## BEFORE THE

## CALIFORNIA ENERGY COMMISSION

In the Matter of	)	Docket No.	15-PMAC-1
	)		
Petroleum Market Advisory	)		
Committee Meeting	)		

MEETING OF THE PETROLEUM MARKET ADVISORY COMMITTEE

ENERGY INSTITUTE AT HAAS
2547 Channing Way
University of California, Berkeley
Berkeley, California

TUESDAY, FEBRUARY 10, 2015 1:00 P.M.

Reported by: Kent Odell

#### **APPEARANCES**

## Commissioners Present (\*Via WebEx and telephone)

Janea A. Scott, California Energy Commission

## CEC Staff Present

Ivin Rhyne, Office Manager, Natural Gas, Procurement
 Analysis, Distributed Generation Integration,
 Transportation Fuels Data
Gordon Schremp, Energy Assessments Division
Ryan Eggers, Supervisor, Transportation Fuels Data Unit
Samantha Arens, Staff Counsel

Jim Sweeney, Committee Chair, Director,
Stanford University Precourt Energy Efficiency Center
Sam Wade, Chief, Transportation Fuels Branch,
California Air Resources Board

Severin Borenstein, Professor, Haas School of Business Economic Analysis and Policy Group, University of California, Berkeley

David J. Hackett, President, Stillwater Associates
Kathleen E. Foote, Senior Assistant Attorney General and
Antitrust Chief, California Attorney General's Office
Amy Meyers Jaffe, Executive Director of Energy and
Sustainability, University of California, Davis
\*John Brody, Valero

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- 1 PROCEEDINGS
- 2 FEBRUARY 10, 2014 1:18 p.m.
- 3 CHAIR SWEENEY: Okay, hello. Welcome.
- 4 Technical difficulties called "parking spaces"
- 5 delayed the beginning of the meeting, so I'd like
- 6 to call this meeting to order. It appears we
- 7 have a quorum here, so we're able to proceed. In
- 8 fact, we've got everybody, right? Oh, we have
- 9 everybody but Amy, which is a quorum.
- 10 Okay, the first order of business is the
- 11 Minutes. You've all had a chance to review them
- 12 by email, I hope everybody has. You have a copy
- 13 in front of you in hard copies. Are there any
- 14 corrections to the Minutes? Have you integrated
- 15 all the corrections that all Committee members
- 16 have already sent you?
- 17 MR. RHYNE: Yes, I have. I've integrated
- 18 all the corrections I was given into the Minutes
- 19 you have there in your hand.
- 20 CHAIR SWEENEY: Okay. Are there any
- 21 further corrections? In that case, can we have a
- 22 motion to accept the Minutes as written?
- MS. FOOTE: So moved.
- 24 CHAIR SWEENEY: So moved.
- 25 UNIDENTIFIED SPEAKER: Second.

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- 1 CHAIR SWEENEY: And second. All in
- 2 favor?
- 3 (Ayes.) Opposed? Abstentions? Okay, it
- 4 is passed unanimously.
- 5 CHAIR SWEENEY: The second item is the
- 6 Charter. We should have -- we talked about this
- 7 at the last meeting and in front of you, you have
- 8 -- we just started a few moments ago. Presumably
- 9 everybody has had a chance to look at the
- 10 Charter, but I'd like everybody to take a look
- 11 now and see if this is acceptable. We have the
- 12 opportunity to discuss it. If there's any
- 13 objections to it, if they're minor objections, we
- 14 can wordsmith here; if there's major objections
- 15 or major wordsmithing, let's take that under
- 16 advisement and we have the opportunity to delay
- 17 approval until such time because we don't want to
- 18 take a lot of time wordsmithing here during the
- 19 meeting.
- 20 So everybody takes a look now and those
- 21 of you who have not read it carefully, at least
- 22 look over it right this moment.
- 23 MS. FOOTE: I think there were a couple
- 24 of comments on this last time, right? Or were
- 25 there?

- 1 MR. RHYME: So there were comments on
- 2 this in the last meeting. There was a specific
- 3 request to add language regarding the three-year
- 4 term, which was added to this, and to clarify the
- 5 fact that the communication restrictions of the
- 6 Bagley-Keene, the Open Meetings Act, was added to
- 7 the charter, both of which were done. Other than
- 8 that, the charter remains unchanged.
- 9 CHAIR SWEENEY: Okay, if everybody had a
- 10 chance to look it over, are there any suggested
- 11 changes to the Charter as it's written? Hearing
- 12 none, do we have a motion to accept the Charter
- 13 as written here?
- MR. HACKETT: So moved.
- 15 CHAIR SWEENEY: So moved.
- MS. FOOTE: Second.
- 17 CHAIR SWEENEY: All in favor?
- 18 (Ayes.) Opposed? Abstentions? Okay,
- 19 the Charter is adopted as written.
- 20 The third item, a briefing by the ARB
- 21 staff on the Low Carbon Fuel Standard. Okay,
- 22 that's you, Sam Wade?
- MR. WADE: Yeah, that's correct. Hi, Sam
- 24 Wade with the Air Resources Board. Thanks for
- 25 the opportunity to present today on the Low

- 1 Carbon Fuel Standard. Can I have the first
- 2 slide?
- 3 The Low Carbon Fuel Standard is one of
- 4 the key programs that the Air Resources Board is
- 5 using to meet the Assembly Bill 32 goals of
- 6 achieving a timely level of greenhouse gas
- 7 emission reductions by 2020.
- 8 This program was originally adopted in
- 9 2009 and was amended in 2011. The program
- 10 targets changes in the transportation fuel mix.
- 11 Specifically, we hope to achieve a reduction in
- 12 carbon intensity of the transportation fuel pool
- 13 by at least 10 percent by 2020. Next slide.
- 14 The transportation sector is the major
- 15 source of emissions in California, it's
- 16 responsible for 40 percent of the greenhouse gas
- 17 emissions, 80 percent of the  $NO_x$  emissions, and
- 18 95 percent of particulate matter in the state.
- 19 The Low Carbon Fuel Standard works with other AB
- 20 32 programs including the cap-in-trade program,
- 21 our Advanced Clean Cars Program, and Smart Growth
- 22 policies including SB 375 to drive emission
- 23 reductions from this sector. Next slide.
- 24 California is not alone in this endeavor
- 25 of promoting clean fuels. The Pacific Coast

- 1 Collaborative Jurisdictions, including British
- 2 Columbia, Washington and Oregon, have all been
- 3 working on policies similar to this. British
- 4 Columbia has its program in place, Washington is
- 5 moving forward under Executive authority
- 6 currently, and Oregon is working on legislation
- 7 currently to remove a sunset on their program
- 8 which is currently only a reporting-type of
- 9 program, but they will transition to a
- 10 compliance-based program assuming that
- 11 legislation passes.
- 12 There's recently been some studies out
- 13 there showing that the volumes of fuel that are
- 14 needed to achieve all of these clean fuel goals
- 15 simultaneously across the West Coast will be
- 16 available in the timeframe that's needed to meet
- 17 the targets and jurisdictions. Next slide,
- 18 please.
- 19 So let me get into how the Low Carbon
- 20 Fuel Standard works. The program sets carbon
- 21 intensity Standards for gasoline and diesel, and
- 22 the fuels that replace them, so there's one
- 23 Standard for gasoline and gasoline substitutes,
- 24 and one Standard for diesel and diesel
- 25 substitutes.

- 1 Carbon intensity is the measure of
- 2 greenhouse gas emissions associated with
- 3 producing and consuming the fuel on a full
- 4 lifecycle basis, which is measured in grams of
- 5 carbon dioxide equivalent per megajoule.
- 6 My next few slides briefly explain what
- 7 full lifecycle analysis really is. Next one,
- 8 please.
- 9 So on the fossil fuel side for CARBOB
- 10 with the blend stock, you know, you could see
- 11 from these little thought bubbles where the
- 12 source of emissions are in the full lifecycle,
- 13 roughly 12 grams per megajoule in the extraction
- 14 step, 14 grams in the refining step, and 74 grams
- 15 when the fuel is combusted in the vehicle, so for
- 16 a total of 101 across the lifecycle. Next slide,
- 17 please.
- 18 For a low carbon fuel such as biogas
- 19 burned in a heavy-duty truck, the numbers look
- 20 different. There's very little at the extraction
- 21 step, but there's a significant flare credit
- 22 assigned there because it's assumed otherwise
- 23 that methane would leak into the atmosphere.
- 24 There's processing and getting the fuel to the
- 25 vehicle and then the vehicle step where we do

- 1 adjust for efficiency of natural gas engines
- 2 versus diesel engines, so you end of with a value
- 3 of about 20 for something like biogas CNG.
- 4 So conceptually this is just looking at
- 5 the full lifecycle and weighing everything on
- 6 sort of an apples to apples basis, and promoting
- 7 the cleanest fuels. And if the Committee has any
- 8 questions, feel free to interrupt me, I'm going
- 9 to go through the next few slides --
- 10 PROFESSOR BORENSTEIN: Sam?
- MR. WADE: Yes.
- 12 PROFESSOR BORENSTEIN: So you kind of ran
- 13 by this point, that the ICCT finds the clean fuel
- 14 goals and jurisdictions achievable. Would the
- 15 oil industry agree with that statement?
- MR. WADE: No, it's certainly a point of
- 17 controversy. The Western States Petroleum
- 18 Association and others feel that the goals are
- 19 challenging, and some would say not achievable.
- 20 PROFESSOR BORENSTEIN: Who is the ICCT?
- 21 MR. WADE: They are an independent group
- 22 that's looking at this because they're interested
- 23 in clean fuels and clean transportation.
- 24 PROFESSOR BORENSTEIN: What does ICCT
- 25 stand for?

- 1 MR. WADE: International Council for
- 2 Clean Transportation.
- 3 COMMISSIONER SCOTT: Is that Allen Wade's
- 4 group?
- 5 MR. WADE: That's right. And they've
- 6 taken on just a look across --
- 7 PROFESSOR BORENSTEIN: I just -- that was
- 8 my impression that there was a lot of
- 9 disagreement. MR. WADE: There absolutely
- 10 is still controversy about whether the targets
- 11 are achievable, both in California and in these
- 12 other jurisdictions. But ARB has done a lot of
- 13 our work internally and we've seen similar work
- 14 from other outside experts to indicate that it is
- 15 possible. The primary folks who sponsor research
- 16 that shows that it's challenging to achieve it
- 17 would be the folks such as WSPA who, you know,
- 18 are essentially seeing their demands slightly
- 19 reduced as a result of this program, so....
- 20 PROFESSOR BORENSTEIN: Yeah, but the
- 21 International Council for Clean Transportation --
- 22 MR. WADE: They have their own thoughts
- 23 on where this should go.
- 24 MR. HACKETT: Pardon me. This is Dave
- 25 Hackett, Stillwater Associates speaking. I would

- 1 ask a question of Commissioner Scott and I was
- 2 wondering, I know that Energy Commission has
- 3 Senior Analysts who pay attention to
- 4 transportation energy demand. Are those analysts
- 5 going to be looking at the data that the Air
- 6 Board is producing?
- 7 COMMISSIONER SCOTT: That's a great
- 8 question. I might turn to my Senior Analyst
- 9 here. Is that on our plan to take a look at the
- 10 data of the Air Resources Board? I think we work
- 11 pretty closely with the Air Resources Board most
- 12 of the time to make sure that our numbers are
- 13 lined up and that we're in agreement on most
- 14 things, so I would imagine that we're doing it
- 15 here, too.
- MR. SCHREMP: Thank you, Commissioner
- 17 Scott. This is Gordon Schremp, Senior Fuels
- 18 Specialist with the Energy Commission. Yes, we
- 19 do look at the markets, we especially look at the
- 20 markets of fuel availability. There are
- 21 different types of fuels, as Sam has pointed out
- 22 for compliance with this Regulation. We're very
- 23 interested in low carbon intensity fuels that
- 24 could be available nationally, as well as
- 25 internationally. The Air Resources Board is

- 1 doing a really good job as of late in
- 2 illustrating what volumes could be available in
- 3 the U.S., internationally. We are looking at
- 4 that same information, we intend to also look at
- 5 additional sources of fuel availability because,
- 6 yes, that's a critical issue on what could be
- 7 available and certainly over what period of time.
- 8 So we're very interested in that for fuel supply
- 9 availability purposes. And we're in the midst of
- 10 our Integrated Energy Policy Report process that
- 11 will culminate with a policy document some time
- 12 later this year, and that document will have a
- 13 transportation element to it, transportation fuel
- 14 element, and we always do look at Federal/State
- 15 Regulations that could affect supply
- 16 availability. So it's part of our sort of normal
- 17 process, if you will.
- 18 MS. MEYERS JAFFE: Can I it's Amy
- 19 Meyers Jaffe from University of California Davis.
- 20 I serve with Jim Sweeney's colleague, John Wyatt
- 21 and a group of professors who look at and model
- 22 fuels for the United States and many people from
- 23 Duke and MIT, and we found the report submitted
- 24 by WSPA on this shortage of fuels that will be
- 25 available to be highly flawed. And it had a lot

- 1 of assumption in it that are assumptions that are
- 2 incorrect as a matter of scientific fact and also
- 3 resulting from other people's modeling of the
- 4 same issues. So I would say that it's not
- 5 correct to say that, having looked at it
- 6 carefully with a panel of several other academic
- 7 experts, it's not correct to say that WSPA's
- 8 assessment that there's going to be a shortage is
- 9 accurate. It had a lot of assumptions about
- 10 refineries closing that aren't going to close, it
- 11 had a lot of presumptions about what's going to
- 12 happen in Biofuels shuffling from one location to
- 13 another. It had a lot of assumptions about
- 14 natural gas markets and biogas markets that were
- 15 incorrect. It had a lot of assumptions about
- 16 what the feedstock for refining in California was
- 17 going to be, whether it was going to be domestic
- 18 crude or international crude.
- 19 So I would just caution anybody listening
- 20 or trying to make an assumption about, you know,
- 21 I'm not saying that there's an easy clear path
- 22 that the industry has pointed to and that they
- 23 know they're going to use to comply to the
- 24 Standard as it tightens over time, but I would
- 25 say that the documents that the industry has

- 1 presented were also highly flawed.
- 2 CHAIR SWEENEY: I want to clarify what
- 3 you said. You've clarified that the study from
- 4 WSPA is flawed. Did your group also confirm that
- 5 there would be sufficient fuel available to meet
- 6 the Standard over some significant period of
- 7 time, at some reasonable cost? Was that positive
- 8 conclusion or just a conclusion that there was
- 9 enough errors in WSPA's study that you couldn't
- 10 take that as a given yourself?
- MS. MEYERS JAFFE: I don't want to speak
- 12 for that committee of scholars. I would say
- 13 myself as a scholar, having looked at some of the
- 14 research, there are quite a few pathways. I
- 15 can't say, I mean, I'd have to sit down and
- 16 remember exactly what each of those pathways
- 17 were, but there has been scholarship that shows
- 18 that at least so far the Standard is being
- 19 complied with and there's reasonable market for
- 20 pollution credits. And I think as you go out any
- 21 number of years, there's an assumption of a
- 22 certain number of years that it's going to be
- 23 able to do that, and I don't want to speak to the
- 24 longer term because I kind of don't remember what
- 25 the panel found in the very long term. I know in

- 1 the short term, I think that it was found that
- 2 there was going to be enough material available.
- 3 MR. WADE: So if I could, I can dive back
- 4 into what's been happening in the short term if
- that's helpful, then speak a little bit as to 5
- 6 what we as ARB think of the long term.
- 7 So to date Low Carbon Fuel use in
- California has been increasing with significant 8
- 9 initial penetrations of Renewable Diesel, for
- 10 example, coming to market.
- 11 The Low Carbon Fuel Standard's Credit
- 12 Market System has been functioning relatively
- 13 well with roughly 30 trades per month. And to
- 14 date credits have exceeded deficits in all
- 15 quarters, and a significant bank of credits has
- 16 been built.
- 17 The mix of fuels that have been
- 18 generating credits has also shifted over time
- 19 from 2011 and 2014. We see much greater
- 20 penetration of non-ethanol alternative fuels. As
- 21 I mentioned, Renewable Diesel and Biodiesel are
- 22 representing larger shares of the total pie of
- 23 credit generation.
- 24 On the next slide --
- 25 PROFESSOR BORENSTEIN: Can I just -- so

- 1 it looks like, I mean, none of the non-blue goes
- 2 in conventional vehicles, conventional autos.
- 3 MR. WADE: On the light-duty side?
- 4 PROFESSOR BORENSTEIN: Yeah, is that what
- 5 --
- 6 MR. WADE: Yeah, you're just pointing out
- 7 the connection of light-duty versus heavy-duty.
- 8 PROFESSOR BORENSTEIN: So it seems like -
- 9 is that the pathway that light-duty vehicles
- 10 would just be using 10 percent Ethanol and all
- 11 the other compliance is going to come through
- 12 heavy-duty LNG and Diesel?
- MR. WADE: Well, there's many potential
- 14 possibilities in the future. To date, the carbon
- 15 intensity of Ethanol has been declining, so that
- 16 is still the primary alternative fuel in the
- 17 light-duty space. In the 2020 timeframe, we have
- 18 done a projection as part of our recent Initial
- 19 Statement of Reasons for this rule and we see
- 20 slightly greater contributions from electricity.
- 21 But it's true that overall we see the heavy-duty
- 22 side over-complying and those credits, you know,
- 23 being transferred to the light-duty side to meet
- 24 the Standard overall.
- 25 CHAIR SWEENEY: Now, a second point and

