamental problem.

And if the manufacturers and retailers would promote the energy efficiency of their products, not just televisions, but other products, then that would make an entire difference.

However, given that that isn't happening necessarily, then it seems like there may be $20 per item worth of promotion that PG&E and the others who are spending ratepayer money to do this, could be doing to bring that same information in front of consumers so that they can

see, gee, I could pick this television, or I could pick this one with the same features, the same size, everything else, and it not only will save me money on my electric bill for the next ten years, but in fact it's cheaper first cost. Why wouldn't I buy that.

So, I'm just a little confused about why this $20 per item is even in play, whether it goes to the customer or to the retailer.

MR. FERNSTROM: So we would submit that the $20 accomplishes the end that you point out. It isn't specifically labeled promotion, but in effect that's the effect that it has. And it serves to accelerate the availability of this product before the standard takes effect.

MR. MICHEL: I think that's a key point that Gary just made. I think, Commissioner, we can move -- if we want to move more slowly and see change, you know, on a slower pace, we could just back off and go with awareness programs.

But what we're trying to do is accelerate the introduction of those products.

ASSOCIATE MEMBER PFANNENSTIEL: I'm sorry, I want to move more rapidly. And so to just, when you say to wait for awareness programs,

as if that is foot-dragging. My sense is if you put the money towards promotional programs and advertising would move ahead of having to do the paperwork of getting the retailers another $20 and hoping that they will then stock what you want to stock.

So, I'm just looking at some way of moving this much more expeditiously.

MR. MICHEL: And --

MR. FERNSTROM: So, --

MR. MICHEL: If I could, Gary. I think it's not really to move at the speed and sense of urgency that I hear you speak about, we're deploying both, you know, both ways. We're not looking at it as an either/or situation. We're looking at the deployment of incentives so that we're changing the profitability of these products to make retailers more interested to change their shelf set assortments, and to promote those sales --

ASSOCIATE MEMBER PFANNENSTIEL: Okay, well, that's something I hadn't heard before, that these products are less profitable to the retailers than the less efficient --

MR. MICHEL: I didn't --

ASSOCIATE MEMBER PFANNENSTIEL: -- than the more -- than the less --

MR. MICHEL: We want to make them more profitable. We want to change the --

ASSOCIATE MEMBER PFANNENSTIEL: But if they're -- maybe they are, maybe they're not, I don't think we know that. So, if they already are more profitable, we're just adding to that.

MR. MICHEL: Well, which would then increase their -- even if it was already profitable, if we're going to make it even more profitable and we're looking at shelf sets within retailers, I would expect them to increase the assortment of those products. And ultimately, you know, drive the sales to the customer.

ASSOCIATE MEMBER PFANNENSTIEL: I think we're sort of beating this question of efficient use of ratepayer dollars farther than we need to do it here.

MR. MICHEL: Okay.

PRESIDING MEMBER ROSENFELD: I'm going to ask one related question, though, which I'm embarrassed that I don't know the answer to. When it comes to older white goods like refrigerators or -- I'm used to seeing yellow energy guide

labels which tell me something about the energy efficiency.

And I realize that I've slept through these proceedings without really asking myself do we have any powers to require labeling, any labeling on tvs? I don't know whether -- Noah has his hand up. Do you want to say something, Noah? Noah Horowitz.

MR. HOROWITZ: Noah Horowitz with the Natural Resources Defense Council. Commissioner Rosenfeld is referring to the yellow energy guide label that's commonly found on refrigerators and other white goods.

The federal energy bill of 2007 EISA, the Energy Independence and Security Act, requires the agency, the Federal Trade Commission to include tvs within the next 18 months. That clock started the end of the year, but there is a delay in terms of getting the new test method up to date.

So in the next couple of years you will see that yellow sticker on tvs at the federal level.

PRESIDING MEMBER ROSENFELD: And is there anything we could do to accelerate that in

California on an effective date for -- no -- go ahead.

MR. SPEAKER: Ken's going to answer this.

MR. RIDER: At the --

PRESIDING MEMBER ROSENFELD: Say who you are for the record.

MR. RIDER: All right. This is Ken Rider. Anyway, at the end of the proposed standards in the staff report I've actually included labeling in the proposed --

PRESIDING MEMBER ROSENFELD: Say it louder, Included?

MR. RIDER: It includes labeling requirements in the proposed standards.

PRESIDING MEMBER ROSENFELD: Very good.

MR. RIDER: Which basically just mirror what the -- it just requires that the active mode energy; right now that's what it requires is reported on the box.

PRESIDING MEMBER ROSENFELD: So that will help the situation.

ASSOCIATE MEMBER PFANNENSTIEL: Shall we finish? I see somebody wants to speak, but I think we should go finish the presentation. Thank

you.

PRESIDING MEMBER ROSENFELD: Sorry for the interruptions.

MR. MICHEL: No worries. I can finish quickly here.

So, just to wrap things up, we believe that the program, the voluntary program that we've put in place will help pave the way for the future of Title 20 standards in California.

We think that it will help with market transformation effects and help increase and accelerate innovation within a particular tv space.

While our program is in place and there's a structure that will pay at a very specific level, the 15 percent above EnergyStar, as the CEC looks at the implementation of potential Title 20 standards, we would evaluate implementing a tiered structured in our program to drive the market towards whatever that future Title 20 is.

And in most cases, would be my guess, we would look at spurring beyond that. Because once there's a Title 20 impact, that would be a baseline for a voluntary program. And we would

have to do something above and beyond whatever that baseline is to justify our program.

So, one of the things is as we look at the potential implementation of multiple tiers to try to support the efforts that you're considering, as soon as we know what those are we can drive the programmatic change well in advance of something actually taking place in terms of a Title 20 standard for the State of California.

So, the sooner we know the sooner I can sit down with the program folks such as SMUD and the other IOUs for the implementation of a tiered structure to try to press the market towards that particular standard. And most likely something well beyond that.

So, in conclusion, we believe what we've set up as a voluntary program here in California can help serve as a national model for other utility or utility regions in the country.

Over the course of the fall I've spent a considerable amount of time delivering presentations at EnergyStar, CEC/industry partner meetings, eSource. And I've personally spoken with dozens upon dozens of interested utilities in the country that are looking at what we're doing

here in California.

And in many cases several of them are moving forward with their own regulators to implement programs in the tv space.

And it's our goal to try to harmonize as much as possible with those utilities or utility regions so that we can develop a critical mass for our program which will help to further spur innovation and accelerate product introductions on a scale that we didn't think would occur otherwise.

Our goal is to continue to work with very important stakeholders such as the folks at EnergyStar, the Consortium for Energy Efficiency, the Consumer Electronics Association, retailers and manufacturers.

We think if we can work together on the voluntary side with all of these types of efforts, we'll help spur innovation and drive customers to buy the kinds of products that we would like to see.

We also think that the national effort could lead to greater participation and acceleration of product introduction, and acceleration of promotion of these products, both

at retail and at the manufacturing level.

Just to wrap it up, we think California is well positioned to influence a very significant market transformation effect here in California through a right combination of voluntary incentive programs, energy performance standards such as what you're considering here today, and customer, retailer education.

I appreciate the opportunity to be here; hopefully I was able to provide, shed some light and not leave too many questions in the minds of people here today. But I'm available to answer any questions either right now or at any break offline.

MR. FERNSTROM: Just one more very quick comment. The incentive program is designed to encourage the top 25, 30 percent of equipment in terms of its performance. The standards program is designed to eliminate the bottom 25 percent in principle.

And this isn't one homogeneous product. These televisions are differentiated in their performance, so the target for the incentive program is different than the target for the standards program.

And in order to convince you that the standards program is merited, PG&E and its allies needs to make a pretty good strong case that there's a lot of equipment that's going to be available. Otherwise you would not be convinced that you should approve this proposed standard.

PRESIDING MEMBER ROSENFELD: Thank you very much. PG&E gets lots of credits, and I hope that the southern California companies are on your tail.

I guess it's time for some comments.

MR. KLINE: Yeah, Dave Kline from JVC. When will your program go live? When will we be able to see this in the Best Buys and the Fry's and all of your other retail partners?

MR. MICHEL: The program is live today. We just signed contracts with a very large national buying group to bring on all their independent members here in California, totaling, I believe, 55 stores.

And we're in the final contractual processes with some of the largest national retailers in the country. And expect, before the end of this year, that at least two, if not three, of them will be onboard and the incentives

available, up in the stores and promoting.

MR. KLINE: But there is currently nothing available, because I was out looking at a major retailer last night --

MR. MICHEL: Right. So, like I said at the beginning, one of the biggest issues was the lack of -- was the unknown of what tvs would qualify for the program.

So when we put forward the contracts in mid-fall of this year, the question that we would typically get from retailers are what tvs qualify. Of the tvs that I'm going to sell, what qualifies for the program.

A lot of those questions were unknown until EnergyStar published their first list of 3.0 televisions. Now that, according to Alex there was close to 400 models on the EnergyStar website. And I think approximately 80 percent of those models qualify for the incentive.

So, at a very busy time of the year where it's usually difficult to work with the buyers with the big retailers, once we started showing them what tvs actually qualified, that accelerated conversations with legal staffs for the contractual process.

Last week we received the contract from one major national retailer and we're in the execution phase of that contract this week. We're expecting to repeat that with another national retailer before the end of this week.

MR. KLINE: So, you're saying probably by the end of the year, first of the Q1 of 09, we would be able to see that at retail?

MR. MICHEL: You would see generic promotion of the EnergyStar SaveMore brand in tv departments --

MR. KLINE: Right. Okay, thank you.

MR. MICHEL: -- with some of the biggest retailers. And quite frankly, some of the smaller retailers and the independents. So we're looking at an execution strategy across the spectrum of retailers.

MR. SHARP: But you're talking about your California service territories?

MR. MICHEL: Right. Only within our service territories.

PRESIDING MEMBER ROSENFELD: Yes, sir.

MR. SOOHOO: My name is Leon SooHoo; I'm the President and owner of Paradyme Sound and Vision, Sacramento. I'm a retailer, so this

incentive has a lot of interest to me.

My question is how are you handling or making it fair to some of the smaller dealers around your territory that are not part of the buying group, not part of the Best Buy group and so forth.

MR. MICHEL: The program is open to any retailer that can meet the contractual obligations as laid out. And as a Sacramento retailer, most likely you would connect up with SMUD, the SMUD group, in terms of this program. And I'm sure that they would encourage you to reach out to them and get involved in the program. Again, we have no barriers.

MR. SOOHOO: This is the first I heard about it, only when I heard in -- I mean, if you do not announce it the retailers are not going to be aware of that. They have issues, you know, working on their own. And I think that you need to reach out if you're going to offer this.

MR. MICHEL: I completely agree. And we're reaching out to the retailers within the Pacific Gas and Electric service territory. And I'm sure that the Sacramento Municipal Utility District intends to do the same thing.

MR. SOOHOO: Short of reaching out they won't hear about it. I'm just telling you this.

MR. MICHEL: Okay. I mean, point noted.

MR. SOOHOO: The other thing is, as a retailer I tell you, if I have to sell a $3000 tv versus a $1500 tv, my salesman is going to sell the $3000 tv in spite of the $20 incentive there.

The only area that the $20 really affects is the tvs in the $300, $400, $500 range. Anything above that there's no incentive. $20 is too low for that.

Why not have the incentives somewhat based on screen size?

MR. MICHEL: With all due respect, I hear and understand what you're saying, but what I can tell you is that there are people in the retail community that would completely disagree with that point of view.

And we've shown in some of the meetings that we've been in with larger retailers, that that $20 has a significant impact in terms of what they want to put in their stores.

MR. SOOHOO: Just an example of some of the incentive that comes from our manufacturers, Sony, Mitsubishi and so forth, and Pioneer, you

find that their incentive goes up with a higher price television set.

So I don't know where your source information is. But, as a retailer, I'll guarantee you $20 will not make one bit of difference for a $5000 or $4000 tv set. But $100, $200, then you may have some impact.

MR. MICHEL: Right.

MR. SOOHOO: So I just wanted to make that comment.

MR. MICHEL: Okay, thank you very much.

PRESIDING MEMBER ROSENFELD: I see one person. Yes, go ahead.

MS. ERICKSON: Janis Erickson with the Sacramento Municipal Utility District. I wanted to just say that we're happy to be participating in this program.

And we saw it, you know, SMUD has a small service territory within -- completely surrounded by PG&E. And we saw it as an opportunity to expand our ability to influence manufacturers and retailers to carry the products that would be efficient, and make a point of noting that to customers who don't really understand that there is a difference between the

higher efficiency ones and the lower efficiency ones.

I think it was buried in maybe Alex's presentation, that when they did a study of customers, that they just didn't understand that there was some better and some worse.

So, by coordinating with the other utilities both in California, and we literally have been approached by utilities across the nation to join this type of market promotion, that we have the ability to expand that influence and better serve our customers.

We have started, like Tim said, with more national retailers and manufacturers. But it certainly is not to exclude any local companies. And we just have had our heads down trying to run the program out the door. And apologize to the fellow from Paradym, but we will get with you and make sure that we have the opportunity to include everybody that wants to be included.

Thank you.

PRESIDING MEMBER ROSENFELD: Thank you very much. Any more questions? Is somebody on the line?

MR. TUTT: I have a question.

PRESIDING MEMBER ROSENFELD: Tim Tutt.

MR. TUTT: Tim, I guess I'm just trying to clarify in my mind exactly what the incentive program is you're proposing.

Right now when you say it's live and effectively the incentive level would be 15 percent above the EnergyStar level, and tvs that exceed that.

And then as the -- if we develop and propose and adopt new standards, the incentives would be adjusted to reflect the standard levels and go beyond the standard levels, is that correct?

MR. MICHEL: That would be certainly the way I believe that we would react to that. If we see this happen we would look at how would we implement a, you know, would we either adjust our existing one-level program, or do we implement tiers to try to stretch out to whatever gets adopted, if anything gets adopted.

MR. TUTT: Okay. And then the second question is you describe this as an incentive program working in the midstream with the retailers. What does the consumer see when they walk into a store that reflects this, if anything?

MR. MICHEL: Sure. What they would see is we worked with Maria Vargas and the brand team at EnergyStar to develop what was initially a pilot called SaveMore with EnergyStar. And SaveMore, you're able to use the SaveMore EnergyStar brand any time there's a national advance specification, such as what CEE adopted in August of this year.

So, because there's that advanced specification the PLP that you will see up in the store will be a co-brand in our territory with PG&E and EnergyStar. In Sacramento's case you would see Sacramento's logo with EnergyStar. And then what it will say is SaveMore, and then it says, Save the environment, money and something else --

PRESIDING MEMBER ROSENFELD: But does SaveMore --

MR. MICHEL: -- energy.

PRESIDING MEMBER ROSENFELD: -- suggest that you are beating EnergyStar by 15 percent?

MR. MICHEL: What it just says is EnergyStar Save More. So, what the customers really are going to hone in on, and what we've seen through a variety of research is that the

EnergyStar brand holds such high recognition from the customer, and has that energy efficiency equation, we're going to call it out and use that as the vehicle to call these tvs out that will qualify for the retailer incentives.

PRESIDING MEMBER ROSENFELD: So your strategy is basically to market EnergyStar, but you don't have any way of communicating with the buyer that there are models out there that beat EnergyStar by 15 or more percent?

MR. MICHEL: I understand, Commissioner. So, I mean, as in conjunction with putting this point of purchase up, both PG&E and SMUD have engaged detailing outfits to go into each of these retailers and conduct energy efficiency awareness training in addition to the placement of the PLP.

So there would be sales personnel education components that will clearly spell out that these products are the most efficient within the EnergyStar mix. So there would be those types of educational efforts.

And as we move forward into 2009 there will be additional efforts through PG&E microsites promoting these particular products and other, I would imagine, press-related PR type efforts.

PRESIDING MEMBER ROSENFELD: Thanks.

MR. TUTT: One more followup on that. Then the consumer walks into the store, they'll see some tvs that just have an EnergyStar label. And they'll see other tvs which have an EnergyStar label and also have a flyer or some display that says EnergyStar Save More, is that right?

MR. MICHEL: That is correct.

PRESIDING MEMBER ROSENFELD: And every tv which basically complies with EnergyStar doesn't necessarily get the Save More?

MR. MICHEL: Right. So, based on the information that Alex put forward, you would see roughly, you know, it changes on a week-to-week basis, but approximately 80 percent of the tvs that qualify for our program that are in that EnergyStar mix, would have that PLP.

There's only 20 percent of the current EnergyStar mix that doesn't qualify for our program incentive, based on current data.

PRESIDING MEMBER ROSENFELD: Thanks. Do we go ahead?

ASSOCIATE MEMBER PFANNENSTIEL: Noah.

PRESIDING MEMBER ROSENFELD: Noah's next.

MR. MICHEL: Thank you.

PRESIDING MEMBER ROSENFELD: Thank you.

MR. HOROWITZ: Good afternoon; I'm Noah Horowitz with the Natural Resources Defense Council, NRDC. Thanks for the opportunity to talk.

We've been very active in this space and we did the first ever comprehensive look at how much power do tvs use. And we did that back in 2004. And nobody was listening then. And we're delighted to see the progress that the industry's been making, and particularly in the last year or so.

In our prior testimony, I just want to highlight the greatest hits of what we did and move forward. For those people that are new to this, tvs represent roughly 1 percent of national electricity use. And it's one of the biggest remaining end uses in the home that's unregulated.

The PG&E study done by Energy Solutions, we could quibble over the numbers, but order of magnitude, once the tier two standard is fully in effect and the stock changes over, we're looking at savings of roughly 500 megawatts, which is a good sized power plant. So I wanted to put that

in perspective; this is a big thing we're talking about here.