- 1 question here, we see only very tiny sugar-based
- 2 Ethanol in 2014, somewhat lighter in 2011, is
- 3 that mostly the input of Ethanol from Brazil or
- 4 other countries?
- 5 MR. WADE: Yes, that's the primary source
- 6 of that type of fuel.
- 7 CHAIR SWEENEY: So why has that
- 8 disappeared mostly?
- 9 MR. WADE: That's an excellent question.
- 10 You know, partially we've heard recently about
- 11 Brazil upping its domestic consumption targets,
- 12 there's also been supply issues associated with
- 13 drought in the last few years, but our belief is
- 14 that this type of fuel will be able to come to
- 15 California in significant volumes in the 2020
- timeframe. And I'll leave it there for now. 16
- It's true that the trend has been sort of up for 17
- 18 a little while and then back down recently.
- 19 CHAIR SWEENEY: Now, the final question
- 20 that I have at least from this graph, we have a
- 21 small but significant set of electricity and
- 22 hydrogen, I'm assuming that's mostly all
- 23 electricity, very little of it hydrogen.
- 24 MR. WADE: Currently, yes.
- 25 CHAIR SWEENEY: That's being collected by

- 1 the Utilities. Are the Utilities selling any of
- 2 these credits? Or are they holding all of their
- 3 credits -- almost all of it?
- 4 MR. WADE: Yeah, the Utilities were
- 5 waiting for PUC authorization to transact the
- 6 credits and that did create some delay, they now
- 7 have that authorization and they can transact. I
- $8\,$  can't speak to exactly what those market systems
- 9 have done --
- 10 CHAIR SWEENEY: But do you know if they
- 11 have in fact, now that they have the authority,
- 12 whether they have in fact transacted, or do you
- 13 know if they mostly simply are holding them --
- 14 MR. WADE: Since there's only a few large
- 15 utilities, I don't want to speculate or release
- 16 confidential information here about how they've
- 17 transacted in the marketplace, but you could
- 18 check with the Utilities themselves.
- 19 MS. FOOTE: Could you explain just
- 20 briefly how that works, the Utilities and
- 21 precisely what it is that the PUC has
- 22 jurisdiction over versus what CARB does?
- 23 MR. WADE: Yeah. So the CPUC has the
- 24 authority to tell the Utilities what they can and
- 25 cannot do with these credits and they first had

- 1 to give them authorization to sell the credits,
- 2 and then they have a decision that will tell them
- 3 how the money that's raised from the sale of the
- 4 credits can be returned to their ratepayers. So
- 5 ARB authorizes the program that creates these
- 6 credits and says that the Utilities will be the
- 7 folks who receive the credit in certain cases.
- 8 So that's the interaction between the two
- 9 regulatory agencies.
- MS. FOOTE: Thank you.
- 11 PROFESSOR BORENSTEIN: Can you just
- 12 remind us what the formula is for how carbon
- 13 content (indiscernible)?
- 14 MR. WADE: Sure. I don't have that
- 15 number on these slides. So conceptually it's the
- 16 average mix emission factor of electricity in
- 17 California adjusted for the energy efficiency of
- 18 electric vehicles. So you get a CI number from
- 19 looking at the lifecycle of producing electricity
- 20 on average in California, and then you adjust it
- 21 for the fact that electric vehicles are more
- 22 efficient than conventional.
- 23 MR. HACKETT: On Renewable Natural Gas, I
- 24 know that quite a lot of it is produced out of
- 25 state. How does it get to California to be

- 1 consumed by Californians?
- 2 MR. WADE: So currently, unlike in say
- 3 the Renewable Portfolio Standard and other
- 4 California Programs, there's no explicit tracking
- 5 of the deliverability of that fuel, so if you
- 6 have a landfill and you put Renewable Natural Gas
- 7 on the pipeline outside of California, and you
- 8 show that that pipeline system connects to
- 9 California, and you take credit for the same
- 10 amount of volume that you put onto the pipeline,
- 11 we allow that under the Low Carbon Fuel Standard.
- MR. HACKETT: And so is that -- how
- 13 different is that than the Ethanol issue where
- 14 indeed the Brazilians are probably importing more
- 15 Ethanol from the U.S. than they're exporting.
- 16 And so it does give some thought to using the
- 17 same kind of mechanism to essentially translate
- 18 Brazilian Ethanol, but the benefit of Brazilian
- 19 Ethanol translates to the benefit of Renewable
- 20 Natural Gas.
- 21 MR. WADE: I see the analogy. We have
- 22 not used that accounting framework to date. We
- 23 could consider it moving forward.
- 24 PROFESSOR BORENSTEIN: So basically, I
- 25 was going to actually ask this, the U.S. is

- 1 shipping corn ethanol to Brazil and Brazil is
- 2 shipping sugar ethanol to the U.S.
- MR. WADE: In some volumes, yes, that's
- 4 true. The magnitude of that is the question.
- 5 You'll hear from WSPA and BCG that that ethanol
- 6 swap is going to be very large and is going to be
- 7 problematic for the overall goals --
- 8 PROFESSOR BORENSTEIN: In some ways, it's
- 9 not the problem of this committee, actually if --
- 10 MR. WADE: Yeah, if you folks are
- 11 interested in exploring it more, we can come back
- 12 to more recent data on what's been happening
- 13 there. Yeah, as you can see right now, in 2014
- 14 we did not import a significant amount of
- 15 sugarcane.
- 16 Okay, so moving on, slide 10 is about the
- 17 credit price history and the volumes of credits
- 18 transacted. I just want to give you folks a
- 19 sense of how that looks. We've seen credit
- 20 prices as high as \$80.00 per metric ton in 2013,
- 21 and then primarily we believe because of the
- 22 lawsuit issues that I'll be getting into over the
- 23 next few slides, prices have gone down
- 24 dramatically, down to around \$26.00 per metric
- 25 ton recently. But transaction volumes have

- 1 actually been increasing in the last few months.
- 2 PROFESSOR BORENSTEIN: I'm sorry, I
- 3 didn't understand. The existence of the lawsuits
- 4 drove it to 80's?
- 5 MR. WADE: No, I believe the lawsuits
- 6 helped bring it down to \$26, so I'll touch on
- 7 that in the next few slides.
- 8 Because of the uncertainty, so the result
- 9 of the lawsuit -- I'll just short circuit and
- 10 start here -- the result of the lawsuit was that
- 11 the Standard remained fix at a one percent
- 12 declining carbon intensity for 2013, 2014, and
- 13 2015. And originally the Standard was supposed
- 14 to decline in those years, so in '14 through '15.
- 15 So as a result of that we believe that the market
- 16 saw that as a bear signal and the prices came
- 17 down.
- 18 PROFESSOR BORENSTEIN: Okay. And \$26.00
- 19 a ton, it looks like translates to like \$0.6 a
- 20 gallon?
- 21 MR. WADE: So it depends on which year
- 22 you're talking about right --
- 23 PROFESSOR BORENSTEIN: In 2020.
- MR. WADE: Yeah, in 2020, that's what I
- 25 figured, yeah. Okay, so let me just quickly

- 1 touch on the legal challenges that are faced with
- 2 this program and we believe have created sort of
- 3 an uncertainty in this market. There was Federal
- 4 challenges based on the Commerce Clause in the
- 5 Constitution, and that was appealed all the way
- 6 to the Supreme Court, the Supreme Court denied
- 7 the Plaintiff's request for review and found
- 8 essentially in favor of the ARB by not hearing
- 9 that case. So that lawsuit was resolved
- 10 primarily in favor of ARB.
- 11 With respect to the State Court issue,
- 12 there was a finding of procedural issues
- 13 associated with the California Environmental
- 14 Quality Act and the Administrative Procedures
- 15 Act, and so that Court did, as I said, fix the
- 16 standard at one percent for 2014 and 2015, and
- 17 required ARB to readopt the program which I'll
- 18 get to on the next slide, but it allowed us to
- 19 keep enforcing it at this one percent level. So
- 20 that had the impacts, as I said, of diminishing
- 21 the incentive for at least near term investment
- 22 and also reducing, we believe, the credit price.
- 23 Next slide.
- 24 So staff as a result of that lawsuit will
- 25 be bringing the rule back to the Board for a

- 1 complete re-adoption. On February 19th, we'll
- 2 have the first of two hearings on this issue.
- 3 The first hearing will basically lay out the new
- 4 proposal to the Board, explain the new and
- 5 updated CEQA analysis that was done, and the
- 6 second hearing which was tentatively July of this
- 7 year will be the actual Board adoption of this
- 8 new program. So although primarily the reason
- 9 we're bringing the rule back to the Board is the
- 10 Court challenge, we're also using the opportunity
- 11 to clarify and enhance the Regulation in a few
- 12 ways and adjust based on, you know, five years of
- 13 running this program.
- 14 So on the next slide, I'll get into a
- 15 little bit to what is moving around or being
- 16 changed in this new proposal. The core concepts
- 17 of the program remain the same, but we have a few
- 18 areas we've adjusted. The first is we've updated
- 19 all of our models that we use to calculate the
- 20 carbon intensity of every fuel and as a result of
- 21 the uncertainty created by the lawsuit, we
- 22 thought it was appropriate to reduce the targets
- 23 and actually make them slightly less stringent in
- 24 the 2016 through 2020 timeframe. So I'll go into
- 25 that more in a second. But we've also put

- 1 forward a cost containment mechanism to put an
- 2 upper bound on the credit price of \$200.00 per
- 3 credit, and we've been streamlining the protocol
- 4 process, or the pathways process for this program
- 5 to basically find easier ways to get CI values to
- 6 each advanced fuel.
- 7 CHAIR SWEENEY: Before you go ahead, a
- 8 clarification. A credit is one kind of carbon
- 9 dioxide --
- MR. WADE: Yeah.
- 11 CHAIR SWEENEY: So you envision that the
- 12 maximum price will be \$200.00 per ton carbon
- 13 dioxide and kept lower. Has there been
- 14 consideration in the Air Resources Board about
- 15 the provision in AB 32 that said that the
- 16 portfolio of action must be cost-effective if you
- 17 have a \$200.00 marginal price for something? And
- 18 much lower price for others? Have you considered
- 19 that?
- 20 MR. WADE: We have considered that and
- 21 I'm familiar with some of the cost curve work
- 22 that you did earlier in the AB 32 process. Yes,
- 23 we certainly think that's important and meeting
- 24 the cost-effectiveness requirement of AB 32 is
- 25 something that ARB takes very seriously. But we

- 1 have the overall -- we sort of look at it as we
- 2 have some transformational policies such as the
- 3 Low Carbon Fuel Standard and the RPS, which may
- 4 cost more and augment your ton basis in the near
- 5 term, but may be necessary to incent the types of
- 6 advanced technologies that we need to see achieve
- 7 the longer term goals of the Governor and others.
- 8 So we don't rank everything on a dollar per
- 9 metric ton basis, and march up the cost curve as
- 10 some folks have proposed, but we have certain
- 11 targeted programs such as the Low Carbon Fuel
- 12 Standard and RPS, and then we have the Cap-and-
- 13 Trade Program that generally picks things up and
- 14 we have energy efficiency programs, other stuff
- 15 that gets some of the lower cost measures done.
- 16 So I hope that answers your question.
- 17 CHAIR SWEENEY: Sounds like you say that
- 18 the requirement that it be cost-effective is
- 19 being superseded by other goals --
- 20 MR. WADE: No, let me restate that, then.
- 21 I don't want to convey that at all. Let me say
- 22 that some of these expensive reductions are
- 23 needed in the long run and we are starting some
- 24 of those now. So, you know, if you envision the
- 25 upper end of your cost curve including some of

- 1 these low carbon fuels, and we've sort of said we
- 2 will do some of those now so that more of them
- 3 will come to market in the long run, and
- 4 hopefully be available at a lower price.
- 5 PROFESSOR BORENSTEIN: So the \$200.00 per
- 6 ton is the wrong denominator, that Sam is arguing
- 7 that the ARB is arguing that in the long run you
- 8 get a lot more than that one time, it transforms
- 9 the market.
- MR. WADE: Yeah, transformational
- 11 effects.
- 12 PROFESSOR BORENSTEIN: And nobody has
- 13 done that calculation.
- 14 MR. WADE: Sure, and let me just add
- 15 that, you know, we'll get into this potentially,
- 16 but applying a \$200.00 per ton carbon price in a
- 17 Cap-and-Trade Program would have very different
- 18 effects than applying a \$200.00 per ton carbon
- 19 price in a Low Carbon Fuel Standard.
- 20 CHAIR SWEENEY: Yeah. As Professor
- 21 Borenstein reminded us, this is not the mission
- 22 of our committee --
- 23 PROFESSOR BORENSTEIN: Right.
- 24 CHAIR SWEENEY: -- and I think it's
- 25 appropriate and I may even remind people of that,

- 1 but let us move on.
- 2 PROFESSOR BORENSTEIN: Can I ask about
- 3 the -- so the \$200.00 per ton price cap
- 4 translates into only about \$.26 a gallon in 2020.
- 5 How do you think about it in earlier meetings,
- 6 not today?
- 7 MR. WADE: Well, the credit price is
- 8 currently at \$.26 --
- 9 PROFESSOR BORENSTEIN: No, if it were
- 10 \$200.00 --
- 11 MR. WADE: Oh, because the reduction is
- 12 less in those years and the impact on CARBOB or
- 13 on the gasoline is proportionate to the total
- 14 reduction you're asking for, it's less than that.
- 15 PROFESSOR BORENSTEIN: So even with the
- 16 \$200.00 per ton today, I mean, it's much smaller
- 17 --
- 18 MR. WADE: It's much less than that,
- 19 that's right, and we have those data in our staff
- 20 report, I mean, it has less than a cent
- 21 currently, we believe.
- 22 CHAIR SWEENEY: This calculation seems to
- 23 be beyond my comprehension.
- 24 PROFESSOR BORENSTEIN: You're paying for
- 25 the reduction, not for the emission.

- 1 CHAIR SWEENEY: Right. We're saying that
- 2 the marginal value of a reduced ton of carbon
- 3 dioxide is \$200.00.
- 4 MS. MEYERS JAFFE: Right, so I think -
- 5 (cross talk)
- 6 PROFESSOR BORESTEIN: Well, that was a
- 7 price cap on what you have to pay.
- 8 MS. MEYERS JAFFE: Right, but the
- 9 timeline issue was an important issue, like Joan
- 10 Ogden has done this work on the timeline price
- 11 for hydrogen if L.A. gets their private project
- 12 off the ground, and I forget the number of years
- 13 again, so I don't think we were talking about
- 14 this because it doesn't affect the petroleum
- 15 market this year, but, you know, the price of
- 16 hydrogen is less than gasoline after five years,
- 17 so I think that is very -- you have to look in
- 18 each field and you would have to go and rebuild
- 19 the supply curve and so forth, and since we're
- 20 actually here to deal with petroleum prices for
- 21 this year, I think we can ask ARB if this program
- 22 is increasing petroleum prices for this year. I
- 23 think if we want to talk about five years from
- 24 now, we should get people like Joan and others
- 25 who actually have worked on that topic and have

- 1 them come and talk about it.
- 2 CHAIR SWEENEY: Well, I think you have a
- 3 point, that this price cap is not binding at this
- 4 point, it's not relevant, and so it has not
- 5 influenced this year's petroleum margin price.
- 6 And so I agree that we can go on. The logic,
- 7 though, is what I'm questioning because if we
- 8 charge \$200.00 per ton of something, that is a
- 9 marginal cost that we're assigning to carbon
- 10 dioxide to get there. In fact, if a gallon of
- 11 gasoline is reduced by 10 percent, and we only
- 12 therefore apply this to a tenth of a gallon, it's
- 13 \$200.00 per -- yeah, divided by -- it works that
- 14 way, so let's move on even though the concept may
- 15 be very much a high price for carbon.
- MR. WADE: Sure. Well, we're happy to
- 17 discuss that with you further.
- MS. MEYERS JAFFE: And it's also a cap,
- 19 no one is saying that you're going to reach the
- 20 cap.
- 21 MR. WADE: Sure, that's right. And we
- 22 believe that this is only going to occur in a
- 23 case of an unexpected market event, we don't see
- 24 this as part of the normal operations of the
- 25 system, we don't anticipate getting to this level

- 1 and staying there, for example.
- 2 CHAIR SWEENEY: And is it true that
- 3 you're still assessing how the cap will be
- 4 implemented, whether the government will sell
- 5 more credits at \$200.00, or whether they'll just
- 6 force the market to occur at \$200.00 with no pre-
- 7 sales?
- 8 MR. WADE: The proposal as currently
- 9 drafted is that the market is essentially as I
- 10 said, we're forcing a credit clearance market to
- 11 occur.
- 12 CHAIR SWEENEY: Right, so you're keeping
- 13 this by forcing some people to sell and make it
- 14 available for others to buy, but not changing
- 15 supply and demand balance, yeah. By the way, I
- 16 think that editorial, I think that economics is
- 17 really confused.
- 18 MR. WADE: I fully appreciate your
- 19 perspective --
- 20 CHAIR SWEENEY: But it's petroleum
- 21 markets now that we're evaluating, so I suggest
- 22 that we go on, even though as Chairman I --
- MR. WADE: Well, I will take that up. On
- 24 the next slide, let me just talk about how the
- 25 program curve has been proposed to be adjusted,

- 1 you know, in the 2016 year it's adjusted from a
- 2 3.5 percent reduction target to 2.0, and so on.
- 3 You know, I think essentially as I said that the
- 4 main driver for this change from ARB's
- 5 perspective is the fact that we have had such
- 6 uncertainty in the system, you know, we are
- 7 concerned about the total volumes being available
- 8 to meet the original curve, so we've made an
- 9 adjustment to make the program work more
- 10 smoothly. And the next slide helps highlight
- 11 what our projection of fuel availability or
- 12 carbon intensity reduction is, so the first line
- 13 I have up here is the initial compliance curve,
- 14 pre-litigation. If you click once, that's the
- 15 actual compliance curve that occurred as the
- 16 result of the litigation. Next slide.
- 17 And here's the historic carbon intensity
- 18 reduction that we've seen. Next, please. So we
- 19 believe that that has led to a banking
- 20 opportunity basically during that period of time.
- 21 Next slide.
- Here is the new proposed curve that has
- 23 us still achieving a 10 percent target in 2020,
- 24 but if you flip to the next slide, the way we're
- 25 projecting fuels moving forward, you know, and

- 1 the CI reduction moving forward is a little
- 2 different than that curve. And so, one more
- 3 click, please, so that represents a period where
- 4 we think that we'll be drawing down this bank
- 5 that's been built up under the period of legal
- 6 challenge, and will allow us plenty of time for
- 7 investment in Low Carbon Fuels to accelerate even
- 8 further, and for these fuels to come to market in
- 9 California. One more click, please.
- 10 And the last thing I would mention here
- 11 is that we've only looked out to 2020 in our
- 12 target setting so far, but our analysis goes out
- 13 further and, you know, obviously the governor
- 14 recently released some big goals on petroleum
- 15 reduction, so we do believe that in the long run
- 16 if this program is supposed to help contribute
- 17 toward those goals, it will require another
- 18 adjustment to targets. Next slide.
- 19 MR. HACKETT: Hang on a second. So the
- 20 fight over, you know, that part of the sinus
- 21 right, the ARB right, the oil companies' right,
- 22 if it all comes around, where does that little
- 23 dotted line cross the green dash line?
- 24 Essentially what's happened is a bank of credits
- 25 have been built up, and there's a lot of them,

- 1 okay, and as soon as the Regulation is adopted,
- 2 then that's likely to be drawn down because the
- 3 industry won't find enough carbon intensity
- 4 reduction fast enough, so they use credits
- 5 instead of CI reduction. So the problem is,
- 6 where do those two lines cross? Do they cross in
- 7 this case in 2018, or earlier, or later? That's
- 8 what kind of the bottom line --
- 9 MR. WADE: Yeah, that's correct. I mean,
- 10 there's certainly differences of opinion about
- 11 that both --
- MR. HACKETT: That's the big difference
- 13 out there, how do you get to this number? Can
- 14 you make that?
- 15 PROFESSOR BORENSTEIN: But without this
- 16 adjustment, these lines pretty clearly would have
- 17 crossed in 2015?
- MR. WADE: Well, I think that the green
- 19 line would have shifted, right? I mean, if you
- 20 had more certainty around the program in the long
- 21 run, hopefully you would have had more investment
- 22 and more fuels coming to market.
- 23 MR. HACKETT: Certainly there were many
- 24 that thought 2015 would have been the crossover,
- 25 yeah.

- 1 MR. WADE: Okay. Next slide, please. So
- 2 just a little more about how the cost containment
- 3 provision works. It basically allows folks to,
- 4 if they have deficits at the end of a period, and
- 5 they say, "I wish to participate in this cost
- 6 containment market," the folks on the credit
- 7 generation side come forward and say, "I have
- 8 credits to sell." The two folks are then brought
- 9 together by ARB, and then ARB releases a list of
- 10 those that have credits to sell, and they
- 11 instruct the debits folks to go out and acquire
- 12 those credits. If they buy their pro rata share
- 13 of the total number that are available and the
- 14 pro rata share is determined by their number of
- 15 deficits relative to the total amount that are
- 16 out there, then they are allowed to carry any
- 17 further deficits after buying that pro rata share
- 18 forward. So is this making sense to folks? Do
- 19 you want me to --?
- 20 PROFESSOR BORENSTEIN: A certain amount
- 21 of sense, but I think I understand, whether it
- 22 makes sense --
- MR. WADE: Understood.
- 24 PROFESSOR BORENSTEIN: -- so the idea is
- 25 that there will be some set of people who will

- 1 say, "Yes, we have credits to sell or 200 --
- MR. WADE: Yeah, and they weren't
- 3 previously transacted with folks who had
- 4 deficits.
- 5 PROFESSOR BORENSTEIN: And the people on
- 6 the short side of the market, then, would buy
- 7 their pro rata share of the amount that has been
- 8 brought to market.
- 9 MR. WADE: Yeah.
- 10 PROFESSOR BORENSTEIN: And then they
- 11 would be given a delay.
- MR. WADE: Yeah, that's right. They're
- 13 allowed to carry anything left after that forward
- 14 and pay a five percent annual interest rate on
- 15 that in terms of the amount they owe of deficits.
- 16 PROFESSOR BORENSTEIN: Well, if you got
- 17 up to \$200.00, presumably everybody would want it
- 18 to sell at the \$200.00 it already has, or \$199.
- MS. MEYERS JAFFE: Well, what you're
- 20 doing is, if there are shorts that aren't
- 21 covered, you're telling the players who are
- 22 holding the assets that they have to cover them
- 23 for \$200.00.
- 24 PROFESSOR BORENSTEIN: Well, but it
- 25 doesn't sound like the sellers have to sell.

- 1 MR. WADE: The sellers are not forced to
- 2 sell, but we believe that if they thought it was
- 3 attractive to sell, or if they didn't think it
- 4 was attractive to sell at \$199.00, they'd feel it
- 5 was attractive to sell at \$200.00, right?
- 6 MS. MEYERS JAFFE: Well, how are we going
- 7 to -- it's only going to work if you can force
- 8 the guys who have credits to sell to the people
- 9 who are short, otherwise you're the squeeze.
- MR. WADE: Yeah, but what's the advantage
- 11 to someone to squeeze 'cause we're not going to
- 12 let folks transact beyond \$200.00 a ton, right?
- 13 PROFESSOR BORENSTEIN: No, and that's
- 14 right if somebody is actually manipulating the
- 15 market, but if the market is truly short and
- 16 there's a --
- 17 MR. WADE: Yeah, that's right. This
- 18 provision is not designed to address the long
- 19 term shortage, it's designed to address either
- 20 market inflation or a short term shortage. In
- 21 the long term, you adjust the target curve to fix
- 22 a long term fundamental imbalance.
- 23 MS. MEYERS JAFFE: So the risk to the
- 24 participant of hoarding their long position would
- 25 be that the government is going to step in and

- 1 either issue more credits or relax the standard.
- 2 MR. WADE: That's right.
- 3 MS. MEYERS JAFFE: And that will be their
- 4 incentive to sell.
- 5 PROFESSOR BORENSTEIN: Although they're
- 6 claiming that they're not going to do it during
- 7 that --
- 8 MR. WADE: No, I think we do plan, if
- 9 there is a long term fundamental imbalance, we
- 10 would adjust the targets.
- 11 PROFESSOR BORENSTEIN: Okay, okay.
- MS. MEYERS JAFFE: It's like selling at
- 13 the top of a bubble, right?
- 14 PROFESSOR BORENSTEIN: Well, not really,
- 15 it's like the bubble getting relieved because God
- 16 suddenly created --
- 17 (Cross talk)
- MS. MEYERS JAFFE: -- we let you out of
- 19 your rents, we changed the title.
- 20 MR. WADE: This is providing some
- 21 certainty that ARB does not believe transactions
- 22 should occur above \$200.00 a ton. So anyway,
- 23 next slide, please.
- 24 We've already touched on this, but we
- 25 just wanted to emphasize, you know, how the LCSF

- 1 credit value impacts both the low carbon fuel
- 2 production costs and the fuel product costs. You
- 3 know, in this year, 2020, the production target
- 4 is 10 percent. The impact for a low carbon fuel
- 5 producer is dramatic on a cents per gallon basis
- 6 if the credit price is \$100.00 a ton, you know,
- 7 for the average biodiesel you're up above \$1.15,
- 8 \$1.16 per gallon, whereas the impact on carbon
- 9 diesel in that same year for the same reduction
- 10 is, I believe that's \$.14 or \$.15 per gallon
- 11 there. So you know, this is the fundamental
- 12 shift that we believe occurs on the production of
- 13 the fuel side of things, and the economics there.
- 14 The impacts on the consumer, we don't believe,
- 15 are fully straightforward. We hope that you
- 16 folks can in your academic careers help further
- 17 clarify this stuff for us; we believe that if
- 18 there is full pass-through, what the producer
- 19 sees and what the consumers are going to see, but
- 20 there is complexity there and I put one
- 21 publication that addresses some of that
- 22 complexity there at the bottom. I know that's
- 23 not the current task in front of you with this
- 24 committee, but it's related, right? And so
- 25 anyway, I'll leave it there.

- 1 CHAIR SWEENEY: But just to confirm what
- 2 this is saying, you're saying \$100.00 credit
- 3 price at most is what would increase the price of
- 4 gasoline if the markets were working well, about
- 5 15 cents.
- 6 MR. WADE: Yeah, at \$100.00.
- 7 CHAIR SWEENEY: At \$100.00, and \$.30 a
- 8 gallon, and that I would have calculated actually
- 9 a little bit of a lower number, but we may have
- 10 used a different parameter. And the logic you've
- 11 used to do this is saying if you apply \$200.00 a
- 12 ton of carbon dioxide to a whole gallon of
- 13 gasoline, it would have increased the price on
- 14 the order of \$2.00. If you apply it to only 10
- 15 percent because you have to have a ten percent
- 16 reduction, the additional cost is 10 percent of
- 17 \$2.00, which is \$.20, so it would be \$.20 at
- 18 \$100.00 credit price at \$200.00 credit price
- 19 which is why I don't quite see why there's \$15.00
- 20 at \$100.00 credit. But the bottom line I think
- 21 you're saying is, even if you get to that limit,
- 22 we shouldn't see any price bites in the gasoline
- 23 price and that's relevant for our committee, of
- 24 course.
- MR. WADE: No dramatic price bites.

- 1 That's right, and that's what I want to leave
- 2 with you today is that we feel like, with the
- 3 cost containment mechanism in place, there is not
- 4 the potential for runaway price impacts from this
- 5 program.
- 6 MR. HACKETT: Assuming sufficient supply
- 7 of low carbon intensity renewable fuels.
- 8 MR. WADE: No, I would say even without
- 9 the sufficient supply of low carbon fuels, our
- 10 cost containment mechanism prevents a price spike
- 11 associated with --
- 12 PROFESSOR BORENSTEIN: Assuming that
- 13 people believe ARB is going to loosen the
- 14 Standard.
- MR. WADE: Yeah, assuming that ARB
- 16 believes that, given this five additional years
- 17 we have to adjust things, we will make
- 18 appropriate adjustments.
- 19 CHAIR SWEENEY: So are you also
- 20 considering a more, I'll call it, conventional
- 21 price cap, where if the price gets to \$200.00,
- 22 the agencies willing to sell more credits into
- 23 the market at \$200.00 per ton, which is more
- 24 conventionally how you do it.
- MR. WADE: Yeah, that's certainly more

- 1 conventional. That concept was considered and is
- 2 not part of the staff proposal currently.
- 3 Partially that would essentially have ARB raising
- 4 revenue again and, you know, when you compare the
- 5 Cap-and-Trade program to the LCFS, we have
- 6 different goals with each of those programs.
- 7 We're not attempting to use this as a revenue
- 8 generation program. You know, we are not saying
- 9 we're going to be finding a way to spend money if
- 10 from this program, so the concepts are that this
- 11 program will not raise revenue for the
- 12 government.
- 13 CHAIR SWEENEY: I imagine this will be
- 14 discussed in the future because it is unusual
- 15 economic theory that you have going there, but at
- 16 least there is the notion that if you can make
- 17 the cost containment mechanism work your way and
- 18 some other way, the price impact per gallon of
- 19 gasoline will be limited toward the order of \$.20
- 20 a gallon. And therefore we would be absolutely
- 21 surprised to see gasoline prices jump
- 22 significantly more than that as a result of this
- 23 coming in.
- MR. WADE: That's correct.
- 25 CHAIR SWEENEY: Is that a fair statement?

- 1 MR. WADE: That is what the purpose of
- 2 the cost containment mechanism is, and we believe
- 3 we've achieved that.
- 4 CHAIR SWEENEY: Okay. Let's move on.
- 5 MR. WADE: All right, so let me just
- 6 close. I know I was supposed to have 20 minutes,
- 7 I may have gone a little over that, I apologize.
- 8 CHAIR SWEENEY: I think you had 20 minutes
- 9 and we had 35 minutes.
- 10 MR. WADE: Deliberate as long as you
- 11 want, of course.
- 12 So just to reemphasize our timing again,
- 13 we have our first Board hearing in February on
- 14 the 19th, and then we'll have at least one 15-day
- 15 set of changes which is our terminology for how
- 16 we adjust something once we have a regulation
- 17 package on the street. So we'll be reacting to
- 18 stakeholder comment up until the second Board
- 19 hearing tentatively scheduled for July.
- 20 Following hopefully a Board adoption of this new
- 21 and improved LCFS in July, we'll be adjusting our
- 22 market system tools and our processes, and then
- 23 the new rule will be in place January 1, 2016.
- 24 So that's all I have.
- 25 CHAIR SWEENEY: Thank you. Is there any

- 1 other members, especially other than those who
- 2 have been speaking a lot, who have questions or
- 3 comments? If there's none, then those who have
- 4 been speaking a lot can speak more. Okay, any
- 5 other comments. The assumption, I assume, that
- 6 Severin does not. Okay.
- 7 MR. WADE: Thank you.
- 8 CHAIR SWEENEY: Thank you very much for
- 9 the enlightening discussion and listening to our
- 10 comments that went well out of the scope of our
- 11 charge.
- Okay, Ryan Eggers on data.
- 13 MR. EGGERS: Yes. Good afternoon
- 14 everybody in the audience and the members of the
- 15 Petroleum Market Advisory Committee. My name is
- 16 Ryan Eggers. I am the Supervisor of the
- 17 Transportation Fuels Data Unit. During your last
- 18 meeting you asked for a quick briefing on what
- 19 sort of information that the Energy Commission
- 20 can provide on Petroleum, which tangentially hits
- 21 my particular unit which handles the petroleum
- 22 industry data collection duties here at the
- 23 Energy Commission.
- 24 So there are basically three different
- 25 types of information that my unit collects, the

- 1 first is our PIIRA information or better known as
- 2 Petroleum Industry Information Reporting Act of
- 3 1980. This is California-specific petroleum data
- 4 where we go out and survey different petroleum
- 5 companies within California to get information
- 6 from them. We also have proprietary sources of
- 7 data that we collect, Opus was brought up during
- 8 the last meeting that would fit under this
- 9 particular heading. And we also collect open
- 10 source information for data analysis that we keep
- 11 for historical purposes. So my presentation
- 12 should hit one of each of these different data
- 13 types.
- 14 So looking more closely at PIIRA, PIIRA
- 15 information basically hits the data gapping
- 16 between Department of Oil, Gas and Geothermal
- 17 Resource -- actually, it's Division of Oil, Gas,
- 18 Resource Information which collects crude oil
- 19 extraction information here in California. And
- 20 on that one side, we also have the Board of
- 21 Equalization Gasoline and Diesel Retail Sales
- 22 numbers. PIIRA pretty much hits all the other
- 23 interactions in between that, we get refinery
- 24 production information, import/export
- 25 information, terminal inventory levels. We also

- 1 have an E15 Survey which I'll talk about a little
- 2 bit later, which has retail sales volumes at the
- 3 actual retail station level.
- 4 We do collect this information at mostly
- 5 individual company or actual individual location
- 6 levels, so we do have very specific information
- 7 with this regard. That being said, our
- 8 regulations do specify that this information is
- 9 confidential, so there would need to be some sort
- 10 of confidentiality agreement in place for us to
- 11 share it. But we can aggregate it and report it
- 12 publicly, and we actually do report it publicly.
- 13 CHAIR SWEENEY: Now, I want to clarify
- 14 either with you or Committee staff, if we as a
- 15 committee would like to use this confidential
- 16 information, are you saying we would have to sign
- 17 some Confidentiality Agreement about it? Or are
- 18 you saying we're not able to do it because
- 19 everything has to be conducted in public?
- 20 MS. ARENS: I'm Samantha Arens, I work
- 21 in the Legal Department at the CEC. And we can
- 22 analyze that issue further. Ryan was correct, we
- 23 are bound by law in the terms of what we can
- 24 share in terms of PIIRA, it's actually statute,
- 25 not regulation -- well, regulation in addition to