And to put it into further perspective, California's building energy codes, which I think we can all pride ourselves, are amongst the leaders in the world. We saved about 120 megawatts in our last round. So this tv standard alone would provide four times the savings of one year of Title 24 2008.

The other thing that was a big point in our comments was we support the proposed two-level standards put forth by PG&E, and particularly focused on getting tier two right. And that we need to do a lot more than just test and list, which is what has been the industry's sole proposal to date.

We agree with test and list, but we need to go further. And we're very interested to hear from the industry later today, and I'll keep my comments short.

It's been five months since our last hearing and we haven't seen one more piece of data from the industry. And that test takes a couple of hours to do.l So I'm looking forward to seeing the data. And if it's not here, get a better

understanding of why that's not forthcoming.

So my comments today are going to give an overview on the technology. There have been huge advances since we've last met. And some confusion, and I want to clear that up.

I want to give a little bit further snapshot of the market. Alex stole a lot of my thunder, which is great. And I want to focus on the settings, which we haven't spoken about. We need to get that right. And talk a little bit about the timing.

So, first off, where were we going into the beginning of the year. Traditionally tvs were shipped overly bright so they would stand out on the retail floor. The retail floor space is very bright, brighter than in your home. And on top of that, tv manufacturers compete on brightness in many cases.

For the right or wrong reason many consumers will buy the brightest tv, all things being equal. So they were shipped out of the box to look very bright, and they didn't want to have to rely on the retail associate to dial theirs up properly.

The industry, both the panel makers, the

people that make the guts of the panel, if you will, as well as the tv manufacturers who build the tv around that core component, have dramatically improved the performance of both the LCDs and plasmas. And we've heard a lot about that, and I'll give you a quick update on that.

Last year there was no consensus test method. The IEC, which is an international standard-setting body, did officially approve a test method for measuring the amount of power a tv uses when it's on. That's 62087 for those of you keeping score. That was adopted this summer. So we do have an official test method that everybody around the world is embracing.

Also, the old EnergyStar, EnergyStar 2.0, only considered the amount of power a tv used when it was off. That was a glaring omission. They've fixed that. They took the baby step and set the line where they did. That went live November 2008. And they intend to revise that in early 2010, the new one would go live. Now on-mode is covered.

Interestingly enough, it's still incredibly difficult for a consumer to find the energy use or power use of a tv at the point of

sale. And online the only place it's easy is to find, if you are an EnergyStar-qualified model and you told EnergyStar that, you can find that on the website. But the other 60-plus-percent of the market there's still no way for you to find that data. You can find the EnergyStar hog, but you don't know what the energy hog is.

So, I'm going to take you on a journey, the road to efficiency, if you will. And the first step is the industry, which we agree with the direction they're taking, is moving from the you take the tv out of the box, you don't do anything, this is what your settings are.

Instead they've moved, in large part due to the credit you got in the EnergyStar spec to a forced menu. So you have to choose home or retail or vivid or some other setting with the hope that you pick home. The tv is less bright, but still plenty bright for you home in most cases.

Also there might be a little sensor on the tv, so if you turn down the lights in your living room or wherever you're watching tv, the tv dims down to the appropriate level. If it's really sunny in your room, then the brightness goes up.

These cuts, together, have decreased the power use by 10 to 25 percent, especially if they went to the forced menu. This cost was virtually nothing to the manufacturers. And overnight we're seeing these dramatic savings. And that's why, as of today, there are roughly 400 models on the EnergyStar list, only a month into its existence. And we expect to see that to continue to grow.

So, EnergyStar deserves credit for moving the industry towards the forced menu. But that's just the first bite of the apple, if you will.

What would be the next step, then? I'm going to talk in parallel of LCD tvs and then plasma, recognizing that the flat, thin panel tvs are going to dominate; and the thicker ones are increasingly going to have decreasing market share.

Alex alluded to things called ecopanels, or more technically in the industry they call them ecomodules. So there's the little LCD sandwich in front and the backlights behind that. Together that makes a module. And Alex has demonstrated by this shift we're seeing power savings in the on-mode of 30 to 50 percent.

The industry, there are roughly five panel makers that make the guts of almost all LCDs sold around the world. Aewoo is one of them. It's an alphabet soup CMO, LDG. And some of them are vertically owned by the tv manufacturers, themselves. For example, Sharp owns their own panel factory.

Everybody knows how to do this. This isn't a question of there's only one panel maker and they're going to charge everybody an exorbitant rate. Or there's some proprietary IP that people can't get.

So, we're seeing in late 2008 we just saw the introduction of some of these models; and 2009 we expect to see a lot more.

So here's the recipe. Maybe I'll start with a figure and then come back to this. Can I go off-mike for a little bit. Or is there a laser pointer?

MR. SPEAKER: Use the mouse pointer.

MR. HOROWITZ: This is scaring me. I'll be able to do it --

ASSOCIATE MEMBER PFANNENSTIEL: Noah, if you go off-mike the people on the phones can't hear you, and you can't get transcribed.

MR. HOROWITZ: Okay, I'll stay here. Bear with me then. Where it says AMVA, that little green part there, the next generation how do you make that LCD sandwich. The crystals in there are more efficient. So they have improved transmittance.

We've heard already about the 3M film called Vacuity. They're competitors and I think there's a letter in the transcript from another company. Basically it enables more light to come through to the front of the tv.

And there's a diffuser plate here. In the past there was a concern you could see the light bulbs in the back. And that's not a good thing. So we've got a better diffuser plate.

The bottomline here is more light is coming out of the tv. And so, as a result, you can eliminate some of those CCFLs, those cold cathode fluorescent lamps. You can remove some of those lamps. That saves money in reduced lamps. They've also moved to more efficient lamps. So that combination, this whole new ecomodule is close to cost neutral.

We're trying to get better information. We weren't able to get the panel makers to

testify. But I think that if you were to dig deeper the facts would back up. But there's little to no incremental cost here.

So here's it written up a little further. So when you eliminate the need for a few of the lamps there's a little connector there. That saves money. There are inverters related to each lamp and so forth.

This whole package uses less power so as a result the ac-to-dc power supply can become smaller. That saves money and weight in shipping costs and so forth. So, overall, there are lots of net benefits here.

And all of this is at the same brightness level. There's no decrease in performance of the product. That's the LCD side.

Now I'm going to talk about plasmas. This is a little more complicated. There's no single picture to explain this. But, in general, the industry is moving to double the performance, the efficiency, if you will, from 2.5 to 5 lumens per watt so they can cut the power in half by maintaining the same brightness levels as today.

And as you've seen earlier, a full year ago Panasonic demonstrated this technology and

publicly announced their intentions to release this by mid-2009, well in advance of the tier two standard.

This is just more of their press release material. And then Alex mentioned the gentleman, Russ Young, who is one of the leading experts in the plasma industry. Here he shows how do you get, what's the road to 5 lumens per watt look like.

I won't bore people with the details, but it's in our packet here that will become part of the public record. It's not us making this up. These are the technical experts saying here's how you do it.

And here's how you reduce costs at the same time. So, assuming a net incremental cost of zero is probably a safe assumption, being conservative here. This expert shows roughly 10 percent price reduction potential due to lower power supply sizes and other factors.

The other thing is these tvs are becoming thinner due to various technological improvements. So I think these potential standards in the drive for efficiency is driving innovation.

So, what are the benefits besides have a thinner tv? Well, people can market mine's thinner than yours, but that's not the sole benefit to society. You can get more of these panels into a cardboard box so you reduce the amount of packaging materials that that company needs to provide. You can get more of those boxes in a container coming from China or wherever these are being transported. So you're lowering the supply chain cost above and beyond the simple cost of this panel.

We haven't heard that from CEA and I'm glad we've got one of their economists here. Maybe they could give us a sense of how big these savings really are.

So that's how you get to tier two. The good news is we're going to see products exceeding, in this case meaning lower power consumption, than the tier two line, which is going to provide roughly 30 to 50 percent savings.

So we saw those fluorescent-based backlights. The industry is looking at and we're starting to see an occasional model here or there that use LED backlights, or solid state lighting.

They're able to respond very quickly as

opposed to the CFLs, so that you only have as many of the LEDs on as you need, depending on the picture you're displaying.

The recent laptop introduced by Apple has LED backlights in it. There the motivation was to use less power to preserve the battery light. But we expect to see the price of LEDs continue to drop dramatically.

We also saw -- Alex mentioned this, so I won't go over it -- the move to 10 lumens per watt is the next target that the plasma industry is shooting for. And that would provide even more compelling energy savings and cost savings.

For those of you that love this stuff, I'll leave this with you, and the quiz will be tomorrow.

Here's additional information on how you're also lowering price, not just gaining efficiency.

I want to shift, if I can, to settings. So, again I mentioned the tvs were shipped in this very bright mode. And they're often overly bright for the home user, but many people didn't often -- whatever -- however you take you tv out of the box, most people don't change anything. So we

need to get it right the first time.

And that's why we're supportive, and I think it was Panasonic, themselves, who proposed the forced menu. And here they have to choose between home or retail or vivid. And EnergyStar was driving this. And that's why we're seeing such a large rate of companies that are meeting EnergyStar.

What we've heard, though, and this is just in a voluntary environment, and you can imagine further motivation. Someone could dial up the home setting, turn it -- make the tv picture dimmer. And there's a direct correlation between power use and brightness.

So there's the concern that might happen is some manufacturers, hopefully none in this room, would have the home setting as a means to comply, and the picture would be too dim. So many consumers would do one of two things: Return the tv, call the call center, or then they would be motivated to go into the menu and pick a different setting. And the power use would jump dramatically; and we'd only be getting savings on paper. We need real savings here.

So we've got a couple of potential

solutions. We think there needs to be added specificity added to the staff report. So the 45-day language, we're hoping, can have additional suggestions on how to deal with the brightness.

One way to do this, or one quick techy thing, nits means candellas per square centimeter; that's how bright is the image for the area. So you could say, if you are going to use a forced menu, the brightness must be at least set at X nits. So an initial setup condition.

We would continue to use IEC 62087, but you just need to dial the brightness to a certain minimum level. Your tv can use more than that, but if you're going to claim the home setting, you need to be at least this bright. We'd love to hear from industry what's the right number. Is it 300, 350 nits, we're still trying to gather information. We ran out of time before the workshop.

The other thing would be to say before you put in the DVD that you run the test. You need to set the tv at X percent of maximum brightness. So make sure the tv is sufficient bright.

These are just two ways we thought of.

You're the experts. So our recommendation is for CEC Staff to convene a conference call as soon as possible, recognizing we're approaching the holiday season. Maybe people could float recommendations to the CEC and they could have a call and come up with this.

I also want to point out that the EPA, for their monitor spec, is considering doing something on brightness. In China they're looking at setting standards for tvs. They're going to have something on brightness, so this is an issue that's of concern to other people. And I think we need to get it right, as well, otherwise the standard could potentially be gamed.

So where are we today? This is my only color slide. I can't do what Alex can do with PowerPoint. But this is real important. The EnergyStar 3.0, that was live November 1st. We've already seen close to 400 models comply. We're well past their threshold of the top 25 percent of the market. The EnergyStar spec wasn't set very ambitiously. But they're going to revise that.

Most of the models that meet EnergyStar already meet the tier one that the CEC is proposing. Ballpark numbers, there are about 1000

discrete models that are out there. But it could be the top 50 models represent a large percent of the overall sales.

So, in terms of market share, we're probably seeing well in excess of these 40 percent-ish numbers.

The part that I delight in is today, a long time before the new standard, we're seeing over 100 models meet the tier two. To be fair, all of these are LCDs or rear projections. We haven't seen plasmas meet this. But based on the evidence we've seen, we're very confident that the plasmas will be coming along shortly.

Here is a list. It's hard for you to read, but it's an alphabet soup of all different manufacturers, all different sizes, meeting tier one, and increasingly tier two.

And here's a table just to leave in the docket of a cross-section of who's meeting tier two today. And I do want to acknowledge Dave Kline from JVC. They've got 13 models that already meet tier two. And have some of the most efficient LCDs out there. These also tend to be the thinner models, and in terms of incremental cost, Dave would be a great person to talk to.

How did you achieve this? And is it costing you any money, if at all.

Some of the other companies here have a lot of models. They tend to be on the smaller side. But what we typically hear in these sort of proceedings, and I've been at more than I prefer to admit, is oh, that can only be done at the high end. You're going to be preventing consumers, for whatever reason, forced to only be able to consider the $500 or lower tv.

If you go back to the chart, I don't know if you can read it, but there are companies like Sylvania, Emerson, RCA. Those are the entry price products, and they're showing very high compliance rates. Not only with tier one, but also with tier two.

So this isn't just a question of you're forcing people to only buy the $2000 tv when people can't afford that.

Also, we're seeing these at all different sizes. Yes, Alex's data showed more models at the small ones. That's where many companies are starting. But we saw a 52 inch Sony. If you look across JVC's portfolio, they've got the 37, the 42, the 46 and the 50.

These are also -- you also hear, well, you're going to stifle features. These are the full-featured models that are meeting this today. It's the 1080P, it's the high refresh rate, and all those other specs.

Also, Vizio has a lot of different models out there, and I'll talk to them in a minute. You'll probably hear from the industry, we've heard it before, is the market's taking care of this, why do we need it.

Yes, we have 100 models that are meeting tier two, but we still have 900 or so that aren't. We need to set the standard to make sure every tv sold in California is an efficient one. It's not just a niche product.

A quick update on the plasma side. Yes, we have models that are meeting tier one today. We're fully expecting to see tier two models trickling in next year.

I want to -- I just found out and put into my presentation a letter from Vizio. Vizio is one of the top five manufacturers of tvs sold in North America, and I want to point your attention to two parts here. I'll read this to you, especially for those on the phone. And this

is directly the letter written by the cofounder and Vice President, Ken Lowe, of Vizio:

"We've reviewed Title 20 efficiency levels proposed by the CEC for tvs and support the standard. And we are in a position to comply with the proposed effective dates. But we'd also support earlier implementations.

"Another thing of note, we have several LCD models in the market today that meet the tier two standard. So four years before the proposed effective date. These models are using the latest technology and features and scan a range of screen sizes.

"For our plasma tvs, although it is difficult for them to meet the standard today, there are significant efficiency achievements on the near horizon that could enable them to meet the tier two requirements in the next couple of years."

Bottom line, they see costs coming down. They are already meeting it on several of their LCDs, and those that don't, they're confident they can do that in the near term. And they're also a plasma manufacturer. And even though they don't have models today, they're confident they can meet

the tier two standard, as well. So we acknowledge their leadership and hope other companies will step up, as well.

Shifting gears a minute, we haven't mentioned Philips, but it's interesting, Starwood Hotels chain recently signed an announcement with Philips saying all of the tvs that are going to be sold in Starwoods are going to be very efficient. And roughly 40 percent savings compared to the ones they currently have.

So, we're seeing interest by retailers. We're starting to see interest by folks that buy a lot of these tvs and pay the electric bill. We owe it to consumers and businesses to help take some of the pain out of their electric bills, especially in these difficult economic times.

So, I'll conclude with NRDC supports the original tier one that was proposed and the tier two standard that were contained in the CEC Staff report. We think the settings language needs to be improved, and look forward to working with the CEC to help make that happen.

We would like to see a timeline published by the CEC, a tentative timeline, that winds up with adoption of the full standard no

later than the end of the second quarter in 2009.

We had a five-month lag between the last hearing and this one for many good reasons, but it's time to finalize this. I think there is an overwhelming amount of information to support a standard and the ability to move forward.

Given where the industry is, and our needs to meet -- comply with the AB-32 goals, and other issues in place, we think it's appropriate to move up the dates. We think tier one would have an effective date of July 1, 2010. And even more important, tier two should be no later than July 1, 2011.

And that concludes our comments.

ASSOCIATE MEMBER PFANNENSTIEL: Noah, great presentation. The question I have actually was for a comment you made earlier. When you were talking about the labeling requirements in the Energy Act, this year's energy act, and you mentioned that the law requires the labeling, but it also requires the test procedures to be redone. Is that the issue that we've been struggling with, the test procedures for televisions?

MR. HOROWITZ: Yes, the Department of Energy has a test method on the books; it's over

30 years old.

ASSOCIATE MEMBER PFANNENSTIEL: Right.

MR. HOROWITZ: The CEC submitted a petition, and NRDC and many other stakeholders put in a similar letter saying take out the old test method, put in the new one. That's simply an administrative step that we fully expect to happen under the new Administration.

ASSOCIATE MEMBER PFANNENSTIEL: I see, but it hasn't yet happened. I thought maybe what you were saying was that the legislation was requiring the DOE to make that change. Still has not happened?

MR. HOROWITZ: If I suggested that, that's not the case.

ASSOCIATE MEMBER PFANNENSTIEL: All right, thank you.

MR. HOROWITZ: EnergyStar has built their program off that 62087 test method, as other governments around the world.

ASSOCIATE MEMBER PFANNENSTIEL: Right. Yeah, we knew that, okay. Thanks.

PRESIDING MEMBER ROSENFELD: As Commissioner Pfannenstiel said, great presentation. Thank you very much.

First, before I -- Tim. Comments? Yes, sir.

MR. FAIRHURST: Hello, I'm Jon Fairhurst from Sharp Labs of America. And I was actually the project leader on the IEC project 62087.

The one concern that I have --

PRESIDING MEMBER ROSENFELD: Good for you.

MR. FAIRHURST: Thank you very much. The one concern that I have is regarding unknowns about brightness. As Noah mentioned, it's possible that the system could be gamed. I don't think that's happening, but last week EPA made a request for brightness data from the manufacturers.

So we're just now going to gather the information. What we don't know is we set brightness at let's say one level, we might find that no televisions meet the standard. If you set at another, you might find all of the current tier two meets it.