- 1 that, but we have statutory limits on what we can
- 2 share and we're required to aggregate and
- 3 anonymize it. As to whether or not we could
- 4 provide it with a NDA or other Confidentiality
- 5 document in place, that's something that we can
- 6 analyze further in the legal office and get back
- 7 to you on.
- 8 CHAIR SWEENEY: And will you then analyze
- 9 whether the mechanism is to simply provide it in
- 10 a closed session that we will then, you know,
- 11 make sure there's no communication after an NDA,
- 12 or are there other things that get in the way of
- 13 the data being able to be available to this
- 14 Committee if the Committee believes it's needed
- 15 in order to do our job?
- 16 MS. ARENS: We will look at the whole
- 17 picture and so, for instance, under the Bagley-
- 18 Keene Act, there are certain specified reasons
- 19 that we have to go into closed session, and in
- 20 order to do that, we have to fall within one of
- 21 those preset categories. And so we will
- 22 certainly look at, you know, if we would be able
- 23 to do this and, if so, how procedurally that
- 24 would take place.
- 25 PROFESSOR BORENSTEIN: Could I ask, when

- 1 you say "we" I'm trying to figure out, is "we"
- 2 all of the CEC that does have access to this?
- 3 MS. ARENS: The CEC does have access to
- 4 this. When I say "we will analyze it," --
- 5 PROFESSOR BORENSTEIN: No, no, no, I mean
- 6 we can look at this, but you can't, I'm just
- 7 struck by the fact that the Committee is not
- 8 considered part of the CEC for this purpose, but
- 9 for Bagley-Keene coverage, apparently they are
- 10 considered part of the CEC, so it seems to be
- 11 getting the worst at both ends.
- MS. ARENS: I understand your
- 13 frustration.
- 14 CHAIR SWEENEY: Well, the State of
- 15 California.
- 16 PROFESSOR BORENSTEIN: And it seems like
- 17 maybe one procedure would be to somehow figure
- 18 out how we are part of the CEC so that since that
- 19 was the point of having this --
- 20 CHAIR SWEENEY: Be careful what you're
- 21 asking for.
- 22 MR. SCHREMP: Professor Borenstein, I
- 23 think to clarify, this is Gordon Schremp with the
- 24 Energy Commission, I don't want there to be an
- 25 impression that all 400-500 employees of the

- 1 Commission have access to this data; actually,
- 2 it's a very very small subset of employees. The
- 3 data access is in a protected drive, there are
- 4 only a few staff members who have access to this
- 5 information, and so it's very restricted
- 6 internally so that the information is only had by
- 7 those who need to see the data.
- 8 PROFESSOR BORENSTEIN: No, and I
- 9 understand that, but that's at the discretion of
- 10 the CEC, like if a Commissioner really wants to
- 11 see these data, the Commissioner can. Right?
- MR. SCHREMP: Yes.
- PROFESSOR BORENSTEIN: Okay, and so I'm
- 14 just -- and I'm just -- it seems the legal
- 15 interpretations are hitting us both ways.
- 16 CHAIR SWEENEY: So I think what we've
- 17 been promised is a complete analysis of how we
- 18 can use it --
- 19 MS. ARENS: If we can use it, right.
- 20 CHAIR SWEENEY: If we can use it, but I
- 21 think you're hearing from at least one other than
- 22 me that if we think it's important to do our job,
- 23 to use the confidential data, and if the
- 24 California Energy Commission is asking us to do
- 25 the job, then it does behoove the California

- 1 Energy Commission to find a way to make both of
- 2 those possible.
- 3 MS. ARENS: Certainly.
- 4 CHAIR SWEENEY: And that you will figure
- 5 out how to make it happen.
- 6 MS. ARENS: We will help you do your job
- 7 to the best that we can within the confines of
- 8 the law. And I think Professor Borenstein's
- 9 question is right on, what exactly is the nature,
- 10 how is the committee's role defined? It is an
- 11 Advisory body, but you're not employees of the
- 12 Commission, and it's that line that we need to
- 13 look at closely. And you can certainly have
- 14 access to aggregated and anonymized data. The
- 15 question that we will look at in the Legal Office
- 16 is as to the raw data.
- 17 CHAIR SWEENEY: Right. And just to point
- 18 out again, there are restrictions on people who
- 19 are members of the California Energy Commission
- 20 by being a particular type of government employee
- 21 that are not restrictions on us, as well. I for
- 22 one do not want to be classified as a CEC member
- 23 for that purpose.
- 24 MR. RHYNE: So Chair Sweeney, I just want
- 25 to make sure that what I'm hearing in a clear to

- 1 do, which I had hoped we would be able to wrap up
- 2 before this meeting, but obviously we weren't
- 3 able to, is to get very clear definitions from
- 4 our legal staff as to how and to what extent you
- 5 as members of this committee are able to access,
- 6 both PIIRA data if at all possible, and/or
- 7 proprietary data because that's another
- 8 classification data. Obviously you can access
- 9 any open or public data source that you wish, but
- 10 to what extent we're able to release or brief
- 11 you, or under what circumstances we can show you
- 12 or share that data with you. So I'm taking that
- 13 as a clear to do on the part of our team.
- 14 CHAIR SWEENEY: And let me add, there are
- 15 several different levels. One level is taking
- 16 the confidential data and aggregating it in such
- 17 a way that you are protecting privacy, that may
- 18 be sufficient for all we need. I don't think any
- 19 of us actually know at this point. It may be
- 20 that we'll need to go down to the raw data and so
- 21 therefore it's important to know what are the
- 22 limits of how you're able to go into this and
- 23 bring it back to this committee.
- 24 MS. ARENS: As to the subscription
- 25 service data, we have certain agreements with our

- 1 subscription service provider where we're under
- 2 contract as to how we can use the data and who
- 3 gets access to it. And having looked at the
- 4 subscription service agreements, my initial big
- 5 picture impression is that we're okay sharing the
- 6 data so long as, again, it's aggregated and
- 7 anonymized in such a way that the raw data can't
- 8 be reverse engineered. And then if there comes a
- 9 specific time when you want raw data in addition
- 10 to that, it just depends on which data it is, for
- 11 instance, the OPIS Agreement is different from
- 12 the C-PLATT Agreement, and it depends on, again,
- 13 the nature of our relationship, whether you're
- 14 consultants, things like that. But that's
- 15 something that we can look into further. We can
- 16 get started on that now and if the specific
- 17 instance arises where you say, "I want this raw
- 18 data from C-PLATT, then we'll have to look more
- 19 closely at the terms of that subscription
- 20 agreement.
- 21 PROFESSOR BORENSTEIN: Yeah, I just have
- 22 to say I think this is absolutely critical. The
- 23 point of this committee, I think, at its heart is
- 24 to ask a group of outside experts with price
- 25 spikes, is this market power or is this a

- 1 competitive working market? And the way one does
- 2 that is by looking at individual firm behavior,
- 3 looking at their incentives to restrict output,
- 4 and whether they actually are restricting output,
- 5 that's what we did in the California electricity
- 6 crisis, it would allow us to identify market
- 7 power. But --
- 8 CHAIR SWEENEY: We have some disagreement
- 9 as to what's the mix of the difference.
- 10 PROFESSOR BORENSTEIN: But anyway, but we
- 11 will have to -- if the price suddenly does
- 12 something like it did in October of 2012, then
- 13 this maybe I'm betting we'll be asked to meet
- 14 suddenly and we'll be asked, "We need you to tell
- 15 us what's going on." And at that point, if we
- 16 get told, well, we're going to need a couple
- 17 months to figure out whether you can access the
- 18 data, you know, there's not much point in being
- 19 here.
- 20 MS. ARENS: Okay, we can look at this
- $21 \quad now.$
- 22 CHAIR SWEENEY: So we're all in
- 23 agreement, I endorse almost everything he said,
- 24 including this point that we don't agree on some
- 25 of these issues. But in terms of the data,

- 1 absolutely. And I think that in some sense if we
- 2 do not have the right to have as much data as we
- 3 need, it's always in your hands, you might be
- 4 willing to go back and ask whether the Committee
- 5 is being allowed to do its job.
- 6 MS. ARENS: Okay, we will get a head
- 7 start on looking at this now and, again, we will
- 8 do everything that we can to help you do your
- 9 jobs within the confines of the law.
- 10 CHAIR SWEENEY: Good, we got a deal.
- 11 Okay, thank you.
- MR. EGGERS: All right, well continuing
- 13 on, while I didn't want to touch on the
- 14 individual data items in this particular
- 15 presentation, if you want to look at more
- 16 description on what sort of information the
- 17 Energy Commission is collecting in this regard, I
- 18 do have on me some of the forms, the CEC forms of
- 19 the information we're collecting via PIIRA.
- 20 These forms can also be found at the website
- 21 here, as well.
- 22 That being said, a lot of PIIRA data
- 23 collection sort of piggybacks on EIA work, we're
- 24 interested in a lot of the same sort of
- 25 information that the EIA collects. And so we

- 1 have them submit the same forms that they do to
- 2 the EIA to us, as well, along with the other
- 3 forms I was talking about which are addendums to
- 4 those forms for more specific California
- 5 information.
- 6 Now PIIRA information can also be broken
- 7 further down into five different groupings. We
- 8 track marine and pipeline movements with crude by
- 9 rail becoming more important. We also are
- 10 getting individual railroad filings such as Union
- 11 Pacific and BNSF that would also fit into this
- 12 particular section, as well. But most of all,
- 13 marine and pipeline information comes from our
- 14 W700s and Kinder Morgan filings. Refinery
- 15 operations are covered with EIA 800 and 810
- 16 forms, as well, also with some other forms that
- 17 cover different refinery actions here in
- 18 California.
- 19 Terminal sales are covered with our
- 20 weekly -- that's what the "W" stands for -- 08s
- 21 and MO8s also, an annual report for that, as
- 22 well. Trucking and Jobber movement is covered
- 23 with the W900s and the M782s are also very
- 24 important. And then we also get retail sales
- 25 with our annual A15 Retail Sales Outlet Report.

- 1 This is a little bit of a complicated report
- 2 since there is no master list for all the
- 3 different retail stations here in California.
- 4 After doing this a couple years, we figure we get
- 5 about 80 percent compliance on that particular
- 6 report. And through using the BOE, we were able
- 7 to bootstrap up to approximately 10,000 retail
- 8 stations here in California and that's how we
- 9 come up with that determination.
- 10 But for the most part, our reporting
- 11 compliance is pretty good, it ranges from 95
- 12 percent up. This is sort of I wouldn't say
- 13 strictly regulated markets, so people do come in
- 14 and out all the time, so it is sometimes tough
- 15 tracking down people who just might come into the
- 16 market for a brief amount of time, and making
- 17 sure that they report to us. So that is one of
- 18 the caveats of PIIRA data, it is a survey form,
- 19 it isn't always direct perfect accounting.
- 20 Also, we don't get a lot of daily or
- 21 weekly import/export movements, actually we
- 22 collect no daily information via PIIRA, and so if
- 23 you want to link up to like daily price
- 24 movements, I'm not sure this data would be able
- 25 to provide you the sort of distinction you're

- 1 looking for.
- 2 Reporting also below the State level is
- 3 difficult, there are few players in the
- 4 California Petroleum industry, and so aggregating
- 5 these up in order to anonymize, you'd have to go
- 6 all the way up to the State level in order to do
- 7 that, otherwise we run the risk of not complying
- 8 with confidentiality agreements.
- 9 As I mentioned before, retail level
- 10 reporting is on an annual basis only, and we only
- 11 collect the sales volumes, but we do collect both
- 12 diesel, gasoline and all the fuel sales that we
- 13 can get a hold of through this reporting
- 14 procedure.
- 15 Also, PIIRA doesn't have any sort of
- 16 pricing information outside of the Dealer Tank
- 17 Wagon 900 Form, so all of this stuff is sort of
- 18 detached from whatever pricing information you
- 19 would be collecting.
- 20 So that covers our PIIRA, well, it
- 21 doesn't finish our PIIRA reporting, I'm sorry, so
- 22 we basically here at the Energy Commission use
- 23 this information for two important reports, along
- 24 with our IEPR activities, but this information
- 25 basically goes into --

- 1 COMMISSIONER SCOTT: That's Integrated
- 2 Energy Policy Report.
- 3 MR. EGGERS: Thank you, Commissioner.
- 4 This information goes into our Weekly Fuel
- 5 Summary which can be found on the Energy Almanac
- 6 which we post this every week of different
- 7 utilization rates, or production totals for
- 8 California Refineries, and also their inventory
- 9 levels. This is also information that goes into
- 10 our Petroleum Watch, which I'll talk to you about
- 11 a little later in my presentation.
- Now, moving on to our proprietary
- 13 sources, in the last meeting you guys talked
- 14 about OPIS information which is our Oil Price
- 15 Information Service information. This is where
- 16 we're getting all of our daily price information,
- 17 and we get things like gasoline prices at actual
- 18 retail sales levels, along with diesel, jet fuel,
- 19 propane, we have ethanol prices as part of that,
- 20 along with biodiesel prices, so all of our
- 21 pricing information really does come from OPIS.
- Now, our next two subscriptions is PIERS
- 23 and PLATTS C-Flow, this is marine movements of
- 24 different blend stocks in crude oil happening on
- 25 the West Coast. The thing to remember with

- 1 import/export data is we actually have to combine
- 2 roughly about seven to eight different data
- 3 sources in order to get a true accounting on
- 4 what's going on along the West Coast, so
- 5 reporting on that information is always a slow
- 6 process, usually reported once every quarter, and
- 7 it's usually a couple of months behind after the
- 8 quarter that we actually produce it. And Gordon
- 9 has a great graph that shows all the different
- 10 sort of movements of petroleum products here in
- 11 California.
- MS. MEYERS JAFFE: Do you even have the
- 13 monthly data? Or you only have the quarterly
- 14 data?
- MR. EGGERS: We have monthly, it's
- 16 monthly, yeah. And we do put that out on the
- 17 Energy Almanac.
- 18 MR. SCHREMP: And further to your
- 19 question, in some of the data sources such as
- 20 PIERS, you could actually see a delivery date, a
- 21 loading date, an unloading date, and also the
- 22 State Lands Commission collects this kind of data
- 23 by individual marine terminal, and they can have
- 24 a specific load and unload date, so greater
- 25 specificity than just a month.

- 1 MR. EGGERS: We're also attempting to get
- 2 a hold of the Industry Information Resources, or
- 3 IIR Petro-Cash which will give us a historic sort
- 4 of accounting of different refinery maintenance
- 5 that's happened here in California, and also
- 6 future plant maintenance information will also
- 7 come from this service.
- 8 MR. HACKETT: Hey Ryan?
- 9 MR. EGGERS: Yes.
- 10 MR. HACKETT: This is a real unfair
- 11 question, but I'm going to ask it anyway. How
- 12 much do you guys spend in a year on data?
- MS. ARENS: That's a good question. I
- 14 mean, I don't know that the --
- MR. HACKETT: Is it six figures?
- 16 MR. RHYNE: You're talking about -- just
- 17 make sure I understand the question -- how much
- 18 does the Energy Commission spend total on these
- 19 -- paying for these proprietary --
- 20 MR. HACKETT: Yeah, just kind of in the
- 21 ballpark.
- 22 MR. RHYNE: The ballpark is in the six-
- 23 figure range.
- MR. HACKETT: It's six figures.
- MR. RHYNE: Total, I mean, as a sum.