So the concern that I have is by saying that we need to set this standard, but we don't know what is the brightness standard, we have a huge unknown. So in my mind it's a bit premature

to say let's set a tier two standard, until we at least get the data back to find out is there a brightness problem or not.

That's my comment.

PRESIDING MEMBER ROSENFELD: Noah, you sort of raised that issue, didn't you?

MR. HOROWITZ: I did. My point is the standard wouldn't say all tvs need to be this brightness. It's just saying if you are going to have the home setting it can't be too dim. So what is that level? And that's what this dialogue would hopefully pull out.

MR. KLINE: This is David Kline from JVC. Thanks for the shout-out, Noah. Our tvs are the number one sets in the market. We are taking a huge gamble as JVC. We are shipping out of the box in standard mode. We have no setup menu. The set that you pull out of the box is green and qualifying as the number one set in every screen size where we participate, 32, 42, 47 and 52.

We are taking a huge gamble because we are pushing the envelope in terms of brightness on screen. That's the magic that my company is doing. It's standard technology for any other people. But we are taking a huge risk.

I have been asked to write disclaimers why this set looks different than it did November 1 when we started shipping EnergyStar televisions that comply with this 3.0. And the sets that we produced on October 31st, which were the 2.0 standby only and in vivid, what we call vivid mode. It's comparable to the retail of the EnergyStar.

We do not know what the impact on sales will be. We do not know what the consumer reaction to that industry-leading picture quality. That picture quality is based on several industry standards. The Joe Kane industries, the Imaging Sciences Foundation with Joel Silver are two industry organizations which have set home theater lighting and brightness levels.

There's several test discs in the ecosystem of screen adjustment. There's a cottage industry built up about backing down your tvs to what's called a D-6500 standard. It's a reduced brightness, but a more wide ranging, better video dynamics because of that reduced brightness.

Our sets have been designed to look as if they were doing that D-6500, which our engineers in Japan decided is the ideal load for

actual home video usage, rather than retail.

So we're shipping out of the box. We don't know, we may see a huge hit in our sales. People hate this. They complain, this is darker than what I saw in the store. We're hoping that the consumers will see the energy benefits, and we are hoping -- sorry in this public auction -- but we have -- are hoping that the consumers are more concerned with the energy efficiency of those sets, and impressed with the energy efficiency of those sets, and will accept the standard mode where we have shipped.

To those who do not care for that particular style of picture, or for a room, Sunday afternoon NFL football where there's Andersen window walls around all three sides of the great room and the family room here in California, open plans housing. You may see a vivid mode where the customer has the option to change to that more highly consumptive, but brighter and more viewable in that brighter ambient light situation.

But for most prime time of television is 8:00 p.m. to 11:00 p.m., okay. It's dark. Sorry. There may be room lights on, but it's not bright Sunday afternoon football. That's the only

situation where we're honestly seeing a problem or an issue with most consumer actual fundamental operation of the sets.

So, while we are the leader, we are pushing the envelope. We feel that our actions caused the EnergyStar memo to come out and report the brightness. How can you guys be 60 percent below EnergyStar levels? Our 52 inch LCD tvs are up to 60 percent below EnergyStar levels. Simply by pushing that screen picture envelope.

We're hoping that the consumers will accept that. We have complaint, we have prepared disclaimer messages that this set is more energy efficient, you should consider the energy efficiency of this set before you change it.

But we are deeply concerned, and we do not know what the acceptance of this will be. We're the only people who are doing this in the industry. So we're the canary in the coal mine to see how folks will accept this.

We may, next year, be going back to a forced menu option, depending on what the actual market sales are. We're in a business. We want to sell these tvs. We don't want to build a bunch of beautifully green but unsaleable televisions.

Our bottomline is selling those tvs.

So, that's our presentation. It's simple technology. You got to just twist back the knobs and break yourselves of that old habit of a blow-torch mode.

We're concerned deeply about next year's sample sets going out with a reduced mode in comparison with all the other vivid modes that will be there on the retail shelf. But that's a gamble that we're willing to make to hope that some of those consumers will see the energy efficiencies, notice us on the EnergyStar database, and ask for hopefully those JVC televisions.

Thank you.

MR. HOROWITZ: David, a quick point that you mentioned is the staff report requires the tv to either have a forced mode or a motion sensor. I think one should have the ability to have their tv without a forced menu --

MR. KLINE: Yeah, that was one of our --

MR. HOROWITZ: -- and use out of the box.

MR. KLINE: -- our comments was that we would like to have language in this that either

the set, out of the box, would be the first solution to measure the set. If it does not pass at that point, then you go to a forced menu system that would be a second alternative option.

But we would like more not to require the performance or extra features, such as the brightness control, the sensors, all of those things. If you can perform straight up, out of the box, that's the ultimate solution.

And if you need these other technological additions, you may use them to enable the efficiency of the tv.

MR. HOROWITZ: Couldn't agree with you more. If I could -- one last point is price. Alex showed some presentation material. I think people are coming up with the -- it's not a hundred percent true that the more efficient tv will cost less than its comparable one.

One thing we do know for sure is tomorrow's tv will cost less than today's. The industry has continued to drive prices down. And part of what's very difficult, some of the more efficient ones may cost more. It's not because of the cost of the efficiency, it's just a mix of the features and how that company markets their

products.

So I think we need to focus on what's the incremental production cost and supply chain cost. And we continue to look forward to seeing that data from the industry. Thank you.

PRESIDING MEMBER ROSENFELD: PG&E has a comment, and then we're going to take a break.

MR. FERNSTROM: Two quick comments from PG&E. PG&E supports the NRDC's accelerated date recommendation for tier two. And we also support the approach that Noah mentioned for minimum brightness with the test procedure.

PRESIDING MEMBER ROSENFELD: Thank you, Gary. Other comments on this part? No.

I'm going to make two suggestions. Commissioner Pfannenstiel has to leave at 4:00, and I think she'd like to hear the CEA talk.

So I think we'll tweak the schedule, but I'm going to suggest we take a, let's see, it's -- that clock says 3:27. If we could take a seven-minute break and really start at 25 minutes to 4:00, I think everybody would be happier.

But I really mean just seven minutes, okay? Not 15.

(Brief recess.)

PRESIDING MEMBER ROSENFELD: And I note that we really did get through with a ten-minute break. All right. Okay, are you ready? Would you introduce yourselves.

MR. JOHNSON: Good afternoon, Commissioners. My name is Doug Johnson; I'm Senior Director of Technology Policy for the Consumer Electronics Association.

In this portion of the agenda it's noted as CEA's presentation. We have a number of parties involved in the industry in CEA's presentation this afternoon that we want to move through quickly, given the time constraint. But importantly we want to hear the various voices that are here today in the room.

First let me begin by describing the approach here. The first portion of our presentation has to do with the economic impact of the CEC Staff's proposal. Following that we'll hear about some of the specific impacts on different parts of the value chain of our industry.

Finally, we'll talk about some alternative approaches and ideas. And some of the common denominators in what you've heard presented

this afternoon.

The CEC's approach, I think, can be, the staff's proposal, the staff's report can be characterized as suggesting that there be an on-mode energy use limit. We've heard many times from July and since then, from the Commission Staff and others, that the objective here is to remove inefficient tvs from the marketplace.

We've also heard several times this afternoon that there are no costs, no adverse impacts to stakeholders that are significant.

We've also seen justification of this proposal with savings estimates that are based on business-as-usual scenarios. And if there's one fundamental point I want to make is that there is no business-as-usual scenario in the technology industry. In fact, many of the presentations do show you that things are happening and happening very fast that support energy efficiency. And we'll be talking about that in more specifics shortly.

So, at this point I would like to turn over to Shawn DuBravac, our Chief Economist at CEA. Shawn.

MR. DuBRAVAC: Thanks, Doug. And thanks

for having me. I will keep my comments short so that we can move on to other comments, as well.

As Doug mentioned, I'm the economist for the Consumer Electronics Association. I also teach in the business schools of George Washington University and George Mason University.

What we wanted to do here was just model the effects on the State of California, really focusing on tax revenue and jobs for the State of California, given the impact of the proposed standard.

We estimate that roughly 3.2 million flat panel television sets are sold in 2008, in given year, with a wholesale revenue value of roughly $2.7 billion to California retailers.

This is expected to grow about 6.5 percent annually for the next five years. So there's still a lot of growth left in the flat panel category, certainly, as consumers continue to update older CRT televisions throughout their home.

The way we went about modeling this is running it through a simulation and trying to capture the effects of the standard. So our model walks through roughly 1300 iterations. And we

have an error estimate of less than 2 percent.

Some of the model assumptions. Just taking a look, and a lot of this information, as some of the prior presentations have used, comes from the data available in the EnergyStar 3.0 data that was recently made available.

So looking at those models, we found similar to what Noah presented, that about 22 percent of the models in that EnergyStar database would not qualify under the CEC Staff proposal.

We know that that EnergyStar database, of course, doesn't capture all sets. So the number is likely larger, and the number of nonqualifying sets would be higher because of those sets not contained within that database.

So we run through three separate scenarios. One where you remove roughly 30 percent of those nonqualifying television become qualifying televisions. And 20 percent and 10 percent, respectively.

So some of the things we assume in our model, just to give you a little bit of a feel for what we're doing in the model, we assume that people who would have otherwise, before the standard, bought a nonqualifying set, of course,

under the standard then have to buy a qualifying set.

So we don't assume that these purchases disappear or that they go away, or that it impacts consumers' desire to buy televisions. We still see, you know, in years moving forward over 3.5 million sets purchased in California.

So, again, there the big assumption is that nonqualifying models are removed from the market and consumers are likely to choose among qualifying models.

We know that nonqualifying tvs tend to be larger. They tend to be more expensive, as has been already presented today multiple times. Across the board the average price delta is about $1000 between qualifying models and nonqualifying models.

Part of that is driven, of course, by the fact that qualifying models tend to be smaller than nonqualifying models. So you can use -- and the model's built in such a way that if you would have other assumptions you'd like us to run, we're happy to put those assumptions in.

We used something significantly less than $1000. We looked at a price difference

between $400 and $600. I think some of the examples that were given earlier were in, you know, the $200 or $300 range. Certainly you could use those estimates, as well.

One of the assumptions we work with is the number of workers at retail locations in California is a function of the value of total sales. So retailers tend to keep on staff employees based upon the revenue of that store.

You know, if the store grows and they're able to produce more sales, then they add staff accordingly. And the reverse is also true. If the value of their sales declines then they're forced to remove employees, to lay off employees and reduce their sales count.

As is common with economic modeling there is a multiplier effect. So if you lose a job or you gain a job in a certain industry that produces jobs in adjacent industries and other industries that are downstream.

So you can imagine that as a retailer adds employees, those employees then go on to buy other things outside of their industry. They buy clothes, so that helps retailers that sell clothes. They go out to eat, that helps

restaurants. And so there is this multiplier effect.

In the model we assume that the multiplier effect for consumer electronics retailing in California is consistent with the results coming out of a PWC report that was published earlier in the year.

They were looking at the effects the industry had on employment generally for the country. We assume that California looks very similar to the rest of the country. And I think that's, with it being 12 percent of the population, a fair assumption. And, again, of course, all of these assumptions we can change accordingly.

In the model we've ignored several things. We do believe the results we'll present here shortly provide a downward bias or a more conservative estimate.

For example, we've ignored any reduction in installer services. Bigger screens, more expensive screens tend to be installed. And you'll hear later from specialty retailers, specialty retailers that I've talked to get about half of their, you know, up to half of their

revenue from installer services. It is a big important part of their business model.

That is when you go in and you buy a television you also hire that firm to come in; they install it; they wire it; they set it up. And so it's an important part of the business.

We've ignored any impact from reduced installer services. The idea there is that as you remove these nonqualifying sets consumers are left to choose from qualifying sets. If they then buy a smaller set chances are they're not going to have it installed, or at least not at the same rate.

We've also ignored any impact from attachment purchases. When consumers go in and they buy a new flat panel television, they tend to add products to that purchase. They bundle additional products with it. Maybe it's a new DVD player, or it's a BlueRay player in many instances these days.

Often televisions today have different connections to connect those video components. So they might be buying an HDMI cable, something like that. So you're buying a less expensive set. I think it's fair to assume that you're also going

to spend less on these attachment services. You're buying a smaller set, you're probably not going to buy the HDMI cable or the video component that you would have in the past.

Needless to say, we've ignored those type of impacts. We've also ignored any other externalities that I'll just briefly mention later.

With that we then rolled through the model. We've heard from PG&E that they'd like to see 25 percent of televisions removed from the market. We're going to go through again just a few scenarios.

One is we start with removing 30 percent of the models. So if you saw 30 percent of the nonqualifying models, and those were removed and replaced with qualifying models, we estimate that it would cost, on an annual basis, the State of California about $130 million in lost tax revenue. And costs the state nearly 16 jobs in California.

PRESIDING MEMBER ROSENFELD: Can I ask you one question?

MR. DuBRAVAC: Sure.

PRESIDING MEMBER ROSENFELD: I wish that I had the data right in front of me, but you're

assuming that there's a huge correlation between nonconforming models and size and price.

And I don't remember very well, but I thought that on the scatter plots that we saw earlier that nonconforming models were sort of spread equally around on the screen from 40 inches to 60 inches.

MR. DuBRAVAC: Well, what I'm using is the database that I think the presenters before me have used. And that's really the only data that we have to go on is the data from the EnergyStar 3.0 database.

So if you use that data, and even if you're comparing equal sizes, and I think we saw that from one of the earliest presentations, if you compare an equal size 42 inch qualifying versus a equal size nonqualifying, that you'll notice a price delta there, a price difference.

ASSOCIATE MEMBER PFANNENSTIEL: So, let me make sure then, following up with Commissioner Rosenfeld, that I have this straight.

For a television equal size, equal features, but one is more efficient than the other, one qualifies, the qualifying one is cheaper than the nonqualifying one.

And so what you're leading us to is because consumers are buying more efficient and cheaper televisions then there's going to be this significant negative impact on the California economy.

But what about the fact that -- have you modeled for the fact that then these consumers, by paying less for a television set, and less for the energy for the next ten years for that television set, will then be pumping some additional money back into the economy.

There would be a positive multiplier, in fact, would there not be, that way?

MR. DuBRAVAC: Well, assume we're looking at the -- in representing the industry we're looking at the impacts from the industry. I mean I think you can think of -- it depends on where that money is spent.

ASSOCIATE MEMBER PFANNENSTIEL: But I do think this issue, and it's a really big issue, about 10,000 additional jobs lost in California in the time of an economic recession throughout the country and in California, is a headline issue.

And yet I think that we have to be very careful that that is only the downside, that's

merely a negative impact from something that may, in fact, have some maybe equal, maybe totally offsetting, and maybe even more positive effects.

So I'm just really concerned that we look at -- I don't know why we would think it being a negative thing when a consumer would get the same product, and then, in fact, a better product, for less cost. It seems like that's a positive for the State of California.

MR. DuBRAVAC: Right. So, I mean one of the things you have, and I think when you hear from some of the specialty retail channels you'll get a better vision of that.

But one of the issues is that they, a person who's buying a more expensive, more feature-rich set will go to a specialty retail location. And I think hearing it straight from them is probably more appropriate.

But then now they're opting in the new world to buy a less expensive set, perhaps a smaller set than they --

ASSOCIATE MEMBER PFANNENSTIEL: But, see, I'm not going there. I'm not agreeing that the set would have to be smaller to be compliant.

MR. DuBRAVAC: Right.

ASSOCIATE MEMBER PFANNENSTIEL: And if it's the same set --

MR. DuBRAVAC: On average it is, though. I mean on average the sets that would qualify are smaller. The average set is smaller.

PRESIDING MEMBER ROSENFELD: Well, but that depends explicitly on this plot that I wish we had in front of us, with the noncomplying models as a function of size. I don't remember that correlation.

MR. DuBRAVAC: Yeah, and maybe it doesn't show up in the graph, but looking purely at the data from the EnergyStar 3.0 database, it does show up. If you just look at kind of the --

PRESIDING MEMBER ROSENFELD: Maybe at the end of --

MR. DuBRAVAC: Yeah.

PRESIDING MEMBER ROSENFELD: -- his talk the staff can remind us of that data.

MR. DuBRAVAC: Yeah.

MR. TUTT: Even so, it does seem that as the consumers are buying compliant sets they are spending less money on energy use, they are taking that money and potentially spending it in other areas of the economy, and you're not modeling

that.

MR. DuBRAVAC: Right, because we represent the consumer electronics industry. So, --

PRESIDING MEMBER ROSENFELD: But that's a pretty -- I must say I'm very uncomfortable about this. It sounds a little bit like arguments I heard from -- we all heard from General Motors and Chrysler and Ford, that SUVs were very profitable, and we got lots of jobs because they sold for more money.

But there was a catch to that argument which we all know.

MR. DuBRAVAC: Well, so one of the problems is, and we can certainly model this, but if the multiplier effect is lower where that money is being spent, then there still would be a net loss.

So, what you --

ASSOCIATE MEMBER PFANNENSTIEL: But if it's higher, then, in fact, there would be a net gain.

MR. DuBRAVAC: Definitely, yeah. So, you'd --

ASSOCIATE MEMBER PFANNENSTIEL: You just

don't know that.

MR. DuBRAVAC: Right, you'd have to figure out where they were spending that money. If you felt like they were going to spend it in an industry that had a higher multiplier effect, then, you know, then there would be a net positive gain.

From the PWC study it does appear that the consumer electronics industry generally, and the retail and distribution sections specifically, have a very high multiplier effect. There's a very high multiplier effect for that --

ASSOCIATE MEMBER PFANNENSTIEL: Well, they could well be spending it elsewhere in the consumer electronics industry. I mean that --

MR. DuBRAVAC: Certainly.

ASSOCIATE MEMBER PFANNENSTIEL: -- doesn't, you know, or some other industry that has --

MR. DuBRAVAC: Yeah, I --

MR. HUNGERFORD: So your model leaves that out.

MR. DuBRAVAC: That's --

MR. HUNGERFORD: Your model says they aren't spending the money.

ASSOCIATE MEMBER PFANNENSTIEL: Right.

MR. DuBRAVAC: Right, or that they're --

MR. HUNGERFORD: Okay, well, we know that's not true. So, --

MR. DuBRAVAC: Well, how do we know that's not true?

MR. HUNGERFORD: When people -- basic economics. I know you have a PhD in economics, but so you do understand that. But you've set your accounting stance in such a way that you've constrained it to your industry, and --

MR. DuBRAVAC: Right.

MR. HUNGERFORD: -- and haven't looked at the effects outside of your own industry. So, people have a budget that they're spending on a particular -- they have a consumer budget that they're spending.

Then the fact that one item costs less doesn't mean their budget goes down. It means that they spend their budget in other ways.

And, in fact, Jackie's point is precisely correct. If someone were to spend a little less on the television -- by the way, I don't necessarily agree that they wouldn't spend less on the television, but if they did spend less

on the television, they're likely going to put it into their audio system to go with their home theater, or a few more DVDs.

MR. DuBRAVAC: Right, we would hope certainly, from an industry perspective, that they would spend it within the industry, and then the multiplier effects would be the same.

I think when you hear from the specialty retailers you'll see that if they're buying a less feature-rich set, or if they do buy a smaller set, then there might be less inclination to spend it on the type of components and products they had otherwise or previously would have purchased.

So, I mean I think you definitely need to take into account where that money goes. And then, you know, assuming 10 percent of tv models are eliminated, you see the loss on an annual basis, 44 million. And about 5000 jobs.

Most of these jobs are within that consumer electronics retailing industry, though, you know, some of that is captured in the multiplier effect. So they are throughout the economy.

Even if you were just looking at 1 to 2 percent of the models, you're still looking at 7

million a year. So even if you, you know, even if the effect is small, you're still looking at nearly 1000 jobs in California.

Some of the other externalities we didn't take into account. We know that 75 percent of consumers shop online, and that they do research before they purchase a product.

So, you know, I think there's potential externalities that we haven't looked at either way for this scenario. I mean, one scenario is that they just buy online, and so if that online retailer isn't capturing the tax from that sale, then there's just an entire loss to the State of California, not just the marginal loss.

You know, the flip side is maybe there's an environmental gain there. They're not driving to the retailer, so they're not, you know, there's no carbon, additional carbon footprint.

Conversely, if they find a set that they really like and they go to the retailer and they try to buy it, and, you know, they're talking to a 19-year-old sales clerk who says, we don't have it, you'll have to try somewhere else. And they drive an additional few miles, this program to help the environment could have other

externalities to take into account.

So I think those are just some of the, you know, some of the things to think about. You know, no need to stress more the current environment, certainly.

Just a little bit to frame the conversation moving forward, as you hear from the specialty retailers. As you would expect, the large electronics retailers had a important marketshare in this category. And this is looking specifically at LCD sales both in dollars and units. You'd see Best Buy, Circuit City have an important position in this market.

But you also note that the tv stores and appliance stores, these tend to be the specialty stores that have more -- you know, they typically are regionally based, as opposed to like Circuit City and Best Buy nationally based. They'll have 10 to 15 stores in and around a metropolitan area.

Count nationally, these stores in aggregate are a important share. You'll also note that they tend to spend, they tend to sell more expensive sets, and not make that up on volume. As you can tell from Walmart, low revenue share, much higher unit share. So a store like Walmart,

as you would expect, is selling less expensive sets and making it up in volume.

That's not what you see from the, typically from the television stores who are selling more expensive sets with less volume. And losing those sales does have a larger impact on their business model because they're not making that up in terms of volume.

So, with that I'll turn it back to Doug.

PRESIDING MEMBER ROSENFELD: I wanted to make one comment. I do have it correctly that you do not take into account at all the money saved to the economy by reduced electricity sales?

MR. DuBRAVAC: No, no, we didn't take that into account.

PRESIDING MEMBER ROSENFELD: Because --

MR. DuBRAVAC: Certainly we can, you know, I think these are both good points and we can make those adjustments easily in the model.

PRESIDING MEMBER ROSENFELD: Because there's a paper that's a few months old floating around, by Professor Roland Hurst of Berkeley, in which he looks at the present electricity sales in California, which are lower because of various -- Title 24, Title 20 and so on.

And he comes to the conclusion that we're saving about $5 billion a year on reduced electricity sales. This is from everything, cumulative --

MR. DuBRAVAC: Sure.

PRESIDING MEMBER ROSENFELD: -- used. And he claims, including the multiplier effect, over a million jobs, positive jobs, not negative jobs.

So it's a pretty big deal, and I hope you'll take a look, and put those savings into your model.

MR. DuBRAVAC: No, definitely, I think that's a good suggestion. I'll take a look at that paper, as well.

Any other questions? Thanks.

PRESIDING MEMBER ROSENFELD: Let's go ahead.

MR. JOHNSON: This is Doug Johnson again with CEA. I just want to back it up, unless we forget the point here. What's been suggested by PG&E and others, and the Commission Staff in its report, is to take a portion of tvs off the market. And what we want to illustrate and what we were trying to illustrate in this first part of

the presentation was the dire and negative economic impact of that other, I think brutal, approach to trying to save energy.

There are better ways, and we will talk about that in the last segment of our presentation.

Before we get to that I'd like to introduce the next speaker, Bob Smith with AVAD.

MR. SMITH: Members of the Commission, thank you for giving me the opportunity to speak today. I sort of feel like a kid who was raised by wolves and suddenly is --

PRESIDING MEMBER ROSENFELD: I'm sorry, Bob, he introduced you as Bob Smith from something which I didn't catch.

MR. SMITH: AVAD, and I'll --

PRESIDING MEMBER ROSENFELD: You're going to tell us what --

MR. SMITH: I'll tell you about AVAD after I get done with my wolf story.

(Laughter.)

MR. SMITH: But I kind of feel like a kid who was raised by wolves, and suddenly I come into town and I find out all these things that are going on that will have some impact on me that I

would like to talk about.

AVAD is the largest distributor of consumer electronics in the United States. We have 39 locations in Canada and the United States.

We primarily focus on residential; we call them CE products, but they're really home theater products. And our world is a world of 40 inch video displays and bigger.

In California last year we sold about $30 million worth of video displays. We have six locations in California, and our headquarters are here in Van Nuys.

The home theater phenomenon is driven by one thing, and that is large screen, high def displays. That has created an overwhelming demand in this state, in every state, in Canada and around the world for this home theater environment.

Our customers, and let me get this straight, we are not a retailer, we sell only to dealers and installers. We have a dealer or installer base in the state of approximately 1800 people who buy consistently from us.

They don't have a retail space; they don't have a showroom. All of their business is

by referral. All of their business focuses around 40 inch and larger video displays. That is the anchor of their business.

If you -- and I, you know, I'm not going to speculate on what is going to happen in the future. I'm only going to talk about right now, but our tech guys sat down and we went through the StarEnergy site and looked at the wattage ratings for all video displays in there. I can tell you that as of this date, if nothing changes, 50 percent of the displays that we sell will not meet the 2013 standard.

The only ones that will do, currently, are 40 inch screens. Anything bigger than that will not.

I think it's great that JVC and Sony are working on energy efficient sets. So are the other manufacturers, as well. Unfortunately they don't sell to distribution. So we are not looking at the opportunity to move to sets that already are.

If you look at the 2011 standards, 30 percent of the displays we sell won't make it. And that's essentially from the larger screen size and up.

So, --

PRESIDING MEMBER ROSENFELD: What year standards, Bob?

MR. SMITH: Pardon?

PRESIDING MEMBER ROSENFELD: If you look at them, which standards -- which year did you just quote?

MR. SMITH: The 2011 is 30 percent; 2013 is 50 percent.

MR. TUTT: And do you sell LCDs, as well as plasma?

MR. SMITH: We do.

MR. TUTT: And DLT rear projection?

MR. SMITH: We do, but, you know, rear projection is really not an issue anymore because it's a dead product. The real focus these days are flat screens, either plasma or LCD, or the progeny of those technologies.

MR. TUTT: An earlier presentation by Alex had a 52 inch Sony that met the tier two standard. I'm wondering if that's one of the ones that you would sell, or --

MR. SMITH: Sony doesn't sell to distribution; they sell directly to retail. So, I mean I'd like them to, but, you know, that's their

business model.

If you look at the 50 percent scenario, to us, that being AVAD, we'd lose about $15 million in display sales in a year. Sales tax, the loss to the State of California, on that, when you add what the dealers will add onto what they buy from us at, is about $1.3 million.

The real issue for us is that the video display, while the anchor of the products that our customer buys, really is only about 30 percent of what they buy from us. Because they're putting together a whole system. These are systems that get installed in the wall; they're running ac in the line; they're going to have audio or another tv in another room. So it's really a system, and they need an installer.

Video displays typically are about 30 percent of their total system value. So, when they come to us, yes, we'll lose $15 million in direct display sales, but we'll also lose $45 million in associated product sales.

PRESIDING MEMBER ROSENFELD: Of course, one possibility is that you find some compliant display sales and keep your wonderful business.

MR. SMITH: That's right. We carry top

name brand stamps on Panasonic, Sharp, the major manufacturers. And those are the ones that are available to us to sell.

Many manufacturers have restrictions on who they sell to. Sony sells directly to their dealers and retail. They wouldn't sell to us even if we asked them to. JVC is the same thing.

So, we have major players who are all working on energy efficiency, but I'm only looking at the facts that are right here in front of me as I look at what we're selling and what compliance is.

MR. HUNGERFORD: Just let me be clear of the numbers you have on the screen here.

MR. SMITH: Sure.

MR. HUNGERFORD: And they assume that if 50 percent of the displays you're selling, 50 percent of the models that you carry are noncompliant, that you'll lose 50 percent of your sales?

MR. SMITH: Yes. And that's actually conservative --

MR. HUNGERFORD: Okay, is that realistic? They wouldn't substitute other products like Commissioner Rosenfeld suggested?

MR. SMITH: Like what --

MR. HUNGERFORD: Your retailers wouldn't -- your dealers wouldn't --

MR. SMITH: I'm not a retailer.

MR. HUNGERFORD: -- say -- your dealers or your installers wouldn't say here's one that we can sell you; here are nine models. Instead of here are 18 models.

MR. SMITH: Not if they're buying from us. The models that we have that we offer for sale, at 50 percent is conservative. The only reason that is 50 percent is because the 40 and 42 inch models make it today, four of them do.

The 50 inch and above that we sell don't make it. They're not compliant. So to say we're going to lose 50 percent of our sales, when our real revenue drivers are 50 inch and larger video displays, I think it's a conservative statement.

The dealer who comes to us buys his products from us for many reasons. One of which is we give them leverage because we buy in quantity from a lot of manufacturers so he get cost breaks. We maintain inventory so he doesn't have to. So there's a nice symbiotic relationship between what we do and our customer base.

But the consumer, for high def, is not going to, first of all, buy from us anyway. He'll buy from a dealer. But they're not going to settle, and this is a little bit -- I'll jump ahead a little bit, but they're not going to settle for something smaller.

If they see a 55 or 60 inch video screen my guess is they'll get it. I mean half of our sales are shipped sales. They call in or get us on the internet and we ship.

There are three giant national distributors, Capital Sales, DBL and Petra, that sell directly to dealers in California, anyplace. And if you buy three 50 inch flat screens they'll ship for free.

So, I want to get to that about the economic impact on what happens to the installers of these.

But chiefly looking at the dollar figures, if you look at -- these numbers are based on surveys we take of our dealers. We know from talking to our dealers that we actually account for about 40 percent of distribution sales in California.

So, if you look at extrapolating out

what total distribution sales alone are, you're talking about sales loss, tax loss on displays only of about $3.3 million, based on overall sales of 45 million. That's all distribution.

Associative sales, the tax loss is $8.4 million through all distribution based on $112 million in total associative sales.

If you look at all sources, because we know our dealers buy from distribution, only 40 percent of the products they use in the home. So, for example, they may buy their wire direct or something else. But we know they buy about 40 percent from us.

If you extrapolate that out you're looking at a tax loss of about $21 million based on total dealer purchases of $281 million. And that's if half of them don't work.

So, it's significant what the impact on my customers is, and what my company is. So I haven't heard any of that discussed here today. I just want to make sure that I get that in there.

This is a distribution model, and nobody's really talked about it. It's great to have rebates and any other promotional materials that you can get to have people buy energy

efficient things, but I haven't heard from anybody about rebates or programs that are available to help us educate. I haven't heard from PG&E. Nobody's ever asked us what the impacts on our business would be, or our customers. Or maybe if there's a way to ameliorate the impact by coming together with consensus. So, I just want to share that, again.

Give these numbers to you here so you'll know that there is a significant impact to us.

PRESIDING MEMBER ROSENFELD: One small question.

MR. SMITH: Sure.

PRESIDING MEMBER ROSENFELD: Aren't you eligible for a PG&E rebates? Or are they just so tiny in your price range that they don't make any difference?

MR. SMITH: No, I -- as near as I can tell they're only available to retailers.

PRESIDING MEMBER ROSENFELD: Retailers, okay.

MR. SMITH: And as I can guess is they're pushing the big box retailers. Where they're not talking to distribution --

PRESIDING MEMBER ROSENFELD: Yeah, no,

retailers only, okay.

MR. SMITH: I'm really concerned that the biggest detrimental effect isn't necessarily the loss of sales to AVAD. It would be catastrophic. But the majority of our customers it would be devastating.

My typical customer is a small business with three to ten employees, doing between $1.5 and $3 million a year. They don't have a showroom; they don't have a retail space. So, if you take four or five items off of their shelf, they don't have any fallback position.

They're in the market of selling big screens. And if they can't give the customer what the customer wants, the customer will find somebody else who will.

And what we're looking at is our 1800 dealers in California would be out of business or forced to go into a grey market situation. Without large screen displays they have nothing to sell. With nothing to sell, they're going to go out of business, or they're going to say, you know what, I got a mortgage, I got kids in school, I will find a way to get that customer what they want.

And they'll go and call Petra or DBL, or they'll go to Amazon online. And if they don't -- even if Amazon restricts sales in California, Amazon has a purchase box that circulates four or five internet vendors that will sell you in California.

So, we're forcing these guys to either go out of business, or to engage in quasi-legal or absolutely illegal activities.

So, the loss to AVAD for us is, I can tell you flat out, we'd have to close all six locations. If we can't sell big screen videos and we can't sell them at the levels we do today, we're going to have to cut.

That means to us, if you look at the 1800 conservative dealers that just deal with us that would be out of business, you're talking about 3900 people. That's installers, dealers and distribution employees who are out of work.

A grey market is created in California for large screens purchased by California dealers through the internet will create enforcement problems and challenges for the state, as well as additional loss of sales revenue.

I mean, I've looked into some of the

earlier workshops and read the comments, because to tell you the truth we only found out about this about 30, 40 days ago.

But I'd like to comment a little bit on the issues of this blackmarket or internet purchasing. If you effectively outlaw otherwise -- sales of large screen displays, consumers and installers will buy online. Consumers, because that's what they want. And installers, because that's what they'll have to do to survive.

Fifty percent of our business, like I said, is shipped. And we went through the three largest distributors. They'll sell online. Consumer sites, there are literally hundreds of consumer sites where a consumer can buy a large screen television over the internet.

So, it isn't an issue of whether people will buy online, they already do. Large screen tvs will continue to be added to the California power grid. They will get into this state. They will be installed and they will be sucking power night and day.

The only thing is that we will not have the tax benefit of that; we will effectively have put several thousand people out of work; and still

have the burden of supplying power.

So, I'm hoping that the Commission is open to perhaps some of the ideas that CEA is presenting. Because I can tell you from the distribution viewpoint, and speaking on behalf of my customers, I think they have some alternatives that merit consideration.

And, believe me, I am a hundred percent behind finding a way to make everything we use more efficient. I live in the state, you know, I like to hike, I like clean air, I like all the stuff. I totally support this program.

The only thing that I don't support is such a Draconian approach that has not given consideration to the impact on my company, my industry or my customers.

PRESIDING MEMBER ROSENFELD: I guess my problem is obviously you have to stay in business, you have a good business. I just don't understand technically why you can't get your hands on complying large screen tvs.

MR. SMITH: It's --

PRESIDING MEMBER ROSENFELD: Now, it seems to be a technical or marketing issue between you and the wholesalers, which I just don't

understand.

So, you know, it seems to me the crucial point you still haven't explained to me.

MR. SMITH: The main reason -- well, it's not the main reason, but the difficulty in doing it is that the two manufacturers, for example, that have been touted here today, JVC and Sony, will not sell to distribution. They do not sell to wholesalers. That's their business model. They choose not to do that. They sell directly to end users or -- not end users, but retail or independent dealers.

MR. TUTT: That may be, but I believe that there have been other manufacturers that have been noted in some of the earlier presentations, Samsung and --

MR. SMITH: We sell Samsung. We sell Panasonic. Samsung and Panasonic are in those figures I gave you on compliance, based on the EPA website.

MR. TUTT: And I think that if you look at the data in the charts form the earlier presentations, certainly there are more EnergyStar compliant models and more tier one and tier two compliant models with lower screen sixes.

MR. SMITH: There's certainly may be, but certainly with lower screen sizes.