- 1 MR. HACKETT: And then one other
- 2 question, I know the answer to this one, but I'll
- 3 ask it anyways, do any other states do this?
- 4 MR. SCHREMP: I think the Energy
- 5 Commission has activity, we call it the Western
- 6 States Coordination, we do a monthly webinar and
- 7 there are Western State Energy officials and
- 8 representatives attending these webinars. Most
- 9 of the other states have very very small staffs,
- 10 they could have a couple of people involved in
- 11 all energy issues for the state, and I do not
- 12 know of any of them in the Western States that
- 13 are actually paying and buying information to
- 14 this level, to get to your question. So I think
- 15 we're highly unusual in that regard.
- MR. RHYNE: I would even go as far as
- 17 suggesting that California acts as an information
- 18 hub to a number of other Western States who rely
- 19 on us to do and be a source of a lot of
- 20 information in aggregate form in many respects,
- 21 but information that they wouldn't otherwise be
- 22 able to obtain if they were trying to do this
- 23 individually.
- 24 MR. HACKETT: A plug for what staff does
- 25 -- this monthly Western States presentation that

- 1 Gordon and his folks put together is really quite
- 2 good, I mean, we download it and go through it
- 3 and go, "Oh, man, that's cool." There's a lot of
- 4 good information in there.
- 5 MR. EGGERS: So like the PIIRA data, the
- 6 proprietary sources have their caveats, as well.
- 7 The first and foremost is there are restricted
- 8 terms of use on many of the contracts for this
- 9 information. Luckily most of them do say
- 10 contractors, we are able to share the information
- 11 with contractors, but we do need to refer what
- 12 your exact status is as far as that relationship
- 13 is. Like any other data source, it is difficult
- 14 to reconcile some of these data points with other
- 15 databases that collect similar information, and
- 16 so it does take a little bit of staff expertise
- 17 to make these things sort of line up.
- 18 One of my pet peeves is prices in the
- 19 OPIS information can only be averaged, we don't
- 20 have actual sales totals to go along with the
- 21 prices to come up with completed price for any of
- 22 these prices, so all we have is a straight
- 23 station average when we average up on these.
- 24 Also in the case of the marine data, all
- 25 of our marine data, in general, one single source

- 1 doesn't cover the entire sort of movements of
- 2 petroleum products here in California. And we
- 3 really do need the full spectrum of all of them
- 4 put together in order to get a real good idea of
- 5 where things are moving here in California.
- Then of course there's the Open Source
- 7 Information, we collect much of the same
- 8 information that the Energy Information
- 9 Administration does as far as refining
- 10 activities. As I mentioned earlier, we piggyback
- 11 on a lot of those, but we also collect the weekly
- 12 national and California prices, as long as we get
- 13 access to a lot of the regional marine movements
- 14 and company level for import movements of crude
- 15 oil. We also look, as I mentioned earlier, Board
- 16 of Equalization numbers for Final Sales Retail
- 17 numbers of Diesel and Gasoline sales. We also
- 18 get dyed diesel figures from them as well, and
- 19 these are the numbers that we sort of reconcile
- 20 with our A15 reporting activities.
- 21 Gordon mentioned the States Land
- 22 Commission, but we also use the U.S. Corps of
- 23 Engineers Marine Movement Information in order to
- 24 get the imports/exports of different petroleum
- 25 products that balance all in order, as well.

- 1 But the caveats with the Open Source data
- 2 is they tend not to have a lot of detail in their
- 3 information, or not the sort of detail we want in
- 4 order to look at California local sort of issues.
- 5 There's also large lag times with a lot of this
- 6 information. They have reconciling that, you
- 7 know, these sources need to do on their side, and
- 8 then we need to firm them up and, as I mention
- 9 here, we also need to reconcile them with our
- 10 other sources in order to get our numbers all
- 11 lined up. And as I said, with less detail it's
- 12 kind of incomplete for detailed analysis.
- So where that leads us --
- 14 CHAIR SWEENEY: One question, when you
- 15 say "difficult to reconcile," is that simply
- 16 because the reporting definition is different, or
- 17 are you seeing explicit differences that you say
- 18 they can't be both true?
- 19 MR. EGGERS: It's mostly -- it's a lot of
- 20 different definitions, but it's also calling the
- 21 same product different names, and when you're
- 22 doing this with computer work, the computer wants
- 23 it all the same name. So it does take a human
- 24 hand in order to get this all lined up properly.
- 25 That being said, we are hoping to revise

- 1 a product that sort of went defunct called the
- 2 Petroleum Watch, we used to produce this monthly
- 3 publication from 2006 to 2013, and because of
- 4 staffing difficulties it sort of fell along the
- 5 wayside. But as part of interacting with you in
- 6 the future, we're looking to revive this monthly
- 7 documentation and then basically have the
- 8 Petroleum Market Advisory Committee comment on
- 9 the sort of analysis that they would like to see
- 10 in this particular document. We would then do
- 11 the analysis, work up the graphs, and then put it
- 12 into this document to then give to the public to
- 13 also inform them on what's going on in the
- 14 petroleum industry. A lot of the things you
- 15 asked for at the last meeting, like crack spread,
- 16 different prices at both California PADD 5 and
- 17 California level, are in this particular
- 18 documentation, crack spreads wasn't because an
- 19 actual crack spread wasn't actually discussed,
- 20 instead we did margins instead, but different
- 21 utilization rates for the refineries, not the
- 22 actual individual refineries, but for refinery
- 23 operations in the whole of California are found
- 24 in the back of that particular publication along
- 25 with a little brief analysis explaining what's

- 1 happening with those particular charts.
- We're hoping, you know, moving on into
- 3 the future that for the most part we'll be able
- 4 to document a lot of what's happening in the
- 5 Petroleum Market Advisory Committee, or at least
- 6 some of the analysis that you guys are thinking
- 7 about by incorporating that into this particular
- 8 document. And if there are specific issues you
- 9 want to look at that aren't currently addressed,
- 10 but that are sort of one-off sort of things,
- 11 we're hoping to put that in as like a hot topic
- 12 sort of analysis within this particular document.
- 13 CHAIR SWEENEY: Just as a personal view
- 14 here, if this committee can get credit in goosing
- 15 -- in motivating the California Energy Commission
- 16 into making this sort of data available, in
- 17 parallel with this very good electricity data, I
- 18 think we could all pat ourselves on the back and
- 19 say we accomplished something of value. I think
- 20 public availability of all of this is very
- 21 useful.
- MR. EGGERS: Well, that concludes my
- 23 presentation. Anything else? Thank you very
- 24 much.
- MR. RHYNE: And I will note for the

- 1 record that the Petroleum Watch, a copy of the
- 2 draft Petroleum Watch -- I shouldn't say "draft"
- 3 at this point, it is posted -- of its first
- 4 iteration is available there in your packets, and
- 5 also available online via a link on Petroleum
- 6 Market Advisory Committee's site. I emphasize
- 7 that it is it's firs iteration and in the future
- 8 we're going to be cleaning it up and working with
- 9 our media folks to sort of put a little bit of a
- 10 gloss on it, but I think the feedback of this
- 11 committee is going to be helpful, as well, in not
- 12 only identifying what the ongoing pieces of
- 13 analysis should be in there, but also any hot
- 14 topics that would be of interest. Certainly we
- 15 will be interested in doing that. I will also
- 16 say that it's sometimes difficult to give exactly
- 17 -- I'll use the crack spread as an example --
- 18 exactly the data that is mentioned at these
- 19 committee meetings, but our staff really does
- 20 work very hard to try and give a reasonable
- 21 approximation using if not that exact thing, then
- 22 some other data that gives you at least a sense
- 23 of the question you were driving at. So if these
- 24 don't hit the mark in some way, or you think that
- 25 we're missing something, we're certainly open to

- 1 that feedback and would be willing to integrate
- 2 that in future iterations.
- 3 MS. MEYERS JAFFE: So I guess I would
- 4 just say, thinking forwardly about what's
- 5 happening this month, we're probably going to
- 6 want to see the refinery maintenance study.
- 7 CHAIR SWEENEY: And just in this, on page
- 8 3 of this Petroleum (Market) Watch, as far as you
- 9 can tell, are these data that you've graphed up
- 10 through, well, in January, consistent with any
- 11 other information that you have, that we can look
- 12 at these data and see the trends of gasoline in
- 13 California versus other states? And if I were to
- 14 eyeball it, I don't see a very large price spike
- 15 in California prices relative to the rest of the
- 16 United States, but do you have any data that's
- 17 contrary to the conclusion one might reach from
- 18 looking at this?
- MR. EGGERS: Not yet, but Gordon's
- 20 presentation is going to hit on that --
- 21 MR. RHYNE: But that's a perfect Segue to
- 22 give the next presentation.
- 23 CHAIR SWEENEY: Thank you. Any last
- 24 question for Ryan? Thank you. That is helpful
- 25 and it also gives guidance to the legal staff as

- 1 to which pieces of data that they should be
- 2 looking at contractually. Okay, Gordon.
- 3 MR. SCHREMP: Thank you, Chair Sweeney
- 4 for teeing that up. I'm, once again, Gordon
- 5 Schremp in the Energy Assessments Division at the
- 6 Energy Commission. You'll be talking to the
- 7 Committee members today about what we've seen so
- 8 far with retail price tracking and offering up
- 9 information for you to consider and also, I think
- 10 if we go to the next slide here, looking for some
- 11 feedback, some direction on is this kind of
- 12 information useful, is there something else you'd
- 13 like us to be looking at, or how we examine
- 14 retail prices. We're looking for that kind of
- 15 feedback from the committee members either here
- 16 today or as we go through this process in the
- 17 future. Next slide, please.
- 18 So I'll give you just a little bit, a
- 19 tiny bit of overview of the marketplace here.
- 20 California's market, we'd say, and certainly
- 21 Professor Borenstein would say, is isolated, it's
- 22 a time and distance issue. We don't have
- 23 pipelines connecting us to be supplied from, say,
- 24 Texas, or Washington State, or even Utah for that
- 25 matter. But we don't need pipelines. Why?

- 1 We're essentially self-sufficient. We have
- 2 refining capacity in the Bay Area, Southern
- 3 California, Bakersfield Regions, and we produce
- 4 basically all of our own fuel needs nearly, as
- 5 well as most of Nevada and about half of Arizona.
- 6 So we have the fuel supply here and the rub comes
- 7 when we have a significant unplanned outage or a
- 8 series of unplanned outages such as we had in
- 9 2012.
- 10 So imports are a small portion, I'm
- 11 talking about imports of fuel. This is like base
- 12 gasoline you blend with Ethanol called CARBOB, a
- 13 little bit of diesel fuel, but the imports are
- 14 really not that necessary to balance out demand
- 15 with incremental supply.
- 16 And more recently we've seen an increased
- 17 amount of exports by marine vessel, not
- 18 dissimilar to that of the United States which set
- 19 records for refined product exports in 2013 and
- 20 broke the record or will break the record in 2014
- 21 for exports of diesel, gasoline and jet fuel
- 22 because the economics worked: lower crude oil
- 23 prices, pretty good refining operation in the
- 24 margins, and their relative competition to
- 25 markets in Central, South America, Europe, and

- 1 even as far away as Southeast Asia in some cases.
- 2 MS. MEYERS JAFFE: So I have a question
- 3 for you on that. So theoretically we have, I
- 4 quess, gathered since we're exporting, we have a
- 5 surplus of refining capacity and so theoretically
- 6 if there was somehow a shortfall in the market on
- 7 the refining side, you might say, an inspected
- refinery outage, one would expect the export 8
- 9 levels to go down because you could sell that
- 10 extra surplus gasoline in the state. Is that the
- 11 dynamic that you see?
- 12 MR. SCHREMP: Well, I think --
- 13 MS. FOOTE: -- going to pay more for it
- 14 than we are.
- 15 MS. MEYERS JAFFE: Right, that's why I'm
- 16 asking, because this map would imply that's the
- 17 dynamic or --
- 18 MR. SCHREMP: Why don't we go ahead and
- 19 get to --
- 20 PROFESSOR BORENSTEIN: That's a nice map.
- 21 MR. SCHREMP: There's the Committee
- 22 member who is the genesis of this map's creation,
- 23 no names here, Mr. Hackett. But I think the
- 24 refineries in California and the other locations
- 25 in the United States are sort of free to sell

- 1 wherever they want, but it's not willy nilly,
- 2 we're merchant refiners, we go wherever the best
- 3 price is. Most of them will have the vast
- 4 majority of their output, normal volume of output
- 5 under a contractual obligation to supply. So
- 6 these are contracted volumes for most of their
- 7 output. Some refiners will have maybe a little
- 8 bit less than, say, 90 percent, and they'll have
- 9 unbranded volumes they'll sell them to that will
- 10 have a significant position; that could be like
- 11 Tesoro, Valero, more independent refiners, but
- 12 when there's a refinery problem, what we see in
- 13 these markets is those that are selling to the
- 14 unbranded market will either pull back those
- 15 sales temporarily and sell that volume to
- 16 whomever is having the problem and they say, "I
- 17 need that, I'll pay you a higher market price,"
- 18 and that's what happens to the unbranded market,
- 19 it goes up in price, tightens supply, so --
- 20 MS. MEYERS JAFFE: So there's two things,
- 21 number one, when I'm exporting I have the added
- 22 cost of shipping the product to China, which is a
- 23 cost, and so the Chinese market has to be higher
- 24 than the California market, by greater than the
- 25 cost to ship it.

- 1 MR. SCHREMP: I think actually what we're
- 2 seeing is the destinations for the export
- 3 gasoline diesel from California is in most cases
- 4 going nearer -- Western Canada, West Coast of
- South America, and so what the refiners look at 5
- 6 is, who is my competition? So the competition is
- 7 someone in India reliance refining someone in
- 8 Southeast Asia, and they have a significant
- 9 transportation cost to get into that market, less
- 10 so than the California refiners. However, the
- 11 California refiners have a higher cost of
- 12 production, certainly they have some Chinese or
- 13 Southeast or Indian producers, so it's that
- 14 dynamic, whoever is competing in that or out
- 15 competing in those local markets. So we're
- 16 seeing that if you look at EIA export data, where
- 17 is it going? It's usually closer to home, to
- 18 your point, less of a transportation cost
- element. But that changes. That will shift over 19
- 20 time, new entrants to the market, people exiting
- 21 the market like the big refinery in the Virgin
- 22 Islands that went away and left a hole, and left,
- 23 in part, more exports from the United States as a
- 24 consequence.
- 25 PROFESSOR BORENSTEIN: Can I ask a couple

- 1 questions? So first of all, if you had given
- 2 this presentation five or six years ago,
- 3 California wouldn't have been more of an
- 4 importer, right?
- 5 MR. SCHREMP: Yes.
- 6 PROFESSOR BORENSTEIN: So they used to
- 7 actually be a pretty strong importer in the
- 8 summer and --
- 9 MR. SCHREMP: At times I think it got
- 10 upwards of 15 percent rather than, say, just the
- 11 three to six percent, yes?
- 12 PROFESSOR BORENSTEIN: So when we say
- 13 three to six percent, where's that coming from?
- 14 And has the CEC ever tried to actually map out a
- 15 supply curve of sorts? I see three to six
- 16 percent is not coming all the way from the Gulf
- 17 because that's not a big -- there's not enough
- 18 cost from the Gulf.
- 19 MR. SCHREMP: Yes, Ryan mentioned one of
- 20 the data sources we do look at from the EIA is a
- 21 Gulf Coast to West Coast movement and, you're
- 22 absolutely right, we're seeing far less of that
- 23 over time, not a need for it, and it's going
- 24 somewhere else. Now it's going to the Eastern
- 25 Sea Board, Florida, places like that. Where we

- 1 see other components coming from varies, and it's
- 2 usually so small, there could be cargos of
- 3 opportunity. Is there an arbitrage window that's
- 4 opened up recently? Meaning is it worth my while
- 5 to pay the transportation cost, send it there,
- 6 and by the time my cargo arrives the price is
- 7 still high enough that I make money? And so
- 8 people take that opportunity to move cargos into
- 9 California opportunistically. But we've had, and
- 10 that's 2012 when we see temporary supply
- 11 tightness develop and a little bit more imports
- 12 coming in because the price rose and attracted
- 13 additional supply. We see other circumstances
- 14 such as jet fuel where the California market is,
- 15 say, a little net short, if you will. And we've
- 16 seen sort of standard imports coming in, so
- 17 they'll come in from, say, Southeast Asia, some
- 18 really more complex refineries that have jet fuel
- 19 export capability, but that's where the excess of
- 20 supply for, say, jet fuel is available. So it
- 21 depends on the product and it depends on the
- 22 market circumstance at the time, but you're
- 23 absolutely right, over time we've seen that it's
- 24 gone less and less and less, and part of that had
- 25 to do with what? Declining gasoline demand, six

- 1 of the last eight years since the peak in 2004.
- 2 So they said, "Oh, I have more excess refining
- 3 capability available." And now what's happened?
- 4 Good margins, crude oil prices allowed me to
- 5 export more economically to some of these other
- 6 markets, no differently than a Gulf Coast
- 7 Refiner.
- 8 MS. FOOTE: And Gordon, I was just going
- 9 to ask, does any of the imported stuff come in on
- 10 a contracted basis?
- 11 MR. SCHREMP: I imagine that's -- the
- 12 Energy Commission does not have access to sort of
- 13 the contracts. We understand that refining
- 14 organizations have their own supply departments,
- 15 both for sourcing feedstocks such as crude oil,
- 16 but also for, say, balancing out some supply,
- 17 let's say in planning a large refinery
- 18 maintenance activity, I won't be offering all my
- 19 units, so I want to build my inventory so I do
- 20 what? Still meet my contractual obligations when
- 21 most of my refining units are down. I'll bring
- 22 in some more components. So where I buy those,
- 23 that's probably certainly a cargo opportunity,
- 24 but then I could have a situation where I'm
- 25 seeking additional supply in the moment, and so I

- 1 may contact others in the supply department and,
- 2 in that case, I could buy someone's cargo, re-
- 3 divert it to my refinery, and bring it in that
- 4 way. And so there are different sort of
- 5 arrangements depending on your circumstances.
- 6 But because our imports are so low, there's not
- 7 sort of an on-purpose need where when you get
- 8 into a situation where "I want assurance and
- 9 security of that supply, so I'll put it under
- 10 long term contract." We don't really see that.
- 11 PROFESSOR BORENSTEIN: And when you talk
- 12 about long term contracts and contractual
- 13 shipments, none of these have pricing, these are
- 14 just quantities, right?
- 15 MR. SCHREMP: That's correct. We just
- 16 see the --
- 17 PROFESSOR BORENSTEIN: And quantities are
- 18 determined by some index plus generally?
- 19 MR. SCHREMP: It's our understanding that
- 20 cargos of imports and cargos for exports will be
- 21 priced to some benchmark, and that benchmark from
- 22 what we read is usually the oil price information
- 23 service, spot price, refinery wholesale price, if
- 24 you will, a couple days before or a couple days
- 25 after my cargo arrives or I load the cargo. And