MR. TUTT: Yes.

MR. SMITH: My world is not a lower screen size world.

MR. TUTT: I understand. I think that data reflects the models available today. I think what we're all looking for, nobody, I think, intends to say you can't buy a large screen tv in California. We're intending to say that if you do, you have to include these technology improvements that are coming along, have to be put in place so that your large screen tvs are efficient.

MR. SMITH: That's true. I totally agree with you, and I would suggest that regulation is appropriate. However, the alacrity with which it means to be imposed, I mean I heard from the Natural Resources Defense Council that we need to do it now, because we've dallied long enough on this.

Well, to me, this is the first time I've had an opportunity to speak. And if you're talking about impacting unemployment for these people, and loss of sales tax, I don't think that,

you know, that I would suggest that we need to hurry to a decision today without getting more impact from the industry on what, in fact, other available avenues are for us.

PRESIDING MEMBER ROSENFELD: Well, it does seem to be a case -- it does seem to be that the analysis has to be on how fast 50, 60, god knows, 70 inch tvs can be made compliant. As soon as they're made compliant, all your dire problems go away.

MR. SMITH: Absolutely. But what I hear is a lot of conjecture about what will happen, and putting faith in technology because of shows that they've seen these displays on.

I've been in this business 20 years. I've been to plenty of shows. I can see something a manufacturer tells me, this is the greatest latest thing; we'll be shipping in 30 days. Eighteen months later it rolls into our warehouse.

So, you know, I love the manufacturers; I love PG&E; I love them all, but I live in the now, not in the conjecture of what may happen in the future.

PRESIDING MEMBER ROSENFELD: Okay.

MR. SMITH: Thank you very much.

PRESIDING MEMBER ROSENFELD: Alex Chase, you're waiting to make some comments, I think.

MR. CHASE: Alex Chase with Energy Solutions representing PG&E. I did want to mention, I think it was well aware, that we highlighted many different manufacturers, JVC, Vizio being just two of the examples the gentleman from AVAD mentioned.

He specifically mentioned Samsung. I'd like to call out slide 24, the display week conference. Samsung had a 52 inch television and a 46 inch television, both showing upwards of 50 percent reduction in cost. And, again, these are the large screen sizes that he's mentioned.

We have several other examples, and I'd be happy to work with you in terms of specific manufacturers that are available through your distribution channel, and provide examples of new efficient technologies that, quite frankly, manufacturers are touting and competing to offer the greenest television at the recent display --

PRESIDING MEMBER ROSENFELD: Could you say -- you just mentioned three models, Alex, that comply. Could you repeat again the sizes of those?

MR. CHASE: The Samsung 52 inch television, and a Samsung 46 inch television. Both shown on slide 24 of my presentation.

PRESIDING MEMBER ROSENFELD: Thank you. Noah Horowitz.

MR. HOROWITZ: Noah Horowitz with NRDC. The economist from CEA, I just want to make sure I understand the assumptions. This question is directed to him.

Are you -- in your assumptions you assume the standards will result in lower cost tvs?

MR. KLINE: No. We didn't discuss this.

MR. HOROWITZ: So, let's say a 47 inch tv, are you saying after the standard that tv will cost more or less? I need to understand this.

MR. DuBRAVAC: So looking at the data that we all have available, just the data from EnergyStar 3.0 data, those that qualify and those that don't qualify, comparing those two pools of sets, the ones that do qualify are less expensive.

MR. HOROWITZ: My question is if you have 47 inch tv by manufacturer X, and then you make it comply with the standard, are you assuming an incremental cost? Because that's the real

question.

MR. DuBRAVAC: Right. So, none of that data's available from the EnergyStar database, so we're not guessing what it is. We do know in the Vizio letter that you highlighted that they do say it is more expensive to make these sets comply.

So there is an incremental cost to make them comply. And we're getting that from the Vizio letter. That's the first that I've saw a manufacturer say it'll be more expensive. But --

MR. HOROWITZ: So if there's a higher incremental cost, then more money would be coming in to these retailers. I'm confused. I want to hear directly you saying you're assuming no incremental cost for a more efficient tv? It's going to cost more or cost less? Because that's step one in running a model, right?

MR. KLINE: They're different sets. They're not the same set. The --

MR. DuBRAVAC: Yeah, I think you're comparing apples and oranges.

PRESIDING MEMBER ROSENFELD: I'm with Noah, I don't -- if we don't understand the assumptions, then it's hard --

MR. KLINE: Excuse me, this is Dave

Kline. The deluxe sets, which are the higher end sets that we're talking about --

PRESIDING MEMBER ROSENFELD: The what sets?

MR. KLINE: -- are more expensive because of the significantly increased technology. For example, in my product line our initial sets, there are three of them who share the same common chassis and video processor.

With our own high performance video processor there's between a 15 and 25 watt difference between those two products for a deluxe, higher performance, better picture quality video processor. Okay.

That's the difference why the noncompliant sets are typically the more deluxe, higher end sets, rather than the additional video.

For example, that video processor, that puts up 35; that might bring it over the line, if it were not as efficient as our JVC models are, where it still complies. But there is the 15 to 25, depending on the screen size, watt penalty.

And that's why I think deluxe sets, higher audio packages, 5.1 surround-sound built into that more expensive tv, which is the

noncompliant set that we're talking about, I think. Does that clarify why those noncompliant sets are actually more expensive.

MR. HOROWITZ: Yeah. All I'm asking for is transparency here. Please provide, or we would appreciate seeing the assumptions you made starting with a regular tv that is or isn't meeting the standard. What's the incremental cost together? Is it higher or lower? And the model seems to say that tv prices are going to go down and people are going to smaller tvs. And I just don't see it. So, that's my request.

Secondly, any model in terms of economic impact I think needs to include the operating costs. So we'd like to go on record challenging these numbers, and saying we need to see the electricity bill savings.

And also, as you well pointed out, there's a multiplier. So for each dollar people save there's additional money that can be invested in California.

So I just wanted to point those two things out.

MR. DuBRAVAC: Right, so I just want to note on the multiplier effect, in electronics

retailing, generally, and that's where the impact is showing up for the most part. And you've heard from some of the specialty channels, specifically.

They tend to have, in a typical retail environment, more employees because it's much more of a --

MR. KLINE: Custom.

MR. DuBRAVAC: -- yeah, custom value oriented approach. So if those sales were to go to a different channel where there's less employees, you know, per dollar of revenue, that's where some of those job losses show up.

So even if you take into account, you know, the money staying in the industry but going to a different channel, then you still end up with job losses.

PRESIDING MEMBER ROSENFELD: Yeah, I know I sound like a broken record, but I don't think the problem is that people are going to not be able to buy home theaters. I think the problem is why can't you get 52 inch screens that comply. It's a technological issue as far as I can see.

MR. JOHNSON: Commissioner, if I can jump in here. It's Doug Johnson at CAE. The issue is very much the adverse economic impacts of

the desire to take a significant portion of tvs off the market in the name of saving energy. That has unfortunate consequences for the distribution channel.

We've just heard from a distributor. I would like to give a chance for the other folks in our presentation team --

PRESIDING MEMBER ROSENFELD: Sure.

MR. JOHNSON: -- to give their perspectives, as well.

Next up I'd like to introduce Jim Palumbo who is going to give some comments on behalf of Wilshire Entertainment from southern California who could not be here today.

MR. PALUMBO: Thank you, Doug. Good afternoon, everyone. My name is Jim Palumbo; I am President of the Plasma Display Coalition. Its members are Hitachi, LG, Panasonic and Pioneer. And I'm not here as a plasma advocate particularly on this day; I'm here to represent our members and really the industry, not only of plasma devices, but of LCD.

A few clarifications, if I might, maybe going back a moment. There is, as Dave pointed out, a difference between a higher performing

television set and a lower performing television set. And I think Alex had shown on one of his charts, the difference is one does use less energy and one does cost less money.

And it is those higher performing television sets that Bob Smith was talking about in his presentation. Can he get lower priced tv sets that use less energy? The answer to that is probably yes, he could, through some of his manufacturers.

But the difference is his customers and his installers and the end users in the State of California are not demanding those kinds of tv sets. They're demanding the higher performing tv sets, ones that provide more profit, more dollar sales and all of the other areas that he put up that would make it detrimental to his business.

Mike McCaster, who is President and CEO of Wilshire Home Entertainment, can't be here tonight, unfortunately. I wish he was. But he has a similar circumstance. He is a independent retailer, and independent specialist. He derives most of his business from the higher end from all of the manufacturers of Sony, Panasonic, JVC and others.

He's been in business since 1954. He employs 50 people. He has two warehouses. And as he indicates here, it's already difficult for him as a California entity, to be an employer in the industry. The industry has already been hit hard in California with price compression, not only from the CE industry, but from the competition and recession from the housing impact.

And his buying group represents $500 million in revenue that's specifically in the State of California.

If I can flip this. The chief point about Wilshire TV, 70 percent of his revenue is derived from video sales. Not the low end sales that are represented by CostCo or K-Mart or Sears, or some of the others, but the higher end sales that I don't think anybody in this room has addressed.

There is really two different areas of this industry. And I think we have to understand why there are two areas of this industry, and how that second area that nobody's addressed is impacting the custom installer and the independent specialist.

Seventy percent of the revenues are

derived from video sales, that's the high end business. Twenty-five percent of those sales go back to the community in payroll. Another 20 percent of the sales get paid to local businesses; 45 percent of the revenue supports the local community in southern California. And that doesn't include fixed assets we purchase, like 14 vehicles and two stores that cost $500,000 each to build.

Flat panels are the technology that drives the business. Mike had commented over the phone about two weeks ago that if this goes into effect, with the composition of his company, of the high end products and residual sales he gets from selling these high end products, he might as well take his name, after almost 55 years, off the door, close up, fire everybody and go home.

That's the impact he has. And he is willing to show you the impact on a P&L, his balance sheets and others, on how this will come down if you end up taking 25 percent of the most higher end products off the market, as suggested by PG&E, and as put out by -- as defined by, I guess, Noah Horowitz and others.

There is a difference in the businesses.

So, with that, I've asked -- I think we're on to one of the other dealers --

MR. JOHNSON: Yes.

MR. PALUMBO: There is something that we will get on to. I think Commissioner Pfannenstiel asked for an acceleration, a DTV acceleration program, and I think toward the end of this discussion our industry can make a recommendation to the State of California that eliminates the downside risk of putting a lot of these independent installers and dealers out of business meets your goals and accelerates the business in the State of California, and maybe that could lead the United States.

And I'm hoping that all of the Commissioners up there, and the others who are asking to eliminate 25 percent of the tv sets from the market to give our proposal some very serious consideration. And hopefully we can sit around the table, like we may probably should have done in the beginning of this whole process, to make this process move for the benefit of all of the stakeholders, not just a few.

Because there is a serious business issue, which I think you have to understand.

Thank you.

PRESIDING MEMBER ROSENFELD: So who's going to outline your proposal?

MR. PALUMBO: I will when we go through -- I will make a recommendation on behalf of all of our members of the industry, CEA, that we've agreed might work if everybody gets together. But I think before that, too, there are a few other retailers in here representing not only the installers and the independent specialists, but also some of the major retailers. I think you need to hear their comments, as well.

Thank you.

MR. JOHNSON: This is Doug Johnson, again. Next I'd like to introduce Leon SooHoo with Paradyme here in Sacramento.

MR. SOOHOO: Thank you for the opportunity to address this Commission. What's appearing to be missing is the understanding of the consumer electronics market. I've been in business for 32 years. I've got 32 employees. And I've seen evolution in consumer electronics. I see businesses go under and come on, and the big companies leave us.

But what has happened in the consumer

electronic business is that the independent dealers, small businesses like my size, and smaller, cannot compete against Best Buy, Circuit City and internet sales. Just cannot.

So how do we compete? We compete by selling performance, the best tv there is on the market. That's how we make our living. Our customers come to us for that. They demand that from us. If we tried to sell the same tv as CostCo we couldn't be in business. We could not provide it.

The other thing that we do is that we are leading edge and integrating electronics into the home. This is a very important channel for the State of California, for the healthy nature of our channel. That is we are integrating lighting controls, home automation, energy conservation, environmental control, and television is one major aspect of that.

So I just want to make clear that we're not just talking about television. Just as the whole ecosystem is the total environment in the home. But the television is extremely important. That's a key element that consumers look at. That's the key element that allows us to make the

deal, and make the contract.

What I'm fearful of, to tell you the truth, is I don't believe manufactures is going to manufacture the highest performance tv exists in the State of California. They manufacture the global market. And we know that, because we've been dealing with this.

The other thing is I'm concerned with, the high performance tv, you know, the consumers read magazines, they read reviews. They go on the internet; they look at what other people are saying. People who want great performance home theaters or they want that television set that we sell, they're going to get it.

What's unfortunate is if it's available online or in Reno or in Las Vegas, they're not going to buy it from me. Deprive me of the opportunity to make a profit, and deprive you, the State of California, from actually collecting sales tax.

No one talks about performance. Number one reason the people buy a television is performance, what they see on their eyes. When they walk in the store, and I have a store, I have two stores -- we have high performance tv, I have

regular television, and I see what consumers look at when they come into the store.

There's a reason why manufacturers set the high, vivid line in my store. Because a standard looking dim tv, customers won't buy it. No matter how much you try.

Sharp, you know, we're a Sharp dealer. We have a hard problem selling Sharp. Sharp doesn't look very good on the floor. We had a meeting with their upper management and they say they realize the reason why the Sharp doesn't sell well is because the picture doesn't look good in the store. And they're trying to address that.

So, be aware there's a real problem with this. And I commend JVC, but they are taking a definite risk. Because you put a JVC, and you put another like Mitsubishi or someone else that has a vivid picture, you know, they won't have a change. Even with the EnergyStar.

EnergyStar is think is on our third reason why people will buy. And number one reason is the picture performance. That's really the key element here, I want to mention that to you.

What I'm fearful of that is the California will not be able to regulate the

importation of television sets out of state. Now, if you buy it over -- we're competing hard against the internet sales right now. A brick-and-mortar store, like myself, have a high overhead; we have infrastructure; we have healthcare. We have all the other issues to keep our people employed, and we have to contend with the discount prices on the internet and the fact that they don't collect sales tax put us at a major disadvantage.

So the inability to obtain the higher performance television is going to have a huge ramification. So I just want you to be aware of that.

I'll do whatever I necessarily need to do to survive, because we're out on the front line, we have to do what's necessary to do to make a living. And I'll tell you some of the things that was going through my mind as I was thinking about this issue.

All right, if my customer comes to me and say I want this television because I have read about it, and says, it's the best tv and I want it, price is not an issue.

What I'm going to have to do is refer them to a buddy of mine in Reno and say, buy it

from him. I'll install for you. That's what's going to happen. So I just you to be aware of the other circumstances that I see as their competitor.

We are a very important channel. We're all those small operation, you know. Bob Smith with AVAD. I buy from AVAD. I happen to have a store. But there's a huge number of workforce out there installing all these gadgets and making sure the home theater works and, you know, television is not a simple just plug it in market anymore.

You know, for a long time there people were buying high definition and think they were watching high definition in their set top box, and they were not. They didn't know it. So we go in there and fix it, make sure they have a great performance out of it.

So, our channel is important. Best Buys don't do that very well. You know, Circuit City don't do it very well. The independent is a service for high cost operation. And when you say, well, these jobs, you know, I tell you, our guys are not high paid. But they love doing what they're doing. And I hate to lose them to other people for that.

So I just want to make that statement to you. Thank you.

PRESIDING MEMBER ROSENFELD: Again, I think independent, high quality work is wonderful. Your problem is you need to be able to get efficient, large, high performance tvs.

MR. SOOHOO: Yes, I do. If they are available in California, then it's fine. I'm concerned with if they're not available in California they'll cross the state line. I'm at a major disadvantage. That's all I'm stating here.

MR. JOHNSON: Commissioner, I'd like to introduce our next speaker to keep this moving along so we can open it up to questions to the whole group, if I may.

PRESIDING MEMBER ROSENFELD: Yes, please.

MR. JOHNSON: Next I'd like to introduce, and since so far we've heard about the adverse impact of the Commission Staff's proposal on retailers and distributors, particularly the specialty and independent retailers, next I'd like to talk about the installers and the impact on that community that Leon referred to a moment ago.

So, I'd like to introduce Gerry Demple

with CEDIA, who will give the next presentation.

MR. DEMPLE: I'd like to thank the Committee. My name is Gerry Demple. I'm here in two capacities, one is as Chairman of the CEDIA Government Affairs and Action Team; and the other is as a representative of a California business, Andrews Electronics.

CEDIA is a trade association that specializes in planning and installing electronic systems in the home. We have, in California we have over 540 members. Those 540 members break down into the categories you see on the screen, which is residential electronic systems contractors, including the independent retailers and installers.

That's the biggest chunk. The next biggest is manufacturers, and then distributors, sales representatives, professional services and affiliates. But the important part is the top part of that is the biggest chunk of our membership.

Of those 540 members, they have tens of thousands of employees between the organizations. And they are a vital part of small business in California.

The impact of the mandate to those businesses are similar to what we've been talking about here earlier, what Leon was talking about, what most of the other representatives of our group. And that is that high performance product that is not going to be available because it does not meet that mandate, will adversely affect and disadvantage those CEDIA members.

And we believe that's real. And, you know, you can go back and forth on where that measurement is, but it is no doubt -- there is no doubt about it that it's a performance product, like was explained here earlier, that will not be available and will be a great market product these installers -- the customers are going to want specific things. And that will result in a loss of sales and tax revenue.