- 1 so it's that kind of benchmarking that companies
- 2 will do, and they do that from what we read
- 3 because they can enter into another financial
- 4 instrument that hedges their risk that if I'm
- 5 buying the price will go up, or if I'm selling
- 6 the price will collapse. And so that's why
- 7 they're doing this benchmarking from what we've
- 8 read. We do not see those contracts.
- 9 PROFESSOR BORENSTEIN: Thank you.
- MR. HACKETT: And Gordon, can you talk
- 11 about what's changed on the supply side, talk
- 12 about demand with gasoline demand in decline for
- 13 quite a long time. What's changed on the supply
- 14 side on this map?
- MR. SCHREMP: On this map a couple of
- 16 things have changed, 1) it's a visual change that
- 17 if someone has seen an earlier genesis of this,
- 18 is item 22 where there is now a black line coming
- 19 to Las Vegas, that's from Utah. So this is the
- 20 UNF Pipeline that is bringing supply in from the
- 21 Utah area refineries, they usually have an excess
- 22 of gasoline in the wintertime when we don't need
- 23 it as much because they can produce more, because
- 24 of the Reid Vapor Pressure Regulations, and then
- 25 there's also diesel coming into Las Vegas. So

- 1 that's sort of a new entrant, and we understand
- 2 that there is additional refining capacity or
- 3 expansion occurring in Utah so that they can send
- 4 more to this market. So rather than Las Vegas
- 5 being solely dependent on pipelines supplied from
- 6 the Southern California refineries, that's a
- 7 change, so that's helpful I'm sure to that
- 8 market.
- 9 In the Phoenix market, Phoenix-Tucson
- 10 market supplied by those black lines indicating
- 11 both from the west and from the east, a change
- 12 has been the ability of the refineries to the
- 13 east to make Arizona spec gasoline, this is one
- 14 of the other boutique fields, it's pretty close
- 15 to California reformate gasoline and so that
- 16 change of the capability to produce this gasoline
- 17 in conjunction with, we assume, better economics
- 18 of production, why? Because we've seen a shift,
- 19 more gasoline coming out of the east than is
- 20 coming out of the west, so that's helped free up
- 21 some production capacity, if you will, in
- 22 Southern California refineries and for them maybe
- 23 to consider, well, "I'll export to other
- 24 markets."
- MR. HACKETT: And so do you have any

- 1 thoughts on why refiners in Utah, Texas and New
- 2 Mexico are taking market share from refiners in
- 3 L.A.?
- 4 MR. SCHREMP: Because they're probably a
- 5 little bit more competitive and able to do that.
- 6 MR. HACKETT: They've got low crude
- 7 costs.
- 8 PROFESSOR BORENSTEIN: Yeah, they're
- 9 getting cheap.
- 10 MR. HACKETT: They've got cheap crude,
- 11 yeah.
- MR. SCHREMP: Especially in Utah and in
- 13 West Texas, that's correct.
- 14 So is California a more expensive market?
- 15 Would consumers say that with gasoline and diesel
- 16 fuel? The answer is probably yes, but there are
- 17 reasons for this. They're in three categories, I
- 18 would say, there's a greater tax burden, higher
- 19 production costs, and as we've mentioned earlier,
- 20 an isolated market. And so what are those higher
- 21 prices? What do they look like? Well, they're
- 22 at least \$.17 a gallon higher and these are
- 23 looking at annual averages of California's retail
- 24 price minus the U.S. average price, so about \$.12
- 25 higher for diesel, and if you look at what are

- 1 the averages over the more near term, it's \$.35
- 2 and \$.20 respectively. Next slide, please.
- 3 So here is the bar and it varies from
- 4 year to year, you do see sort of a trend in this
- 5 compared between California and U.S. gasoline
- 6 going up. The high point was mentioned earlier,
- 7 2012, where we set our all-time high for retail
- 8 price in California. Next slide, please.
- 9 MR. HACKETT: Hang on a second. So just
- 10 to make sure I know what you're measuring here,
- 11 this is regular grade gasoline, and I guess these
- 12 are EIA data?
- MR. SCHREMP: Yes, so the Energy
- 14 Information Administration provides, and this is
- 15 what Ryan was mentioning earlier, is an example
- 16 of publicly available data. You can download
- 17 this information, anyone can, weekly refinery --
- 18 sorry, I mean retail prices for California and
- 19 the U.S. and selected other states and cities.
- 20 Now, some of the cities don't go back very far,
- 21 so anyone can replicate this information, so this
- 22 is basically 52 data points per year, weekly
- 23 prices.
- 24 MR. HACKETT: Okay. And so you're using
- 25 all regular grades, you're not segmenting out

- 1 reformulated regulars from conventional regulars,
- 2 it's just regular?
- 3 MR. SCHREMP: That's correct.
- 4 MR. HACKETT: Okay.
- 5 PROFESSOR BORENSTEIN: Wait, this is
- 6 California. All of the --
- 7 MR. SCHREMP: First the U.S., yes.
- 8 MR. HACKETT: And so the absolute value
- 9 gets somewhat skewed because you can't see the
- 10 quality differential to conventional gas and
- 11 reformulated gas.
- 12 PROFESSOR BORENSTEIN: You think that
- 13 might be changing over this period?
- 14 MR. HACKETT: I don't know, I'm sort of
- 15 torn between which is the best way to do it.
- 16 I've always kind of liked to use the EIA's
- 17 average for reformulated gasoline, so that's for
- 18 cities that have air pollution problems like
- 19 Washington, D.C., New York, Houston, etc.,
- 20 Chicago. And so what you get with that is you
- 21 sort of reduce the quality difference and those
- 22 gasolines are similarly tough to make.
- 23 MS. MEYERS JAFFE: Right. Then it's
- 24 apples and apples.
- MR. HACKETT: Yeah. Thank you.

- 1 CHAIRMAN SWEENEY: And this one, though,
- 2 is explicitly the California reformulated
- 3 California Standards minus U.S. Regular.
- 4 PROFESSOR BORENSTEIN: All U.S. regular.
- 5 CHAIRMAN SWEENEY: Right, all of U.S.
- 6 regular.
- 7 MR. SCHREMP: All types and formulations,
- 8 regular grade, yes. One can also look at, I
- 9 believe, mint grade and premium with this dataset
- 10 and do this kind of --
- 11 CHAIRMAN SWEENEY: Right, but this is
- 12 what this is that you plotted.
- MR. SCHREMP: Right.
- 14 MS. MEYERS JAFFE: Well, you know,
- 15 everyone makes such a big deal about 2012, but
- 16 2013 and 2014 aren't that different, so what's
- 17 that about?
- MR. SCHREMP: Once place you would look
- 19 is if you have a higher, a greater amount of
- 20 unplanned outages in the refinery maintenance
- 21 data that we have not yet been able to purchase,
- 22 but that would be one place to look to see what
- 23 would be different, say, from 2011 and 2010. But
- 24 they are relatively small, I mean, that amount
- 25 sustained over the whole year, but that's one

- 1 area you would look at, why is it that much
- 2 higher than the U.S. average.
- 3 MS. MEYERS JAFFE: Well, I think the
- 4 interesting phenomenon, of course I'd have to
- 5 look at all the other data, but if you're showing
- 6 a trend line where we're having higher exports
- 7 over time, and also that means our prices are
- 8 higher than the rest of the country adjusting for
- 9 quality, then it would show that refiners are
- 10 maybe favoring exports. We'd have to look at the
- 11 arbitrage of that compared to, you know, what
- 12 market is pulling that versus the Gulf Coast
- 13 supplying those markets.
- 14 MR. HACKETT: Of course, these are retail
- 15 prices, they're not spot prices.
- MS. MEYERS JAFFE: Well, that's right.
- MR. HACKETT: And so I think, Gordon,
- 18 looking in your package, you deal with some other
- 19 stuff. But I think he's got more tricks in his
- 20 bag.
- 21 MS. FOOTE: So the retail prices lag
- 22 anyway, so maybe that's what it is.
- 23 MS. MEYERS JAFFE: Well, also Richmond, I
- 24 remember you had the Richmond fire, but it took
- 25 the market a little while to adjust to the fact

- 1 that that capacity didn't come back on.
- 2 UNIDENTIFIED FEMALE SPEAKER:
- 3 Californians are just so price insensitive that
- 4 when there's been a net drop as much as it's been
- 5 that, you know, we're all celebrating, not
- 6 noticing that we're still paying --
- 7 MS. MEYERS JAFFE: More than everybody
- 8 else. That too.
- 9 PROFESSOR BORENSTEIN: I just wanted to
- 10 point out the week to week standard deviation on
- 11 these numbers are huge, as I recall. Within a
- 12 year, the last time I looked to this, it's not
- 13 unusual to have this differential be as low as
- 14 \$.10 and as high as \$.50. So you don't want to
- 15 get too hung up on --
- MS. MEYERS JAFFE: Well, what I would say
- 17 is, and that's why we talked a lot about the data
- 18 we talked about, because it's an isolated market
- 19 it would mean it might be more sensitive to
- 20 refinery maintenance schedules than other
- 21 markets, right? And certainly it would be more
- 22 sensitive to unplanned outages, but it would be
- 23 more sensitive to refinery maintenance than other
- 24 markets and that would get to -- that's why you
- 25 would take an inventory analysis to see if the

- 1 companies are planning or not planning the
- 2 maintenance well from the point of view of
- 3 whether the market is volatile or not volatile.
- 4 CHAIRMAN SWEENEY: This, of course, was
- 5 retail, not a wholesale measure.
- 6 MS. MEYERS JAFFE: Right.
- 7 CHAIRMAN SWEENEY: And if we're talking
- 8 about what the oil companies are doing, it's
- 9 probably more wholesale data that's probably
- 10 relevant to look at.
- MS. MEYERS JAFFE: Right.
- 12 CHAIRMAN SWEENEY: And which -- are you
- 13 going to get to that?
- MR. SCHREMP: Yes. So --
- 15 MR. HACKETT: If we give him the chance.
- 16 MR. SCHREMP: Any questions, any time.
- 17 So same process here, let's take the average
- 18 statewide retail diesel price in California,
- 19 subtract the U.S. In this case, it's certainly
- 20 California reformulated diesel, it's a different
- 21 diesel, a slightly different kind of formulation.
- 22 The other states are all the same, it's EPA or
- 23 Federal ultralow sulfur diesel. So back to Mr.
- 24 Hackett's earlier point about there are some
- 25 different types of gasoline markets within the

- 1 U.S., in this case the rest are EPA ultra-low-
- 2 sulfur diesel. And so we see it start to go
- 3 back, we see it not in the same pattern where
- 4 that average annual difference in retail price is
- 5 rising, it's actually dropped off a little bit in
- 6 the last couple years, a rather small amount, not
- 7 a great deal. Next slide, please.
- 8 So one of the areas of why is it more
- 9 expensive is certainly the level of taxation. So
- 10 the American Petroleum Institute on a roughly
- 11 quarterly basis will produce this information,
- 12 and then you could see where does your state
- 13 rank. And certainly everyone has the same
- 14 Federal Excise Tax on their gasoline and diesel,
- 15 and states will have their own excise tax, and
- 16 then there's a sales on local taxes that API
- 17 calculates for all of the states, so that's where
- 18 that will vary. And then states can actually
- 19 have a new tax they put into effect on January 1
- 20 or July 1, that's more unusual and API has a
- 21 state-by-state analysis so one can see if that's
- 22 happening.
- 23 So basically here's the latest snapshot,
- 24 it's from January 1, and California is ranking up
- 25 there at number 2, not unusual, it's usually

- 1 volleying with New York, I think Pennsylvania has
- 2 some new levels of taxation that went into effect
- 3 that they're in the number 1 now. But that's why
- 4 California is, in this snapshot, about \$.15 per
- 5 gallon higher than the average for the U.S. So
- 6 there in part lies some of the reason retail
- 7 prices in California should be higher for
- 8 gasoline than diesel. Next slide, please.
- 9 A little further down the list at number
- 10 6 for diesel fuel, but still a higher level of
- 11 taxation than comparing to the U.S. average,
- 12 we're seeing about \$.11 for this snapshot. If
- 13 you go back to earlier ones, you see a little bit
- 14 higher, that's just how the market moves around.
- 15 So that's where we're seeing a big chunk of that.
- I think, I don't have the slides here,
- 17 but there's also differences in the
- 18 specifications for gasoline. Clearly, California
- 19 reformulated gasoline is some of the cleanest in
- 20 the world, if not. And by some estimates, \$.05,
- 21 \$.10, \$.15 a gallon to produce that fuel, so that
- 22 could be, say, another dime that goes with the
- 23 \$.15 year 25, and now, okay, why at \$.35? Why at
- 24 \$.38? And that has to do more, we believe, with
- 25 the isolation of the market and you have a pretty

- good price spike for 45 days, and then average 1
- 2 that in for the year and, there you go, you can
- 3 be up to these kinds of levels. So next slide,
- 4 please.
- 5 So fuels under the Cap, clearly this body
- 6 knows that went into effect. The Oil Price
- 7 Information Service, among others, offers to
- provide some evaluation of what that might be for 8
- 9 obligation purposes, compliance purposes, and
- 10 basically their formula is to take the price of
- 11 carbon in the market, not the LCFS credits, and
- then figure out what the carbon intensity per 12
- 13 gallon of fuel is in terms of metric tons per
- 14 gallon times dollar per metric ton, and lo and
- 15 behold you get a price. And so they have a
- 16 winter recipe gasoline, summer, next slide, and
- 17 here are their calculations with the hypothetical
- 18 \$0.11.80 per metric ton carbon price. And so you
- 19 see you end up getting 9.510cts/gal for, say,
- 20 gasoline, and diesel is a little bit more at
- 21 about the 12.1cts/gal in this carbon price
- 22 example. Next slide, please.
- 23 PROFESSOR BORENSTEIN: Wait. Could we
- 24 just explain what the .00022 is?
- 25 That's the metric tons of MR. SCHREMP:

- 1 carbon per gallon of that fuel.
- 2 PROFESSOR BORENSTEIN: The .00891, I
- 3 understand the first term, but then there's a
- 4 second tiny adjustment to it.
- 5 MR. SCHREMP: That is for the Ethanol
- 6 portion of the gasoline.
- 7 PROFESSOR BORENSTEIN: Right, now I
- 8 remember.
- 9 MR. SCHREMP: I apologize for not
- 10 covering that initially, but thank you for
- 11 pointing that out. So the gasoline will have two
- 12 components, it will have a petroleum hydrocarbon
- 13 base gasoline which is 90 percent of the gallon,
- 14 and 10 percent of Ethanol, and those are the
- 15 metric tons per gallon of those two respective
- 16 fuel types. And then diesel fuel in this example
- 17 is 100 percent Carb ultralow sulfur diesel, but
- 18 OPIS does show a B5, or a diesel that has five
- 19 percent biodiesel, and so the number is a little
- 20 bit less because it does contain five percent
- 21 biodiesel.
- 22 So we've been looking at a daily, so now
- 23 it gets to a question of prices, prices, prices,
- 24 daily prices. Well, Ryan just told you, well,
- 25 what? We don't collect daily prices. Through

- 1 PIIRA we do not collect daily prices. We do
- 2 purchase daily price information from the Oil
- 3 Price Information Service, they use a process of
- 4 a credit card swipe for transactions that go into
- 5 a database, so they're able to tell what did that
- 6 credit card pay at that physical location on that
- 7 day. So we buy that data so we get a daily
- 8 download. It's about 70,000 locations. Well,
- 9 that's going on all throughout the United States,
- 10 so someone else gets access to that information
- 11 through an arrangement, and that's AAA. So when
- 12 you see AAA prices talked about, what are they
- 13 using? An AAA survey? Nope. OPIS. So they
- 14 have a State average for that data, they'll have
- 15 sub regions, metropolitan regions, so what we've
- 16 been doing is going to the daily AAA on the
- 17 website, go get that information, put it into a
- 18 spreadsheet, and then go back the next day and
- 19 it's gone. But you have today's prices. So one
- 20 must go there every day to get this information
- 21 if you want to build your own sort of tracking of
- 22 what's been going on, and so that's what we've
- 23 been doing to get information not only for
- 24 California because, once again, I said we buy the
- 25 California data, I don't buy the Nevada data. I