We believe that's a significant impact to the employment in this group. And CEDIA members are typically small, anywhere from six to ten employees per company. So they're not large; and a small decrease in sales impacts them a lot. A 10 percent decrease in sales could require them to have to have a significant -- or, I'm sorry, a 10 percent decrease in sales on their high margin

can result in a model where they're reducing employees. As well as, in some cases, probably, you know, closing their doors.

So, it is a big impact. And we believe that our membership will be very adversely affected by just a straightforward jump into this.

And, you know, that would put the California members of our group at severe disadvantage.

The company I represent, Andrews Electronics, we've been in business since 1950. We're based in Santa Clarita, California; we're North America's largest distributor of repair parts. Repair parts logistics, we do repair, refurbish and asset recovery, as well. We employ over 125 people in California.

So the impact on Andrews Electronics goes back to that independent retailers and installers. Many of those will contract or do their service and acquire parts for those repairs for us.

What we've found is that the higher end product is more likely to be repaired, so the more performance product people are going to more likely spend the money to repair down the road.

If it's a less performance product or a lower end product or a less costly product, people are more likely to replace it. And so that we believe in that channel would adversely affect our business.

It would affect what we sell through other distributors, because we act as the secondary distributor for many of the other parts, smaller parts distributors.

And it would ultimately affect the small servicers. And the servicers are even smaller typically than the typical CEDIA type member. They're going to be in, you know, maybe a company that's three, four, five people that come to your home and repair your tv. There are some large service organizations, too, but there's lots and lots of small ones throughout California.

And that's my presentation.

MR. TUTT: One question, I guess -- go ahead, Art.

PRESIDING MEMBER ROSENFELD: No, go ahead.

MR. TUTT: You're basing, I think, some of your statements here, which sound dire, on the tier two standard, correct, that we're proposing.

And that has an effective date of, as proposed, January 1, 2013. That's like four years from now.

If you look back four years from today were you selling pretty much the same tvs then as you are today? You've been in business a long time and I know there's lots of innovation in the tv industry. So, things change pretty quickly, don't they?

MR. DEMPLE: They do change pretty quickly. And there's two things about that. One is there's a call for acceleration of that already.

MR. TUTT: Yeah.

MR. DEMPLE: So that's a big concern. And moving those dates much sooner.

And the other is yes, the technology changes. You've seen it, you've heard it from the manufacturers, but we're guessing. We're guessing without the kind of data that tells us that, yes, we'll be able to get those high performance products to that without hitting that date and still being, you know, you can take electric cars, you know, they've made huge strides. But there are still some insurmountable things.

MR. TUTT: Yeah.

MR. DEMPLE: Maybe tomorrow somebody's going to find something that just gets it over the top. But today we can say for sure.

And so that's, you know, I think getting more information and having further open discussion with everybody to try to come to something that's equitable we're very in favor of.

MR. TUTT: We still are in a pre-rulemaking phase here, although we do want to move forward in getting more information. And having more discussions, I think, is useful and envisioned here.

MR. DEMPLE: Yeah.

MR. TUTT: We've seen a lot of information over the course of this rulemaking about the innovation in the tv industry and coming changes. And we all think that's wonderful to see.

It puts us in a little bit of a dilemma because we're looking at adopting standards that have an effective date far enough out that it's reasonable for the industry.

But things change so quickly that we kind of have to guess a little bit. I mean it's hard to base it entirely on what's clearly here

today because we know that will change four years from now.

So we need help guessing as to what the right level is, certainly.

MR. JOHNSON: If I may jump in here, Gerry. Doug Johnson with CEA again. You know, the problem with guessing with regulations such as what's being suggested here is if you get it wrong consumers pay in the end. And they either lose the products they want to have, there's an economic cost to businesses here in California.

One of the merits of the EnergyStar approach is that if they somehow get it wrong it is a voluntary program. But as you've heard already, EnergyStar perhaps in some view has got it wrong in the sense that it wasn't stringent enough.

But there's an out in the EnergyStar program. Products can still be sold. The latest innovations can still come to market.

What we want to talk about in a moment is what we suggest for the EnergyStar program, since it's worked so well, is a public policy approach for this sector, for tvs in particular. We want to suggest what might be done with that

specification, or the next specification going forward.

We have one more component to our presentation here that I'd like to get to. But before we get to this final couple of slides I'd like to invite Heidi Barsuglia with the California Retailers Association, to the table for a moment.

MS. BARSUGLIA: Good afternoon. Heidi Barsuglia on behalf of the California Retailers Association. And also today on behalf of the Consumer Electronics Retailers Coalition.

Together we represent major retailers such as Best Buy, Circuit City, Radio Shack, Walmart, Sears, K-Mart and Target, as well as the National Retail Federation and the Retail Industry Leaders Association.

In the interest of time our members would like to echo the comments of the Consumer Electronics Association, and point out that retailers have been working at the forefront with manufacturers. Some of that evidence was presented here earlier today.

And that we are working with them to make more energy efficiency consumer products available. And you will see more and more of

those on the shelves as things progress. And we are enthusiastically selling green, particularly in California.

Having said that we are in the midst of a deep recession, and consumers and retailers, as you know, are suffering in this current economic climate. The suggestion that consumers would spend savings elsewhere in the store would certainly be a great hope to us, consumer confidence numbers indicate otherwise at this point.

Our members do believe that removing 10 to 30 percent of existing tvs from the market will cause consumers to purchase tvs online or from neighboring states, leading to store closures in California and retail job loss in California.

Using the numbers that we do have we must stress that the retailers believe that this will cause the State of California to lose a significant amount of tax revenue to the state. And we do believe it will lead to a yet more significant number of unemployment in the State of California.

So, in this economy, with the State of California suffering the staggering deficit that

we are, and with increasing unemployment numbers, we're urging the Commission to please consider other alternatives to pursue energy efficiency standards, all of which are laudable. And we do encourage you to look at the alternatives that will be outlined here shortly. And our members do support those alternatives.

PRESIDING MEMBER ROSENFELD: Thank you. I'm getting pretty interested in this proposal. Yes.

MR. JOHNSON: Yes, and we've saved the best for last. But, it is very important, though, to hear, of course, about the economic impact on all facets of our industry as a result of the Commission Staff's proposal.

Here we'd like to talk about alternative approaches. And I think we've heard some common denominators from all the presentations today.

We believe the goal should be energy efficiency. It should not be a regulation or artificial limit or a line drawn across a dataset where we can only guess what might happen, or what might not happen in the future. Let's focus on what we can do today to encourage energy efficiency, and recognize what's been done

already.

Certainly, among the alternative approaches is the very successful EnergyStar program. I won't spend too long on that, but I do have a couple things to emphasize, as I mentioned. We also want to talk about earlier proposal for data reporting for a moment.

The next three ideas, though, do shed some light, I think, on some new opportunities. Automatic power-down requiring all tvs sold to have energy-saving mode. And, finally, incentivizing the purchase of EnergyStar tvs, and incentivizing the replacement of older, less efficient CRT and rear-projection tvs with flat panel tvs.

EnergyStar, as we have all heard and recognize, has been widely supported and very successful as a policy approach to addressing energy efficiency in the consumer electronics sector, in its approach to addressing energy efficiency in televisions in particular.

It's had a significant and meaningful impact on the marketplace. It has resulted in significant energy savings and carbon emissions reductions that support the California greenhouse

gas emission goals that were talked about by the Energy Solutions presenter earlier.

The current efforts to promote EnergyStar are these. As we mentioned back in July before the Commission, we want to promote EnergyStar for tvs and make the most of this new specification before and during three very important selling periods, which include the holidays, the holiday sale season that we're in right now, as well as the Super Bowl early next year, followed by the transition to digital television, itself, on February 17th.

These are very important opportunities to get the word out to consumers about energy efficiency in televisions and EnergyStar. And so we've taken the initiative, in the private sector, along with the Alliance to Save Energy, to do a media campaign to educate consumers and get the word out about the latest EnergyStar spec and what it means for consumers in terms of energy savings and saving money, as well.

Again, we invite the Commission and other interested parties to join in that effort. There cannot be too many voices encouraging consumers to buy efficient products.

Finally, we want to note that we have called on -- Consumer Electronics Association has called on the EPA to accelerate EnergyStar tier two in light of the successful impact that the tier one specifications had on the marketplace, and in light of the rapid uptake that we've heard about mentioned earlier.

Back in July we suggested an approach that the Commission could take in the near term would be a mandatory reporting of energy use data to the California Energy Commission. As we noted in that proposal, the reporting of data would include, of course, active mode power consumption pursuant to the latest industry standard, along with model numbers and display technology.

I do want to make clear, however, that the Commission Staff's report was incorrect in the way it characterized this suggestion. This was not a request for labeling on boxes or products. The energy use disclosures idea will be addressed at the national level by the Federal Trade Commission in 2009 for tvs and other electronics products.

Automatic power-down, as an approach, I think has a lot of merit; and Noah Horowitz with

NRDC has been a strong proponent of this in energy efficiency discussions within EnergyStar and elsewhere.

Automatic power-down is referenced in the Commission Staff's report. And we suggest that the Commission consider an automatic power-down requirement for tvs. Particularly for scenarios where, say, the tv is left on and the video signal is lost, whether that be from a DVD player or a game console and so forth.

We envision this as something worth considering because of the significant energy savings opportunity attached to it, of course.

A requirement for an energy saving mode was also suggested in the Commission Staff's report. And we also encourage the Commission to focus on this opportunity. That is to consider a requirement that all tvs be shipped and sold with an energy saving mode as a default setting.

Certainly the current EnergyStar specification is encouraging this in the marketplace. But there may be an opportunity here for both the Commission and the industry to focus on a requirement.

Next I'd like to talk a little bit about

the incentivized replacement of older tvs. This is a topic that our industry colleague, Jim Palumbo, will get into in a bit more detail in just a moment.

We recognize that there is a PG&E program, a pilot program, underway with utilities here in California, to incentivize the sale of tvs that perform at or better than EnergyStar levels.

But we also suggest perhaps a program to incentivize the replacement of older, less efficient CRT televisions and rear projection televisions with flat panel televisions.

Both of these programs, the pilot program that's underway, as well as the opportunity to incentivize replacement of older products are opportunities for collaboration between utilities, the California Energy Commission, consumer electronics industry and many other parties.

All of this points to a better economic approach. Again, we've heard about the dire economic impacts and the unfortunate consequences of taking a portion of tvs off the market, as PG&E suggested they'd like to take 25 percent of tvs away to save energy. There are better ways of

achieving energy savings. There are better ways of achieving energy efficiency.

Instead we urge the Commission to incentivize and promote energy efficiency for televisions, stimulate business rather than driving independent dealers and retailers out of business. Increase rather than decrease tax revenues. Contribute to the acceleration of the digital transition, and achieve energy savings and emission reduction goals that were described at the beginning of the presentations this afternoon.

That certainly would be a more favorable and economically and consumer friendly way of addressing energy efficiency that avoids the negative impacts of setting artificial energy limits or taking large portions of tvs off the market.

At this point, to illustrate this incentive approach that I mentioned, I'd like to call Jim Palumbo to the lectern to explain in detail what's being considered here.

MR. PALUMBO: Thank you, Doug. Okay. I'm hoping that the retailers have made an impact that taking away the life blood of their businesses can be a severe impact on their

business entities.

We happen to think, and agree coincidentally with Commissioner Pfannenstiel, that a California DTV acceleration program is a better idea than implementing a plan that would essentially put in harm the business, taxes and your independent retailers.

This is what we would like to discuss as an option rather than executing the plan that's been put forth by a few entities today. One that meets California carbon emissions reduction goals, and targets without negatively impacting retail and independent businesses, without negatively impacting state tax revenue, consumers, innovation, and interstate commerce, and prevents the possibility of starting a grey market in neighboring states with California.

This is mom-and-apple-pie, rockbridge in June of 2008, an independent consulting company talked with over 1200 customers. And nothing new. They're replacing their 36 inch television sets with 40 and 42 inch LCD and plasma devices. They're replacing their big screen television sets, 50 and 53 inch, and 60 inch, old, rear projection tv sets with 50 inch and 52 inch LCD

and plasma sets.

Interestingly enough the website for EnergyStar 3.0 indicates a substantial improvement in energy consumption from 2008 versus 2007. I think everybody in this room has somewhere along the line today touched upon the improvements that our industry has made voluntarily in these areas.

So just in the 40 and 42 inch category on the EPA website, let's address that for a moment as an example in support for a plan that accelerates DTV in the State of California.

There were 53 models as of November 16, 2008, flat panels, LCD and plasma under 200 watts. Most of them were under 175 watts. If you took all 53 of those models and just averaged them -- by the way, most of them being lower priced product within the reach of most consumers -- the average is 153 watts.

Now, I'm using old 36 inch picture tubes as an example, which one is sitting right up here. If you took those 36 inch picture tubes, I'm going to use Sony and RCA proscan as an example. Why? Because in the mid '90s to the late '90s between these two companies they enjoyed over 50 percent market share in the homes, of their 36 inch

product.

Sony 36 XPR 400, 245 watts. Proscan, 295 watts. RCA 360 watts. Sony 36 XPR 2, 330 watts, 36 XPR 450, 245 watts. And you see this going along. The least is 245 watts.

Now, you're going to say, is this the peak power that's in the instruction manual. No. What Sony had done in the middle to late '90s is did something similar to the IEC 62087. They put a tape on there and measured the power consumption of their product under normal viewing conditions with a customer. How do I know that? Because I initiated that.

So these are the, in the 240 watt XPR Sony at the bottom, that might be a peak power of 275 or 290, I'm not sure what it was. But this is what came back from Sony Corporation late last week.

If we were replacing the installed base of 36 inch tubes, for example, with 40 and 42 inch LCD and plasma, in today's 2008 model, you can achieve almost a 38 percent reduction in energy use. That is the average of 153 watts that we're talking on top of all the 40 and 42 inch versus the lowest power consumption which is the 36 XPR

400, which is 245 watts.

And it gets better if you're buying a JVC, for example, to replace some of these products. Because they're at the lower end.

So our strategy should be as quickly as we can -- and by the way, if you walk through the other various screen sizes, you'll find that this is true for most of the screen sizes, that newer models that they're replacing the old tube sets, are more efficient. And certainly they'll be even more efficient in 2009 and 2010 as potentially manufacturers improve the efficiency of their sets.

So replacing old tube tv and old rear projection tv tube technology as soon as possible with the new energy efficient flat panel, and get those old tube sets out of the home for a number of reasons. Because they use more energy, and because you don't want three tv sets per household. You want to get as many tv sets out of the home as you possibly can.

How do we do this? This is a collaboration among government and industry and all stakeholders, but maybe we offer consumers from the State of California an energy efficient

state tax credit or deduction for the replacement of their old technology.

Buy a new Panasonic or JVC, 40 or 42 inch, and replace your old Sony XPR 400; achieve, at a minimum, 38 percent energy cost reduction, and everybody's happy. Encourage them to do that.

Maybe rather than offering a consumer $20 from PG&E, maybe we turn that around with a credit on their next electric bill by verifying that they did a few things. They bought a more energy efficient television set in that category to replace their old technology. And got that old technology out and into the trash bin, recycled.

Offer retailers and installers and other distribution avenues an incentive to promote the plan, and accelerated execution of the program. You know, talking with some of our retailers, and being in this industry a long time, when a retailer has a reason to promote, he'll use his own money to promote.

And in this case is, in the State of California, promoting the benefit of the state tax credit, promoting the benefit of an energy credit on your electric bill, I can bet that 95 percent of the dealers that we have will get behind that

program and it won't cost you a dime, won't cost anybody a dime except the manufacturers to help them promote this. And you can ask the retailers that are sitting here in the audience.

So, what are our benefits? Acceleration of emissions reduction goals. It stimulates sales and business for all channels of distribution and related accessories. I think you heard one of our retailers say the beginning part of the sale for him, at the higher end side, is the tv. In most cases 40 percent of the cost of the tv is added on in accessories and warranties and installations and other good things that he can do if he can get that first sale of the tv set.

So what does this do? Improves profitability, enhances the overall value of his business, it grows the economy. Creates a healthy business plan in the state because you're taking an initiative to accelerate the DTV transition as quickly as you possibly can.

Obviously improves state revenue particularly in the short term by accelerating DTV sales in a time when I think the state, and all states frankly, need it. Keeps the business and the sales in the State of California. And that's

what we're trying to avoid, a grey market that becomes complicated for retailers, consumers, the State of California if you try to police something you're trying to enforce, and the manufacturers.

And accelerates, of course, the digital transition in the state. Removes old, big, hungry, big energy consuming technology from the homes.

And as a result what we like to say in our industry, this is a win/win/win/win/win/win for everybody. You meet your goals. The dealers win. Manufacturers win. The state tax revenue wins. And the utilities win.

And I think if we're to execute a plan that's a win/win for everybody, rather than taking products off the market and damaging the business of some of your independent dealers, we need to get around a table and maybe get this done.

So, thank you.

PRESIDING MEMBER ROSENFELD: Doug, are you going to say something?

MR. JOHNSON: No.

PRESIDING MEMBER ROSENFELD: No. Gary has his hand up, and --

MR. STRAIT: Actually, before we move

on, a couple of comments since there was some issues with the phones earlier, for those that might have been listening in and want to comment on any of the presentations that we've had. I think it would be appropriate to read off the call-in number one more time.

The call-in number for those that wish to dial it is 1-800-857-4259. And when you dial you need to give a passcode. The passcode is appliance. So, if you'd like to comment by phone, please use this number and not the one that was supplied earlier with our presentation materials.

Thank you.

MR. TUTT: And that's good and moved on to public comments on this part of the presentation. We still have two speakers that we passed over. I just wanted to make that --

PRESIDING MEMBER ROSENFELD: Right.

MR. TUTT: -- bring them up.

PRESIDING MEMBER ROSENFELD: Gary.

MR. FERNSTROM: Okay, so, Gary Fernstrom, PG&E. I'll make my comments really quickly. I have three of them.

With regard to the industry's recommendation about a replacement program for

older tvs, if I'm not mistaken I believe the PG&E consultant team showed the saturation of CRTs in the market to be reducing to near-zero in a relatively few number of years anyway.

So if the California utilities were to contemplate such a program, we would have to show that it does something that wasn't going to happen anyway.

And I would agree with industry that a program might accelerate the replacement of those older sets with newer sets, however the years of acceleration would be relatively few, so the energy savings would be relatively little. And it may prove not to be economic.

The second comment has to do with what AVAD had to say, and others, about the market niche for large screen tvs and home theaters. The assertion of this industry segment seems to be that there's not product available that they can sell that would meet the energy efficiency regulations.

That may indeed be the case today, however, the PG&E team presented evidence that new technology is in the making by several of these manufacturers that would allow the large screen

tvs to meet the energy efficiency regulations. And the speakers from that market segment presented no evidence to the contrary.

So it would seem to me, if we're looking at the record of evidence in this proceeding, there is evidence that product will be available; and there's no evidence that product won't be.

The third point, and I'm no economist, mind you, but it has to do with my recollection of economics 101 in college. And it seems to be there was this phenomena that economists call the demand sensitivity to price or something like that.

So, it would seem to me that if the price of televisions were to drop, the market response would be to buy more, maybe a second television for another room in the house and so on, for the children. And that wouldn't have the dire economic consequence that was suggested.

So, my question about the economic argument is how is that economic factor taken into consideration in the analysis. Thank you.

PRESIDING MEMBER ROSENFELD: Alex.

MR. CHASE: Alex Chase, Energy Solutions. I have three comments. One, the first

has to do with retail settings. There is a gentleman --

PRESIDING MEMBER ROSENFELD: With retail what?

MR. CHASE: Retail settings.

PRESIDING MEMBER ROSENFELD: Okay.

MR. CHASE: There was a concern that televisions would not be able to be displayed in the retail setting. One option is to have simply a forced menu. As the retailer sets that television up, a menu comes up; it asks if you're in a home or retail environment. That retailer could select the retail setting and it would be the more vivid setting.

And that's one attribute that's within the staff report and I think addresses that concern.

MR. TUTT: Alex, even if it doesn't have a forced menu, presumably it still has a retail setting or a vivid setting.

MR. CHASE: That's correct, and I think the largest --

MR. TUTT: So the manufacturer could, for a display television, set it to that even if there was no forced menu, is that correct?

Nothing in your proposal or PG&E's proposed standards would prevent the manufacturer from setting it to the vivid setting in the store?

MR. CHASE: That's correct.

PRESIDING MEMBER ROSENFELD: The manufacturer or the retailer?

MR. TUTT: I'm sorry, the retailer.

MR. CHASE: That concern was largely addressed by the independent retailers which presumably have a higher experienced sales staff which could go in there and optimize the settings of those televisions.

The second was, there's been a lot of discussion on how the tier one and tier two standards would limit functionality and features. We tried to highlight in our presentation televisions at all size ranges from various manufacturers that had some of the latest and greatest features.

I would mention from the press release that CEA released last week, their survey of consumers, the wish list for the next television purchase in ranking order what consumers want from the next television purchase, going down the list: more energy efficient televisions, better picture

quality, thinner shape, larger screen size.

We've highlighted televisions that meet tier one and tier two levels that accomplish all those goals. Full high definition; the fastest refresh rates on the market; thinner screens and larger screen sizes. And highlighted those from models available from various manufacturers.

The third point is on the model that the CEA's chief economist introduced, and that Jim Palumbo mentioned, as well in terms of their proposal would meet the California emissions reduction goals. If folks look on the record, all of PG&E's reports have been heavily footnoted. We have an extensive appendices that details every assumption that we've made in terms of the savings that we presented to the CEC.

I'd like to get on the record that the CEA and the Plasma Display Coalition could provide the same sort of detailed information for their assertions.

Thank you.

PRESIDING MEMBER ROSENFELD: Yeah, go ahead. Noah, you'll come right next. Sorry.

MR. JOHNSON: Commissioners, Doug Johnson with CEA. I did check one of the

footnotes that Energy Solutions just referred to. And it cited a report in 2004 as the basis for claiming that the state would save an enormous amount of energy if they went forward with this regulatory proposal.

That is not a sufficient basis upon which to make that judgment. 2004 is almost five years ago. In our industry that's a long time. Certainly whatever assumptions were being made, or whatever measurements were being made at that time are not valid today.

Thank you.

PRESIDING MEMBER ROSENFELD: Just -- are you going to answer Johnson, because --

MR. CHASE: Yes.

PRESIDING MEMBER ROSENFELD: Okay.

MR. CHASE: The assumptions are based on the current EnergyStar dataset. We've been updating them as we get new information. We rely also on the CEA's commissioned TX study which was released in early 2006 in addition to other various industry resources.

So the 2004 footnote may be a reference which wasn't mentioned specifically. But to make a statement to say that we're justifying all our

assertions on a 2004 data is simply incorrect.

PRESIDING MEMBER ROSENFELD: But you can update one, hopefully. Noah Horowitz.

MR. HOROWITZ: Noah Horowitz, NRDC. I'll be quick. I just want to point out again that in this industry tv prices change dramatically. A 50 inch tv two years ago would have cost roughly twice as much as it does today. Yet all these retailers are still in business and thriving. I want to point that out.

And what we're talking about here, we still need more data, but we're looking at plus or minus $50 probably for the incremental cost of these tvs, which is dwarfed by how the prices have changed and continue to change absent this standard.

So, I don't see how California hasn't lost all these jobs or the millions of dollars in revenue that are projected with a small incremental price change. Look at the price change we've seen over time.

Secondly, we've heard, hey, we're not going to be able to buy these tvs. Right now you have an inefficient 42 inch tv that's going to be pulled from the shelf. Yes, that's what the

standard's supposed to do. And replacement would be a 42 inch tv that's more efficient, provides the same features.

Alex has done a great job showing us all the models that are already available. And I want to point out something that's surprising to me. I didn't hear a single manufacturer today say I can't make the more efficient standard to meet tier one or tier two. It's all conjecture from retailers that they won't be available.

So I'd like to, either through written comments, let's see some proof by the manufacturers, themselves. That's who the real hardship of the standard would be. And we're not hearing anything.

Thank you.

PRESIDING MEMBER ROSENFELD: Doug.

MR. JOHNSON: Doug Johnson, CEA. The hardship is across the industry, as you've heard. It's manufacturers, retailers, distributors, installers, everybody is hit by the economic impact of an artificial energy use limit that takes a chunk of tvs off the market in the name of saving energy.

It's been very clear from the

presentations today that that's the impact of what's being suggested.

What we want to stress, though, is how we --

PRESIDING MEMBER ROSENFELD: Well, Doug, I don't think it's -- it's not clear to me. I keep thinking of a given large Cadillac of a screen, which is just a little bit more efficient. The picture I have is that the product is going to be -- the discussion is at what year is the product going to be available, not that the product's not going to be available.

MR. JOHNSON: Sure, and the Commission is suggesting a standard for the future for which it has no, you know, no basis for making a judgment about what that future market is. You're picking out a threshold and attaching a future year to it.

The market is constantly changing. And even since July, since we were last here before the Commission, it's been all but good news for energy efficiency, energy savings and emissions reductions as a result of EnergyStar coupled with technological innovation. These are the two principal drivers of efficiency.

I think what we want to do here is focus on energy efficiency opportunities. And as we mentioned at the conclusion of our presentation, there are several opportunities here to focus on some of the common denominators in all the presentations you heard today.

Let's look at the opportunities for shipping in an energy saving mode. Let's look at the opportunities for incentivizing the replacement of older, less efficient technology in ways that benefit the consumer --

PRESIDING MEMBER ROSENFELD: Doug, I --

MR. JOHNSON: -- that meet your goals --

PRESIDING MEMBER ROSENFELD: -- I guess my comment is I don't see a conflict between standards and many good things. As even Gary admitted, we need to look at an economic analysis of whether getting rid of -- early retirement of CRTs is a good idea. Maybe it's a good idea, maybe it's not.

It's not -- we don't have the power to -- we have the power of suggestion that you work with PG&E to see if that's a good idea, or you work with Congress to see if they'll give you tax credits for that or whatever.

But, what bothers me is the either/or. I think all those win/win/wins are a good idea, but I don't see that they conflict with reasonable standards.

MR. JOHNSON: But if they're going to --

PRESIDING MEMBER ROSENFELD: We have to discuss what reasonable is, and that's the issue there.

MR. JOHNSON: I don't think the objective here is standards and regulation, it's saving energy; it's energy efficiency and how do you achieve it for each sector, for each product category.

And what we're suggesting is that there's a program in place that's driving energy efficiency already. And there are several different ideas out there that could further enhance energy efficiency, without the negative economic consequences of what the Commission Staff suggests in its proposal.

I do want, before I forget the point, to respond to something that Mr. Horowitz just said about the price of efficiency. One of our industry partners, before this hearing, gave us some data on the premium that's paid by consumers

for energy efficient products in the tv category.

Now, the data had to do with televisions that complied with EnergyStar version 2.0, which, as we understand, was the standard focused just on standby. So, taking that into consideration.

The difference in average selling price for televisions that complied with EnergyStar version 2.0 versus those that did not was $98. Okay.

So I think what we want to also do is take a look at the data that shows what premium consumers are paying for efficiency under EnergyStar versus 3.0 as another input to our calculus here. Thank you.

PRESIDING MEMBER ROSENFELD: Melinda Merritt has a comment. Say who you are, Melinda.

MS. MERRITT: This is Melinda Merritt with the appliance program staff. I think we're concluding this particular segment of the meeting.

As the project or process manager for this rulemaking, I've always been concerned about the record of evidence, as Gary was mentioning. And I've heard a couple of questions or concerns about the availability of the data and the assumptions that CEA and the industry have been

asserting today.

I would very much like to know that CEA and the industry will be following up with more substantive written comments. And that they will make their model available to staff for examination, along with the input assumptions and the data.

I think it would be very interesting to run the numbers to clearly establish the potential adverse negative impacts that you've been asserting today.

I guess this is -- it's not directly solely at CEA and the industry. I would make this comment at the end of the day here, that we will be making the call for additional written comments, proposals. We would want those in detailed written format for the record, and for consideration by the Committee.

That's all I have.

PRESIDING MEMBER ROSENFELD: Doug, go ahead.

MR. JOHNSON: One procedural comment. There's an awful lot we heard today to which we'd like to respond. I'd like to request the Commission extend the deadline for written

comments. As you know the current deadline is this Friday. It's just before the holidays. There's an awful lot to respond to here.

We would like to provide written backup to a lot of what we said today. And we'd also like to respond to a lot of what we heard today.

So perhaps we can consider a deadline for written comments following this particular hearing that is, well, I suppose that avoids the holidays, as well. But gives us enough time to put together this material. Thank you.

PRESIDING MEMBER ROSENFELD: I think you certainly made the point that you're very concerned, and, Melinda, how shall we solve this deadline problem? I'm on Johnson's side, I think Friday is out of --

MS. MERRITT: Is too soon? Well, a lot of people are heading in and out on vacations. Two weeks, three weeks, --

PRESIDING MEMBER ROSENFELD: If we go beyond Friday we're going to have to do several weeks.

MS. MERRITT: Yes. I think it would be January 1st. As a --

PRESIDING MEMBER ROSENFELD: Don't say

January 1st. That means work on the holidays.

MS. MERRITT: Well, we can settle a date when this is finished. I do have a question. Will CEA's economic model be available for staff to look at?

MR. DuBRAVAC: Sure, yeah. I mean it's a very simple simulation model --

MS. MERRITT: Okay, great.

MR. DuBRAVAC: -- that anybody could run.

MS. MERRITT: That's good. I'd have to look at a calendar for, you know, a cutoff on the --

PRESIDING MEMBER ROSENFELD: And you said any --

MS. MERRITT: Yes.

PRESIDING MEMBER ROSENFELD: Doug, you won that point.

MR. JOHNSON: That's the only point?

(Laughter.)

PRESIDING MEMBER ROSENFELD: No, listen, let me say, I'm serious when I say that there are a lot of very good ideas there. The question is are they compatible with standards. And are the standards reasonable.

But I see them as additive advantage, rather than something within our powers. I can't order PG&E around. I can praise them, but -- let me also make one sort of general remark.

We've been in the standards business for 30 years. And I think it's generally accepted that appliance standards have reduced California's electric bills by 5 to 10 percent. And that's 5 to 10 percent of a $50 billion utility bill, which we all pay.

And that has resulted in -- I think it's generally agreed that's resulted in a lot of jobs. And so I think the general role of the standards is pretty good. And we have to figure out reasonable standards and we don't want to figure unrealistic standards.

But the idea that we rely entirely on EnergyStar it's just not really consistent with how successful the history of the standards in the past.

But, anyway, here we are -- yes.

MR. DELASKI: Earlier I was --

PRESIDING MEMBER ROSENFELD: I'm sorry, up at the mike. Go to the mike.

MR. TUTT: We skipped two speakers on

the agenda.

PRESIDING MEMBER ROSENFELD: I know.

MR. TUTT: And so in case -- I think we were just looking to move to those next speakers.

PRESIDING MEMBER ROSENFELD: All right.

MR. DELASKI: And Charlie had to leave, so you only have one more speaker.

PRESIDING MEMBER ROSENFELD: Okay.

MR. DELASKI: Charlie had to catch his flight back to Oregon, so. And I have just about five minutes, so I'll keep it short. I know the day has been long and most topics have been covered.

My name is Andrew Delaski and I'm the Executive Director of the Appliance Standards Awareness Project. ASAP is a coalition project that works to advance cost effective energy savings through efficient appliance standards. We work at both the federal and the state level.

ASAP is led by a steering committee that includes energy efficiency organizations like ACEEE, the Alliance to Save Energy; environmental organizations like NRDC and Earth Justice; a major utility company, Pacific Gas and Electric Company; and also representatives from state government,

member of our staff with the California Energy Commission have served on the (inaudible) committee for the past ten years. And it's been a pleasure to work with the Commission over the years on both federal and state standards. Many staff and the Commissioners, as well.

At the federal level we work on rulemakings, we work on negotiations with manufacturers, we work on congressional reforms. At the state level a key function of ASAP has been to develop model legislation. Model legislation which provides a basis for states to move forward with their own state standards.

Since 2002 we have developed state standards to model legislation each year, updated it on an annual basis. And a dozen states now have enacted state laws based on model legislation that we've developed.

As you know, the core, in fact many, I would say 80 percent of the state standards that we have advocated around the country have been based on what we've done here in California, the Title 20 standards. They have become the basis for -- your good work has multiplied its benefits, as it has spread to additional states that have

looked to adopt cost effective standards.

And, in fact, as you also know, many of those standards form the basis for new federal standards, with 25 new federal standards enacted in 2005 and 2007 combined. Many had their basis in work done here initially in California. So thank you for your leadership. It's made a big difference, not just for California, but for other states and for the nation.

I'd point out that three of the states that have enacted standards are the bordering states to California.

Just a couple of points about tvs. First of all, a bit of context from around the country. Like California, many other states also have made commitments to save energy and/or make greenhouse gas emission cuts.

For example, New York has a 15 percent goal by 2015; New Jersey 20 percent by 2020; Maryland also has a 15 percent commitment. The list goes on and on.

At the national level President-elect Obama has campaigned on a pledge to cut electricity use by 15 percent by 2020, from the projected levels.

As PG&E and NRDC have shown, trends in tv energy use are working against these goals, they head the wrong way. In the past few years millions of CRT tvs have been replaced by LCD and plasma sets that use significantly more energy.

Looking at table 3 in the staff report it will take a 30 percent reduction in average new LCD set use just to bring usage back to the level of the CRT it's replacing. In other words, you have to go to tier two just to stand still. So like earlier with the graph shown by PG&E. So therefore ASAP strongly supports CEC adoption of the two tier staff proposal.

With respect to timing in many ways this standard is already late. Reminded of a statement I heard from manufacturers of external power supplies at a DOE hearing in 2006 at the federal level, he said, we hadn't focused on the energy use problem because we didn't know we had an energy use problem.

So I think while we've been figuring out that we had an energy use problem in tv sets, millions and millions of sets have been replaced by sets that use considerably more energy. Therefore, I think it's critical to avoid any

further delay.

We urge the CEC to seriously investigate accelerating the implementation dates in the staff proposal.

I also want to address a couple other counter-arguments that I've heard by those opposing standards for electronics. One argument that we've heard, it's been brought up some today, is the notion that we can rely on a combination of voluntary programs and data reporting as a substitute for standards.

I think that that simply is a delaying of standards in order to see how well these voluntary programs work would be a mistake for a number of reasons. I want to highlight two.

One is that the impact simply won't be as large. You won't get the same energy savings, the same consumer savings for the purchasers of televisions.

Secondly, and this is a point that hasn't been brought up today, is that the voluntary programs should be rapidly redeployed to help spur further innovation and energy savings. To the extent that we delay standards waiting to see how well the voluntary programs work, that's

that much longer before those programs are redeployed by PG&E, as we've heard today, either for the next generation of savings from tvs, or some other good opportunity for energy savings.

The well is deep, but to the extent that we're working on focusing those efforts on work on the tier two standards, that means we're not doing something else that could be pursued.

Another argument we've heard is that electronics are a special case where standards don't make sense because technology and markets evolve too quickly for (inaudible) to keep up. That it's just too complicated for us to set standards for electronics.