- 1 don't buy the data from Washington, but this is
- 2 one source to go get that information, and so
- 3 we're looking at neighboring states, California,
- 4 Washington, Oregon, Nevada, Arizona, and picked a
- 5 couple of other locations, Texas is a huge state,
- 6 Illinois, big refining in both states, and
- 7 Florida, no refining, an import market. So
- 8 that's the set of data we've been collecting
- 9 daily to assess. And so I have something else in
- 10 there, spot refinery wholesale or spot prices and
- 11 this is for the San Francisco Bay Area, Los
- 12 Angeles and Pacific Northwest, which is
- 13 Washington refineries, not Oregon because Oregon
- 14 has no refineries.
- 15 So why would you want to look at refinery
- 16 wholesale prices? Well, how those prices are
- 17 reported to us by OPIS, they'll show a physical
- 18 price for the transaction, price that day,
- 19 they'll show something they call Basis, and Basis
- 20 is just a fancy term they use for the difference
- 21 between the futures price for gasoline and the
- 22 physical price for gasoline sold that day. And
- 23 so the basis, that difference between those two
- 24 prices, tells us something that what the market
- 25 participants think is going on at that time in

- 1 that local market because we look at those basis
- 2 points every day and we average them over the
- 3 year, and so on average California refinery
- 4 wholesale prices are a little bit higher than the
- 5 big price on the futures contract for gasoline
- 6 and for diesel fuel for the heating oil contract.
- 7 And so why you want to look at that is because,
- 8 is there something going on temporarily, right
- 9 now in the market that is indicating the market
- 10 is like, well, there's lots of supply, or supply
- 11 could be tight. So we believe if the basis
- 12 points are showing much higher than the annual
- 13 average that, well, it's starting to be a little
- 14 bit tight, at least the market participants think
- 15 that in their transactions. And if we see
- 16 negative, we go, "Oh, there's plenty of supply."
- 17 And so you'll see some of that information in
- 18 what Ryan has produced in Petroleum Watch where
- 19 he charts that basis on a daily, so you can see.
- 20 So that's important to say why the market
- 21 is either long or temporarily short, can be
- 22 helpful when explaining why retail prices may be
- 23 either farther apart or closer together. Next
- 24 slide, please.
- 25 CHAIRMAN SWEENEY: Before you do that, so

- 1 the AAA, then, data, public data because it was
- 2 on the website at one time, and so those things
- 3 that if we wanted you could supply that, all of
- 4 that raw data from AAA to any of us?
- 5 MR. SCHREMP: Great gray gray area
- 6 question.
- 7 MS. MEYERS JAFFE: I mean, we could --
- 8 CHAIRMAN SWEENEY: Well, yeah, but we
- 9 have to go on every day --
- 10 MS. MEYERS JAFFE: No, I'm saying that
- 11 since we could do it, it seems to me having that
- 12 sort of data would --
- 13 CHAIRMAN SWEENEY: Right. If in
- 14 principle anybody could have done it, then it's
- 15 publicly available, at least in my definition.
- MS. FOOTE: And the question is, of
- 17 course, how quickly could we convene a meeting
- 18 anyway --
- 19 CHAIRMAN SWEENEY: Right, I mean if we --
- 20 MS. FOOTE: -- if there was something
- 21 really interesting --
- 22 CHAIRMAN SWEENEY: -- put it in practice
- 23 doing it, but if you're doing that effort then
- 24 there shouldn't be a reason for not giving that
- 25 data if we would like to see it. Is that

- 1 correct?
- MS. ARENS: We are looking into this
- 3 issue and so my understanding of the AAA data is
- 4 that it is in essence the OPIS raw data, and
- 5 since we pay for OPIS's raw data, it could
- 6 potentially be construed as an end around our
- 7 user agreement with OPIS, but again this is an
- 8 initial impression, this is something that we
- 9 will look into further.
- 10 CHAIRMAN SWEENEY: Okay, there's another
- 11 mechanical issue. Since AAA posted on a daily
- 12 basis and they take it down, that data doesn't
- 13 disappear, has there been any discussion with AAA
- 14 about just making that whole data series
- 15 available so you don't have to go through this
- 16 mechanism of doing it?
- MS. MEYERS JAFFE: They probably have an
- 18 agreement with OPIS that they can't do that.
- 19 CHAIRMAN SWEENEY: Could be, maybe not,
- 20 because they've made it public every day.
- 21 MR. SCHREMP: But certainly it sounds
- 22 like this should be on the list to come back
- 23 about, how could you go about getting such
- 24 information from the Commission --
- MS. ARENS: But you could certainly go in

- 1 and track the AAA data which is publicly
- 2 available itself.
- 3 CHAIRMAN SWEENEY: Yeah, we could if we
- 4 were ready to spend the time and effort doing it.
- 5 But because you do it so much better than any of
- 6 us could, we'd rather rely on you. Okay.
- 7 MR. SCHREMP: So what came up earlier, I
- 8 don't know if Chair Sweeney said this, but I
- 9 think there was a hell of a chart and I saw lines
- 10 going down, and some comment about "what price
- 11 fight?" So, good point. Retail prices have been
- 12 going down in California and other places in the
- 13 United States and it's primarily been driven by a
- 14 continued decline in crude oil prices, which more
- 15 recently have rebounded a bit. But so maybe a
- 16 better way to say, well, has something been
- 17 changing there, we looked at what's the
- 18 difference between the retail price in
- 19 California, such as I showed earlier, and the
- 20 U.S. But we think more importantly, or
- 21 appropriate, what's the difference between a
- 22 California retail price and a neighboring state?
- 23 Because markets are different, they're supplied
- 24 by different crude oil sources, certainly the
- 25 west coast markets are similar, they have foreign

- 1 imports, Alaskan imports, Washington no local
- 2 production, California local discounted price
- 3 production, so we think looking at Washington,
- 4 looking at Nevada and Oregon and Arizona are
- 5 maybe a good place to see what's been going on,
- 6 and do we see a difference in the gap between
- 7 California and those other states? So that's
- 8 what these lines are. They're showing take the
- 9 California retail price, subtract it from these
- 10 other locations every day, Saturday, Sunday....
- 11 And so you can see, well, the U.S. price, where
- 12 did we start on the 31st of December, and where
- 13 are we as of the 5th? We're a little bit lower.
- 14 So, like, what?! What's going on there? Well,
- 15 what's been going on in other parts of the United
- 16 States is that prices have been rising in
- 17 Illinois, prices have been rising in Texas, and
- 18 where California and the West Coast prices were
- 19 declining so you can get this kind of, well, it
- 20 looks like the prices haven't changed at all
- 21 relative to the United States.
- MS. MEYERS JAFFE: Yeah, I mean, I'm
- 23 being arbitrary, but when we talk about very very
- 24 recent, you know, you have this threat of the oil
- 25 workers' strike and that was locational to

- 1 specific markets.
- 2 MR. SCHREMP: Yes, the current labor
- 3 issues on two fronts, 1) the refinery workers --
- 4 MR. HACKETT: But that doesn't show up at
- 5 retail. It's too soon for it to show up at
- 6 retail, so we need to switch to the spot
- 7 discussion.
- 8 MS. MEYERS JAFFE: Spot.
- 9 PROFESSOR BORENSTEIN: But wait, before
- 10 we go on, I just want to point out these numbers
- 11 also have huge standard errors on them, I mean,
- 12 there's a lot of uncertainty. If you took that
- 13 38.3 back a month, you would find that in
- 14 December it rose about \$.58, the differential,
- 15 which wasn't Cap-and-Trade, who knows what it
- 16 was? These numbers are just incredibly volatile.
- 17 MR. SCHREMP: There is some degree of
- 18 variability, volatility with the numbers, but I
- 19 think the longer you look at the data and compare
- 20 them to similar periods, there would be an
- 21 expectation if there's a fee or an obligation
- 22 being monetized by the fuel supply which somehow
- 23 is a line item, or embedded in their wholesale
- 24 rack price, that over time, month in and month
- 25 out, you would start to see a higher sustained

- 1 held differential that wasn't there before. So
- 2 if you go back into January of 2014 and look at
- 3 the differentials and compare them to now,
- 4 they're all up except in Nevada they're about the
- 5 same, they're all up about eight, ten cents. So
- 6 we've seen even a jump from, say, last January.
- 7 So this is just a measure of one way of looking
- 8 at prices when they're declining and moving
- 9 around, to compare them to one another.
- 10 What if I just walk through the rest of
- 11 these, and then --
- 12 CHAIRMAN SWEENEY: But before you do, if
- 13 we go through the analysis that the marginal cost
- 14 of providing gasoline now that it's under the
- 15 Cap-and-Trade system is about ten cents a gallon
- 16 more, you do the calculation of nine and a half,
- 17 so it's about ten cents a gallon. So if that
- 18 number is passed through completely, you would
- 19 expect that California relative to others to go
- 20 up about ten cents as a result of that, okay?
- 21 Nevada looks like that's about what happened.
- 22 Other states, it may have been a larger amount.
- 23 But as Severin suggests, of course there's some
- 24 high variability in these data.
- MS. MEYERS JAFFE: So the other thing

- 1 that just brings to my mind, which I'll just
- 2 mention, you know, I don't have any data to
- 3 support what I'm saying, which is that in past
- 4 analysis that I've done with retail prices, the
- 5 crude oil feedstock cost is the highest
- 6 variability, even on retail prices, and I can
- 7 show you a paper on that. So the interesting
- 8 thing is, I'm just throwing this out here, but I
- 9 don't know if it's really true, but I'm thinking
- 10 it's true, is that California is in the process
- 11 of changing where it gets its crude oil from.
- MR. SCHREMP: It's a very small change at
- 13 this point if you're referring to crude by rail
- 14 imports.
- MS. MEYERS JAFFE: Right.
- 16 MR. SCHREMP: It's one percent last year,
- 17 total volume of crude oil.
- 18 MS. MEYERS JAFFE: And is the source of
- 19 our imports changing?
- 20 MR. SCHREMP: Only in respect similar to
- 21 Washington State, Alaska crude oil source
- 22 declined for California and Washington State
- 23 because Alaska production continues to decline,
- 24 made up by, in California, greater amounts of
- 25 foreign imports from wherever, Iraq, Saudi

- 1 Arabia, South America. So we've seen a change
- 2 over the last 10, 15 years where our foreign
- 3 imports have now gone up over \$.52.
- 4 MS. MEYERS JAFFE: So the reason I
- 5 mentioned that is because Saudi Arabia, as you
- 6 know, has started this price war and therefore
- 7 they lowered all of their prices to the United
- 8 States over the last two months, so I just
- 9 mention that to make their crude very very
- 10 competitively priced compared to other crudes.
- 11 MR. SCHREMP: So I think that in
- 12 California, I mean, we don't see what crude oil
- 13 acquisition costs are. This is data that is
- 14 reported to the Energy Information Administration
- 15 on a monthly basis, and I don't know if it's
- 16 State-specific or company-specific.
- 17 MR. HACKETT: I think it's at the PADD
- 18 level.
- 19 MR. SCHREMP: So it would be PADD 5, so
- 20 say for example Tesoro would be reporting for -
- 21 (cross talk)
- 22 PROFESSOR BORENSTEIN: -- about the
- 23 economics here and what matters is the cost of
- 24 the marginal barrel they're monitoring.
- 25 CHAIRMAN SWEENEY: Yeah.

- 1 PROFESSOR BORENSTEIN: So these aren't
- 2 going to be marginal barrel, they're going to be
- 3 overall average acquisition costs, and there's a
- 4 fair amount of variation, I suspect.
- 5 CHAIRMAN SWEENEY: But, I mean, if I were
- 6 to summarize just through our data, it looks like
- 7 for Arizona and Nevada, the cost increase has
- 8 been around the order of what you would
- 9 theoretically expect from increased margin costs.
- 10 And from Oregon and Washington, it's more than
- 11 you would expect just from that alone, so we've
- 12 got to ask what those other things are going on,
- 13 of course. But at least for two of the states
- 14 you'd wonder if it didn't increase somewhat like
- 15 that and, too, you'd just wonder why it didn't
- 16 increase a little bit more.
- 17 MR. SCHREMP: So in these markets that
- 18 are interrelated, complex, ever-changing, yes,
- 19 there is always something going on. So we'll go
- 20 to the next slide.
- 21 So now let's look at the retail price and
- 22 I take it that orange line, you go, well, that's
- 23 kind of level, isn't it? And you see that blue
- 24 line down on the bottom left, that's kind of
- 25 level also. So that means the retail price

- 1 between those two states hardly changed at all
- 2 over this entire period of time. They both
- 3 either went down together or up and back down
- 4 together. So one takeaway is that, wow, it looks
- 5 like maybe the Washington-Oregon retail price
- 6 markets are behaving in a similar fashion. Well,
- 7 why would that be? Maybe because Oregon gets
- 8 most of their fuel from Washington State
- 9 Refineries, as one plausible explanation.
- 10 Arizona, Nevada, you're getting gasoline
- 11 primarily from the California refinery market,
- 12 it's all one big market, so maybe their markets
- 13 are behaving for gasoline in a similar fashion
- 14 over the same period of time. But if you take
- 15 Washington and compare it to some of the other
- 16 states, you see a decline. So what's been going
- 17 on is that Washington prices have declined more
- 18 than California, they dropped even more.
- 19 So here is where you look at the refinery
- 20 data. And lo and behold, when back at the 31st
- 21 of December when we look at the basis points, the
- 22 difference between the actual final price of
- 23 refinery wholesale gasoline and the futures
- 24 market on that day, and fast forward to the 5th
- 25 of February, we see that they were very similarly

- 1 bunched on the 31st and it grew to the tune of
- 2 about \$.13 a gallon. So the basis is much higher
- 3 in California most recently, through the 5th, and
- 4 if you go a little bit further through yesterday,
- 5 it's a little bit higher still, to Committee
- 6 member Jaffe's point, the refinery strike
- 7 nationally that has struck three refineries, two
- 8 in California, one in Washington State, has
- 9 really only had the material impact on one
- 10 refinery operations, Tesoro Golden Eagle that was
- 11 in turnaround for most of the three units and
- 12 made the decision not to use replacement workers
- 13 to bring all of the refinery back on line so that
- 14 refinery remains idle. We've seen in the spot
- 15 prices that that seems to have had an impact on
- 16 the local markets, so there is some sort of more
- 17 recent, but there is a lag effect to get into
- 18 retail. So we think that can be one reason, if
- 19 you go back one slide, please, why \$.24 and \$.22
- 20 higher since the 31st in retail price compared to
- 21 Nevada and Arizona, so one place to potentially
- 22 look is the other markets are a bit over-
- 23 supplied, if you will, the Pacific Northwest
- 24 compared to California. Next slide, go again in
- 25 the Diesel.

- 1 Same thing. Tracking on a daily basis,
- 2 diesel prices California versus the same set of
- 3 states, as well as the U.S. average, and we're
- 4 seeing a similar rise, \$.17, not quite as high as
- 5 the gasoline. Next slide, please.
- 6 And we're seeing that when you look at
- 7 the sort of pairing of Washington and Oregon,
- 8 we're seeing that, yeah, that's sort of showing a
- 9 similar pattern, there's some fluctuation there,
- $10\,$  but it's kind of sort of flat, and then Nevada
- 11 and Arizona are behaving not always the same, but
- 12 it looks like there's a bit of a premium up in
- 13 Nevada compared to Arizona. Next slide, please.
- 14 So in conclusion, it looks as though when
- 15 you look at just these daily retail prices,
- 16 California versus some neighboring states, it
- 17 does appear that there certainly is a range, the
- 18 range, as Committee member Borenstein said, does
- 19 fluctuate. But the OPIS calculation of about
- 20 \$.10 a gallon for gasoline, and about \$.13 for
- 21 diesel fuel does appear at least to fall within
- 22 the range at this time through the 5th of
- 23 February.
- 24 CHAIRMAN SWEENEY: Now you have all
- 25 retail. Now, do you have the equivalent data

- 1 here for wholesale instead of dealer tank wagon
- 2 prices, or prices that L.A. have, or something
- 3 like that?
- 4 MR. SCHREMP: So other types of pricing
- 5 data, this I think goes back into the proprietary
- 6 subscription, so we do buy daily business day
- 7 OPIS refinery wholesale prices. We do buy OPIS
- 8 rack pricing data, but individual racks in
- 9 California by individual companies, by both
- 10 branded and unbranded postings for that day,
- 11 that's once a day, each business day, so that's
- 12 information we do purchase and so we do have that
- 13 data, that proprietary data that we bought --
- 14 CHAIRMAN SWEENEY: You've seen it and you
- 15 understand it, right?
- 16 MR. SCHREMP: Well, won't ever truly
- 17 understand --
- 18 CHAIRMAN SWEENEY: No, but I mean, so you
- 19 could without revealing any confidentiality ask
- 20 whether the trends that you saw at the retail
- 21 level are very consistent with the data that you
- 22 saw at the wholesale level? You can legally say
- 23 that without violating anything. And the trends
- 24 I mean is that vis a vis Washington and Oregon
- 25 maybe up to \$.10 a gallon price difference, it