This argument was deployed in opposition to consumer electronic standards which are now, have now been in effect in California for several years for several home electronics products. It was deployed for external power supplies. It's been deployed, as you well know, for many many products over the years. And so far the sky hasn't fallen for those in those marketplaces.

For the largest category, external power supplies, manufacture approached advocates to work together to enact California tier two standards

federally. In fact, the federal standards, enacted with the support of the manufacturers of power supplies, take advantage of a critical aspect of this market, the speed with which innovation happens. It takes advantage of it by requiring a rapid review of federal standards 2011, to go to 2015.

It also provides for a very short lag time between the final completion of those federal standards and the next implementation date, the shortest lag time of any federal standards because of recognition that innovation in this marketplace creates an opportunity for rapid improvement and rapid energy savings.

Every product, of course, has its own circumstances today, which I urge, of course, the Commission to consider. But exactly the sort of analysis that's been conducted to date by the Commission and the staff, I think is needed.

In the case of tvs, short product cycles around innovation mean that clear targets firmly adhered to with an ear for implementation dates will yield big savings for the consumer, big energy savings for the state.

In closing, I want to draw a parallel.

There's a UTube video bouncing around the internet of Secretary Designate Stephen Chew, who I assume in the room at this meeting here today probably hasn't been announced as the new energy secretary appointee at the federal level.

In the UTube video he deploys a graph that's I think familiar to the folks on the panel today. It's a graph that tells the story of the refrigerator.

PRESIDING MEMBER ROSENFELD: My favorite graph.

MR. DELASKI: Yeah. I thought it might be familiar to you. This institution and this state, of course, played a huge role in that story. And indeed, you know, much of the credit for the efficient units we have today, due to the work done in this building by this Commission, you played the star role.

Suffice to say that California took an energy trend line which was headed up for 30 years, much as the trend line for tv energy use is headed up. You stopped that trend line and then you bent it down. And it is much to the credit of this institution that that accomplishment was achieved.

Over the same period, that's not the end of the story, Stephen Chew does a nice job of this in his video, which I'll provide for the record if you'd like.

Over the same period even as energy use was brought down dramatically, the average effective product got bigger and better and the real price dropped. And last I checked, real prices dropping for consumers is a good thing. That means consumers benefit.

Refrigerator energy use is one of the most important legacies of this Commission. So although the comparison is undoubtedly imperfect, there are many similarities in the avocado green refrigerator of 1973 and the sleek visual tv of 2008.

So we urge you to expeditiously set strong standards for tvs to assure they become part of the state's and this Commission's legacy of energy savings.

Thank you.

PRESIDING MEMBER ROSENFELD: Thank you, Andrew. Yes.

MR. PALUMBO: Jim Palumbo, again. I just have one caveat and one clarification. It

will be brief.

PRESIDING MEMBER ROSENFELD: Repeat who you are.

MR. PALUMBO: Pardon me?

PRESIDING MEMBER ROSENFELD: Jim Palumbo. Say who you are for the --

MR. PALUMBO: Jim Palumbo from the Plasma Display Coalition. One comment and one recommendation.

I don't think the industry is opposed to standards. We've been living with standards our whole life. I think what we are opposed to in this proceeding is taking 25 percent of the products off the market and impacting the life blood of our independent dealer organization. I want to be clear with that.

To that point I would ask, you know, the CES is coming up, probably the best forum in the world get together and understand our industry a little bit better.

I would make a recommendation and ask CEA to help us do this, for that panel that's up there now, Dave, Art and Jim, and everybody on the Commission to get into a room and we will get as many independent California retailers as we can in

that room. And ask them the question, when we pull the top 25 percent of tv sets off the market in California --

PRESIDING MEMBER ROSENFELD: But that's not what we're trying to do.

MR. PALUMBO: That's what will happen with the proposal --

PRESIDING MEMBER ROSENFELD: That's your assertion, --

MR. PALUMBO: That 's what will happen.

PRESIDING MEMBER ROSENFELD: -- that's not what we're trying to do.

MR. PALUMBO: But that's what we heard and that's what's expected from this proposal.

PRESIDING MEMBER ROSENFELD: We didn't hear it from the manufacturers, we heard it from the --

MR. PALUMBO: I'm sorry?

PRESIDING MEMBER ROSENFELD: We didn't hear it from the manufacturers.

MR. PALUMBO: We heard that from PG&E, the objective is to take the top 25 percent of the television sets off the market.

PRESIDING MEMBER ROSENFELD: Oh, but the assumption -- yes, I'm sorry, I --

MR. PALUMBO: Yeah, that's what we heard. And I would like --

PRESIDING MEMBER ROSENFELD: But the assumption is that they will be replaced with more efficient ones.

MR. TUTT: Excuse me, sir. I believe what PG&E said is that the objective was to take the bottom 25 percent in terms of energy use off the market, not in terms of the performance --

MR. PALUMBO: And that they most likely will be the products that will impact all of those independent dealer organization, as they've just explained. And I'd like maybe the rest of the California dealer organization to explain the same thing to all of you.

So, if you would consider coming to the CES, sit around the room and you can hear firsthand what this impact might be, if you do that. And I think it will be an eye opening for everybody.

Thank you.

PRESIDING MEMBER ROSENFELD: Gary, I hear you -- I see you. Jim, I think we have to admit that there's a striking difference here. The assumption of the people who are trying to

draft standards, the staff, is that the 25 percent of noncomplying product will be replaced with complying product by 2011.

And it's just -- I'm sorry to be repetitious, but we're not trying to take you guys out of business. The question is one of extrapolation. How fast will the new compliant products appear.

Most of our experience, I get back to Andrew Delaski and refrigerators. We are down by, it's admittedly been 30 years, but we're down to one quarter of energy in refrigerators, which per cubic foot is down to one-fifth. And it worked pretty well. And the retail price went down one-third.

MR. PALUMBO: I think you are right to say that there is a gap between what you're trying to accomplish and the unintended consequence that will happen. And that's why I suggested you meet with a whole group of other dealers to see what that consequence might be.

There are two sides to our business. I think we mentioned that earlier. There is the basic business. Typically you walk into a Best Buy store and you see their basic business.

If you walk off into a corner you see that business that we're talking about in the form of magnolia. If you walk into magnolia today, January 1, if you were to implement that program, that magnolia today might have 35 products in it. There will be five.

PRESIDING MEMBER ROSENFELD: Okay, I think we've --

MR. PALUMBO: So there's a gap between I think what you're trying to accomplish and the unintended consequence with our customers. And I really truly believe this Commission needs to understand that a lot more thoroughly.

PRESIDING MEMBER ROSENFELD: We certainly need to put a lot of thought to it. Thank you.

There are two blue cards. One of them is from David Kline, whom I think has already had the mike a couple of times. But there is a blue card from you, David.

MR. KLINE: Okay. I had, just in terms of summary comments. This industry is undergoing a radical transformation from last year to this year, and then from the EnergyStar 3.0 program on November 1st, energy consumption has radically

dropped.

My company at the head, and I'll take all the slings and arrows of that, please buy a JVC tv if you want an environmentally safe tv. The object is that we cannot, if we rush to judgment we are caught in the middle of this transition.

And that within six months you'll see the data gathering that we are proposing and be able to get an accurate picture of next year's models, the 2009 models, which will be introduced in the spring, from consumer electronics show in January all through March, May and June.

And by July 1, which is our proposal, you will see that full picture of the industry. And that we're not just throwing darts at a dart board. That we'll actually have real data of all those sets, which ones could be sold in the State of California.

That's the huge benefit that you all have, as a Commission, that you can order that data gathering. We can only get EnergyStar compliant sets, voluntary products.

And there's a large universe of products outside of that who are sold here in the United

States. We're hoping that you will understand our request for the data gathering and the analysis of that.

And then we will see when we get that honest picture, first of all, staff crunching the numbers for a month after the 1st of July close date. And then we can really see where we're going.

We don't have a problem with emphasizing the positive sales of high performance sets. What we have is a market proposal rather than a regulatory proposal. And that by incentivizing those high performing sets, ours might be one of them. We're taking a big gamble, we're betting the farm here at JVC on the environment, by reducing the brightness of our sets at retail. First out of the box.

And we're trusting our retail partners that they may readjust the sets back to match the vivid mode. And we have a vivid mode in our sets. There's four presets in our screens.

One of those is standard where we ship it, and that's the EnergyStar compliant. We're hoping that folks like that.

But my key comment is don't rush to

judgment. We don't know where we're going. And you'll see this database, which is growing by leaps and bounds, probably 30 to 40 new sets this week from one manufacturer who dropped in their sets.

So I think that these factors mitigate towards take a stance of not rushing to judgment. And we're hoping that there won't be regulations. If you set a regulation it will go to that level and we will never develop beyond that. That's the flaw that we see versus a market situation where constant competition keeps lowering that bar.

If a regulation's in place, okay, we met it, fine. Let's pull the R&D guys off of that. We won that battle. Let's go for something else.

And the third point that I'd like to make is that there are premium products out there. In terms of just the video processor within our JVC product line, there are between 12 and 25 watts different just for the video processor in a high end, JVC, top of the line Genesa line.

The standard off-the-shelf processor is more efficient because it's a mass market product. But our custom-made proprietary processor improves the picture quality. And those are the sets that

these independent dealers are talking about. Every other manufacturer does that. That the high performance, the multichannel surround sound built into the tv adds a certain cost in terms of both the components and the power consumption. During decoding that 5. adobe channel out of the digital stream from your digital television. Significant cost in terms of power consumption.

So those high end deluxe sets are different. They are a different animal than the mainstream sets where we sell 60 to 70 percent of our volume. But those are the pace setters. That's where the technology develops, is in the high end for those custom made processors that each of the manufacturers are developing on their own.

And so that's why I'm saying that you need to respect those top end models, or include them somehow in a program which would be able to incentivize. See the benefits that each of those sets is getting from the previous year.

So, thank you very much, sir.

PRESIDING MEMBER ROSENFELD: Very good. And you agree to stay around till we get --

MR. KLINE: Certainly, sir. I'll be at

your disposal.

PRESIDING MEMBER ROSENFELD: Gary Fernstrom.

MR. FERNSTROM: I'd like to be absolutely clear for the record about PG&E's intent. And, Commissioner Rosenfeld, you perhaps stated it more eloquently than I can. It's not to eliminate 25 percent of the product from the market. It's to allow for the replacement of the worst performing 25 percent with compliant products.

So, the product and the market essentially stays the same.

PRESIDING MEMBER ROSENFELD: And insofar as the new products are more efficient, the other win/win/win ideas, which CEA is advocating, or Palumbo's advocating, become more saleable.

MR. FERNSTROM: Correct.

PRESIDING MEMBER ROSENFELD: I have one more blue card from Edwin Hornquist from Southern California Edison. Thank you for your patience.

MR. HORNQUIST: Not a problem, no, it's great, I get the last word, I guess.

Well, my name is Edwin Hornquist. I'm with Southern California Edison's codes and

standards program.

All I want to say tonight is that we'd like to first acknowledge and commend the efforts by PG&E and staff, CEC Staff, stakeholders that have contributed to this proposed television standards that we discussed here today.

Edison supports the adoption of the two tier standard proposed. We feel that the standards represent an important component to help move California closer to achieving reduction, energy efficiency and greenhouse gas reduction goals as outlined in the State's Assembly bill 32, and the California long-term strategic plan.

We look forward to working with television industry on education, voluntary incentive programs beyond minimum code requirements.

That's all I have to say. Thank you very much.

PRESIDING MEMBER ROSENFELD: Thank you very much. Tim, anything? Any parting wisdom? We need all the wisdom we can have.

MR. TUTT: Well, in light of the hour I guess I'll keep things quite short. I'm due to be leaving, myself, actually.

I wanted to thank everyone for coming, and to say that what I've seen here today is further evidence of the tremendous innovation in the tv industry from a variety of the presentations.

I think that it's clear that innovation, there's a nexus between that innovation and energy use. As tv manufacturers innovate they seem to be making tvs more efficient. And that leads to better televisions for consumers.

I think I've got to express some concern about high end televisions, or high end products and the high end larger screen size. We may have to take a look at stuff in that arena. But all of the data that we have from EnergyStar doesn't suggest that there is a nexus clearly to me between the high end and energy savings or energy efficient televisions.

It seems like there's a wide right in energy efficient televisions that are available to meet EnergyStar, that are available to meet our tier one standard. And with innovation in the industry it would seem to be available by the time of the compliance date to meet our tier two standard.

I think we all support voluntary incentive programs. EnergyStar is a wonderful program. There's no lack of support for those kind of programs here at the Commission.

We are here, though, to look at appliance standards, to look at regulations that affect the salability of appliances in California. And to work with those voluntary programs, and work with EnergyStar in a cohesive whole, not a either/or kind of structure in my mind.

And I would remind people in closing that our standards do have to be, by law, cost effective and feasible. We feel that we'll get there to cost effective and feasible standards.

I also remind people that our standards permit the sale of products manufactured before the compliance date. So there's some inventory clearance built into our standards process that allows retailers to sell product that has been manufactured prior to the compliance date even after that date is in place.

I do think we need more data. And I think it would be useful to get that more data very quickly. So, I encourage people -- as I understand it, the test does not take a lot of

time. Let's get in some more data very quickly.

PRESIDING MEMBER ROSENFELD: Any last comments? Nobody on the phone?

MR. STRAIT: Nobody on the phone.

PRESIDING MEMBER ROSENFELD: Melinda, do you want to state once more what -- are you going to make a guess as to when --

MS. MERRITT: Reconstructing the calendar I think Monday, December 29th, would be a suitable day for -- if people can have their written comments and supporting documentation at least to close off the topics that we've talked about today. Does that sound reasonable?

PRESIDING MEMBER ROSENFELD: How does that suit CEA? Doug?

MR. JOHNSON: Doug Johnson with CEA. I'm sorry, Melinda, I didn't hear the date that you were suggesting.

MS. MERRITT: I'm suggesting Monday, the 29th of December.

MR. JOHNSON: Toward the end of December, that's good. That also avoids the conflict with the show in the first half of January. So I think that's reasonable. January 29th, thank you.

PRESIDING MEMBER ROSENFELD: So, Melinda, you'll send that around.

MR. SPEAKER: No, she said December.

(Parties speaking simultaneously.)

PRESIDING MEMBER ROSENFELD: What did you say, Doug?

MR. JOHNSON: January 29th would be more reasonable --

(Laughter.)

MR. JOHNSON: December 29th is difficult because of the holidays, vacation schedules and preparations for the consumer electronics show, which is January 8th through the 11th. So actually latter January would be better. I'm sorry I didn't hear that correctly the first time.

PRESIDING MEMBER ROSENFELD: Bill Pennington, you're the senior person here. Can you get us out of this dilemma?

MR. PENNINGTON: Well, it seems to me that waiting until the end of January is a little much. But perhaps right after the holidays might be appropriate. Like January 5th or something like that.

PRESIDING MEMBER ROSENFELD: So you're thinking of something like January 10th or --

MR. PENNINGTON: January 5th is what I suggest.

MR. TUTT: Monday, January 5th.

PRESIDING MEMBER ROSENFELD: Doug?

MR. JOHNSON: I think it would be much more reasonable and helpful to CEA in putting the other comments, to have the full attention of the industry on this issue. And it's hard to get attention when they're about to go to the trade show.

PRESIDING MEMBER ROSENFELD: Darn hard.

MR. JOHNSON: You know, so it does occupy the days following the end of the year, early January; as I said, January 8th to the 11th. So I'm suggesting that perhaps after mid-January might be more reasonable in terms of getting people's focus and attention and contributions, most of all, to our written response.

Thank you.

PRESIDING MEMBER ROSENFELD: Bill, do you want to --

MR. PENNINGTON: Well, this is your call, Commissioner.

MR. FERNSTROM: Chasing those kilowatt hours is hard because they keep slipping away.

PRESIDING MEMBER ROSENFELD: I think I'm going to go for Doug Johnson. There'll be a Monday like the 15th or some date like that. I have a calendar here.

Yes, go ahead.

MR. HALME: I'm Steven Halme for Sony Electronics, Senior Manager.

Just like mentioned, myself, and also Mark Sharp from Panasonic, our associates are in Japan. It's very difficult to get anything from Japan in a couple weeks. And I agree with Doug that it should be extended further.

Takes them time to review. They have to get it to committees and look over things and answer. So it's not always an easy situation getting answers from Japan.

Thank you.

MR. FERNSTROM: I think the parking garage closes at 6:00. 7:00?

PRESIDING MEMBER ROSENFELD: I didn't hear you, Gary.

MR. HUNGERFORD: The parking garage.

MR. FERNSTROM: Never mind.

(Parties speaking simultaneously.)

PRESIDING MEMBER ROSENFELD: Oh, the

parking garage is about to close.

MR. HUNGERFORD: It would be the 5th or 12th.

PRESIDING MEMBER ROSENFELD: There's a Monday the 12th. Doug, are you -- will you settle for Monday the 12th. Or do you want Monday the 19th?

MR. JOHNSON: Is Monday the 19th of January, is that a Monday?

MR. SPEAKER: That's a week after CES.

MR. JOHNSON: Monday, the 19th of January seems reasonable, given the manufacturers' and retailers' schedules following at CES. So I think that would be a more reasonable date.

Look, we want to provide sufficient and thorough comment on what we've heard today and be able to respond to the questions from the Commission Staff.

I think this is an adequate extension.

PRESIDING MEMBER ROSENFELD: All right. So be it. The 19th. I'll catch hell from the staff, but --

(Laughter.)

PRESIDING MEMBER ROSENFELD: Okay, thank you all very much. And get to your garage before

it closes.

(Whereupon, at 5:58 p.m., the Committee workshop was adjourned.)

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CERTIFICATE OF REPORTER

I, PETER PETTY, 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 31st day of December, 2008.