- 1 may be up to \$.15 a gallon price difference
- 2 there, when you've looked at the things that
- 3 separate out what the retail dealers are doing,
- 4 would you get it roughly the same answer?
- 5 MR. SCHREMP: I would say yes and no.
- 6 Part of the reason is the refinery wholesale
- 7 prices are only in areas with refineries, so you
- 8 won't have a commensurate Oregon refinery
- 9 wholesale price, Nevada, or Arizona --
- 10 CHAIRMAN SWEENEY: Well, you still have
- 11 Washington.
- 12 MR. SCHREMP: So we have Washington to
- 13 look at, a different product, you know,
- 14 conventional gasoline in California. With regard
- to rack distribution, truck rack wholesale 15
- 16 prices, both branded and unbranded, we have
- 17 California coverage for all fuels, we have some
- 18 limited other locations, Nevada, Arizona for
- 19 diesel fuel, but do not have commensurate
- 20 coverage for export gasoline markets at those
- 21 wholesale levels at the distribution terminals in
- 22 those two states.
- 23 CHAIRMAN SWEENEY: Okay, you've got some
- 24 caveats. So what you have learned?
- 25 MR. SCHREMP: I think what we've seen is

- 1 a rise in the diesel markets a little bit between
- 2 the California rack market and the export markets
- 3 in Nevada and Arizona. I can't speak to
- 4 Washington State.
- 5 CHAIRMAN SWEENEY: Are they consistent
- 6 with the numbers we've seen here, about \$.10 a
- 7 gallon?
- 8 MR. SCHREMP: Yes, in that range, that's
- 9 correct.
- 10 CHAIRMAN SWEENEY: Okay, but between
- 11 Washington where there isn't, where there is a
- 12 refinery in California, have you seen it rise on
- 13 the order of maybe \$.15 over that time?
- 14 MR. SCHREMP: For gasoline we've seen a
- 15 rise of -- and this is through the 5th, let's
- 16 see, let me get -- a rise of 12.6 cents, almost
- 17 13 cents between California and Washington,
- 18 between the refinery wholesale markets and diesel
- 19 fuel only about two cents.
- 20 CHAIRMAN SWEENEY: Okay, so if I
- 21 understood what you said correctly, the price
- 22 differential growth that we see is somewhat more
- 23 at the retail level than at the wholesale level,
- 24 within the caveats of the data that you have.
- 25 MR. SCHREMP: Consistently across the

- 1 states we've examined, yes.
- 2 CHAIRMAN SWEENEY: Yes, okay. Thanks,
- 3 that's helpful to know.
- 4 COMMISSIONER SCOTT: I think one thing
- 5 that we want to do here, too, and Gordon
- 6 mentioned it at the very beginning of his
- 7 excellent presentation -- he knows data like very
- 8 few other people that I know -- is this is kind
- 9 of the preliminary analysis for pulling together
- 10 the best data that we have and we'd really like
- 11 your thoughts, too, on what other data we ought
- 12 to be pulling in, whatever advice you have for us
- 13 on how we should continue to track this
- 14 information just kind of along the questions,
- 15 Chair Sweeney, of what you were asking, is also
- 16 feedback we're looking for from you all, either
- 17 today or you can send him a note.
- 18 CHAIRMAN SWEENEY: I guess my own
- 19 personal view, I'd like to understand at each one
- 20 of those levels because the retail level tends to
- 21 be more susceptible to the price dynamics; that
- 22 is, prices at the retail level tend to go up
- 23 faster than they go down and that means if you're
- 24 trending up versus down, you tend to have more of
- 25 the retail variability, whereas if you go back to

- 1 wholesale level, which in the retail it's loads
- 2 and loads and loads of different players. At the
- 3 wholesale level, it's a more limited number of
- 4 players. So I personally like to look at
- 5 different wholesale measures whether it's dealer
- 6 tank, wagon, or spot prices, or jobber prices and
- 7 so forth, to the extent that you have it. That's
- $8\,$  my personal preference for data, which is that I
- 9 hope we're able to as we move forward be able to
- 10 look at those, as well.
- 11 MR. SCHREMP: And just before Mr. Hackett
- 12 chimes in, I just want to point out with the
- 13 refinery wholesale prices, speaking of volatility
- 14 that someone brought up earlier, you can see some
- 15 significant volatility in those daily market
- 16 assessment prices. We understand, we don't see
- 17 the transactions, we don't know how many parties
- 18 have transacted on a particular day, OPIS does,
- 19 they talk to all the participants, so it's been
- 20 characterized as a thinly traded market, so you
- 21 can have a couple of really strong buyers, you
- 22 can have a pretty good spike one day, and
- 23 certainly susceptible to news, either real
- 24 tightness in the market, or perceived by some
- 25 fire, and so we see a great deal of volatility in

- 1 those prices, just want to say that that's a more
- 2 thinly traded collection of transaction prices.
- 3 Yes, Mr. Hackett.
- 4 MR. BRODY: Gordon?
- 5 MR. SCHREMP: Yes.
- 6 MR. BRODY: Gordon, it's John Brody, I'm
- 7 with Valero. Is the line item for AB 32 being
- 8 added to the invoice when at the rack, really
- 9 below the rack, for sales to retail outlets in
- 10 which case the retail prices would include the
- 11 fuels under the cap impact where the wholesale
- 12 prices upstream of that may not? And that's why
- 13 you may be seeing a larger differential state at
- 14 the retail level than the wholesale level,
- 15 because AB 32 applies to sales at the rack.
- 16 MR. SCHREMP: Thank you, John. That's a
- 17 good clarifying point.
- 18 MR. BRODY: The other comment that I just
- 19 wanted to throw out, if FRG, Federal Reformulated
- 20 Gasoline costs about \$.05 a gallon more to make
- 21 than conventional and it's 21 percent of the U.S.
- 22 market, not counting the 10 percent California,
- 23 take 21 percent of \$.05 and that's, you know, a
- 24 penny a gallon is maybe the fact of comparing
- 25 CARB, then at least maybe your differential

- 1 between average U.S. price being, you know, one
- 2 cent of that is only due to the RFG where
- 3 California is obviously is 100 percent RFG.
- 4 CHAIRMAN SWEENEY: Okay, thank you.
- 5 MR. BRODY: I think it's just CARB is
- 6 more expensive to me.
- 7 CHAIRMAN SWEENEY: Thank you for that
- 8 clarification. I'd like to move the public
- 9 comment to the end of the time period, even
- 10 though I actually appreciate that very helpful
- 11 clarifying comment.
- MR. BRODY: Okay, no problem, it's 5:30,
- 13 I'm about ready to leave.
- 14 CHAIRMAN SWEENEY: Yeah, but thank you
- 15 anyway, even though I'm telling you to stop!
- 16 MR. HACKETT: And so the issue that he
- 17 brings up is how the companies with wanting to
- 18 sort out, how they pass that additional cost
- 19 through, they put it at a price and they have it
- 20 as a line item, and so I mentioned this briefly
- 21 at the last meeting, and it sounds like it hasn't
- 22 completed sorted out yet, and so you sort of have
- 23 to be a little bit careful in your comparison at
- 24 this point because there's no clear consensus --
- 25 CHAIRMAN SWEENEY: I think that's a very

- 1 fundamental point. It still doesn't --
- 2 PROFESSOR BORENSTEIN: Which just points
- 3 out the retail, although I think there are huge
- 4 problems with all of these measures, and I think
- 5 we're taking them way too seriously for the 45
- 6 days -- I think retail is the one that right now
- 7 we can at least get some rough indication on and
- 8 not the upstream prices, which they really
- 9 haven't worked out according to what I've been
- 10 reading.
- 11 CHAIRMAN SWEENEY: Fair enough. But I
- 12 think one can --
- 13 PROFESSOR BORENSTEIN: But I think, in
- 14 general, you can't make much of these prices.
- 15 CHAIRMAN SWEENEY: -- one can in
- 16 principle find out what that is being reported,
- 17 whether it's being reported on either side of it,
- 18 and then there's the caveat: better make sure
- 19 we've got it consistently down.
- 20 PROFESSOR BORENSTEIN: And I think six
- 21 months from now or a year from now we will have a
- 22 much clearer picture both of exactly how the
- 23 reporting is being done and longer run average,
- 24 which is where it will show up. But when you
- 25 look at how these markets clear day to day, the

- 1 volatility, how it is driven by one refinery, or
- 2 one tanker showing up and the price dropping, and
- 3 then bigger demand over a weekend than expected
- 4 and the price going up, you just can't make too
- 5 much of --
- 6 MS. MEYERS JAFFE: So let me just comment
- 7 on that point. If you're working in the market
- 8 with this many refineries, and this many
- 9 shipments of gasoline and diesel fuel and
- 10 everything all around the state, and your
- 11 inventory practice is such that, whether cargo
- 12 arrives or doesn't arrive, and that kind of thing
- 13 is moving the price each day, then the industry
- 14 is not carrying enough inventory, working
- 15 inventory. That would be my statement to what
- 16 you've just said.
- 17 PROFESSOR BORENSTEIN: Well, actually not
- 18 carrying enough is an interesting question when
- 19 we're going to get to discussing market power,
- 20 but I think that there's no question that if you
- 21 look at the day to day volatility and the
- 22 differentials at the wholesale level, they are
- 23 really quite astounding.
- 24 MS. MEYERS JAFFE: I would say that that
- 25 is worth intensive study.

- 1 PROFESSOR BORENSTEIN: I agree with you,
- 2 though I'm not entirely convinced we're going to
- 3 be able to reach any definitive conclusion. It's
- 4 really tough --
- 5 CHAIRMAN SWEENEY: All right, I guess the
- 6 way I interpret it, and no disagreement with what
- 7 you have said, Severin, but I've interpreted
- $8\,$  given the variability and given what I use as a
- 9 theoretical benchmark that they should go up
- 10 about ten cents, I don't see any red flags yet to
- 11 show that there's anything that would cause us to
- 12 have significant alarm that we have a real
- 13 problem. It may be in the next six months or
- 14 year we will see such data, but no data that
- 15 you've reported so far, given the variability,
- 16 causes me to say I see an alarm bell we should be
- 17 ringing. That's what I'm making of it.
- 18 PROFESSOR BORENSTEIN: I think that's
- 19 right and just because I think there are media on
- 20 the line listening, I just don't want a reporter
- 21 to walk away saying, "Sure enough, we know
- 22 exactly what's happening." We just have the
- 23 vaguest indication of what's happened and over
- 24 time we will become more certain of that.
- 25 CHAIRMAN SWEENEY: Right, but the most

- 1 vague indication so far, it's consistent with
- 2 what we would expect to see which is not a
- 3 dramatic increase. I don't consider a dramatic
- 4 \$.10 reduction on top of the massive reduction
- 5 we've seen with the crude oil prices falling, I
- 6 would not call that dramatic.
- 7 PROFESSOR BORENSTEIN: Well, it is what
- 8 the market should be generating.
- 9 CHAIRMAN SWEENEY: Exactly.
- 10 PROFESSIONAL BORENSTEIN: Marginal costs
- 11 at \$.10 a gallon and --
- 12 CHAIRMAN SWEENEY: You'd expect prices to
- 13 go up roughly that.
- 14 MR. HACKETT: You just have to look
- 15 really hard to find it.
- 16 CHAIRMAN SWEENEY: Yeah.
- 17 PROFESSOR BORENSTEIN: There's a lot of
- 18 noise --
- 19 CHAIRMAN SWEENEY: And using my much less
- 20 rigorous methodology, and checking a few local
- 21 gasoline stations I deal with, I can't find it, I
- 22 can't find anything --
- 23 MR. HACKETT: I did see it at one gas
- 24 station down in Newport Beach, somebody put a --
- 25 a station I go by -- put it on for about a day,

- 1 put a dime on for a day and then it didn't last,
- 2 it was gone. And the competition didn't follow
- 3 him up, so he had to take it off.
- 4 CHAIRMAN SWEENEY: And I'm seeing roughly
- 5 about \$2.70 a gallon for regular and \$2.90 for
- 6 premium. But I'm going it in the urban areas
- 7 like Palo Alto, or when I last bought it there
- 8 was in Berkeley.
- 9 PROFESSOR BORENSTEIN: -- Berkeley
- 10 stations.
- 11 CHAIRMAN SWEENEY: Well, that's two. I
- 12 didn't want to run out of gasoline before I got
- 13 to --
- 14 MS. FOOTE: But what you do still see is
- 15 whoever is charging less has the lines across.
- 16 CHAIRMAN SWEENEY: Okay, let us give you
- 17 a chance for the last observations that you have
- 18 there. Have we pretty well finished this? I
- 19 think so, but does anybody have any last
- 20 questions for Gordon?
- 21 PROFESSOR BORENSTEIN: Thank you very
- 22 much, this was great.
- CHAIRMAN SWEENEY: Yeah, this is the sort
- 24 of thing other than wanting more of it, this is
- 25 the thing that I had thought that at the end of

- 1 the last meeting we said we needed in order to
- 2 have the preliminary, so I would like to thank
- 3 each of the people who have given comments so
- 4 far, just what the doctor ordered, so thank you.
- 5 I would suggest that we take -- it is now
- 6 3:40 -- that we take a five-minute break just
- 7 because we have started at I think at 3:40, yeah,
- 8 we started at about 1:15 and it's been two and a
- 9 half hours, so a five-minute break, unless
- 10 anybody objects, I think a five-minute break is
- 11 in order. But let's not expand into a 15 or 20-
- 12 minute break. Does anybody object to that?
- MR. RHYNE: All right, then we'll go
- 14 ahead and place the conference call on mute and
- 15 we will unmute when we return.
- 16 (Break at 3:40 p.m.)
- 17 (Reconvene at 3:47 p.m.)
- 18 CHAIRMAN SWEENEY: Okay, is everybody
- 19 ready for me to hit the mute button? Okay, we've
- 20 finished all the presentations. We have
- 21 opportunity for general topics regarding fuel.
- 22 This is totally open first for the Committee
- 23 members and then we will go to opportunity for
- 24 public comment. Now, you've ordered this as an
- 25 opportunity for public comment, and then that can

- 1 lead to action items because public comment
- 2 itself may suggest action items.
- 3 MR. RHYNE: Right, so the action items
- 4 were added as a way to make sure we captured
- 5 anything that was identified through the course
- 6 of the meeting for follow-up in the next meeting,
- 7 so we've already I think asked for one action
- 8 item, which would be a legal review of the PIIRA
- 9 data and our proprietary data sources.
- 10 So if there are any other specific action
- 11 items that the Committee requests, we'll make
- 12 sure to capture them. And it's added as a sort
- 13 of stopping point in the agenda to make sure that
- 14 we do talk about those items before we move
- 15 forward with the last piece.
- 16 CHAIRMAN SWEENEY: That's fine. So the
- 17 floor is open for any of the participants here in
- 18 the room.
- 19 PROFESSOR BORENSTEIN: So I was
- 20 discussing with Chair Sweeney during the break,
- 21 and I would like to make sure that there's time
- 22 at the next meeting for us to actually discuss
- 23 what -- I think the fundamental question this
- 24 Committee is going to be asked, as I said, is to
- 25 determine when there is a natural operation, a

- 1 competitive operation in the market versus some
- 2 sort of market power and I think it would be
- 3 useful to, before there is a spike, have a
- 4 discussion of what that might look like and what
- 5 data we might need to diagnose it. And I think
- 6 that would be much different than this meeting
- 7 and will have to involve a more free range
- 8 discussion that will strain the edges of Magnate
- 9 Eve. That's what we're here for.
- 10 CHAIRMAN SWEENEY: Any responses to that
- 11 comment?
- MS. FOOTE: It would be particularly
- 13 useful to have input from a number of the staff
- 14 people who are here, CEC and maybe non-CEC, as
- 15 well.
- 16 PROFESSOR BORENSTEIN: Yeah, I think it
- 17 would be very useful to have the people who are
- 18 here today, particularly (indiscernible), I'm
- 19 sure others, too, because as we discussed sort of
- 20 how firms might exercise market power and what
- 21 might be perfectly normal business operations, it
- 22 would be very useful to have people actually know
- 23 in great detail which data, that's too much, but
- 24 I --
- MR. HACKETT: Well, and so that kind of

- 1 begs the question of is there anything you guys
- 2 need, are there any data needs out there that
- 3 you're aware of that you should acquire in order
- 4 to be able to hear, be able to sort of spot these
- 5 things as they're coming at us.
- 6 CHAIRMAN SWEENEY: I guess I in principle
- 7 agree that the time to have a lot of that
- 8 conversation is before we need to make the
- 9 judgment because there's going to be many
- 10 difficult issues that you want to talk about.
- 11 What I'm concerned about in practice is that if
- 12 you were going to see a price spike and you
- 13 believed it could be because of the exercise of
- 14 market power, there's many different ways market
- 15 power could be exercised. So this discussion
- 16 would have to go through all of the various ones,
- 17 or at least the bulk of the ones, and go through
- 18 the analysis of that. And I'm not sure that we'd
- 19 be able to actually effectively go through the
- 20 type of analysis and discussion you would need
- 21 within the time period of a meeting or two
- 22 meetings and doing it. So in principle, I like
- 23 it; in practice, I'm a little dubious, whereas if
- 24 you see an actual event, then you can start
- 25 beginning to see what's happened at the beginning

- 1 instead of tracing down, you don't have to
- 2 hypothetically analyze all of the different ways
- 3 it's happening. So I'm torn. I have these two
- 4 points of view, the desire to have it ahead of
- 5 time versus the desire to keep the conversation
- 6 time-wise manageable.
- 7 MS. FOOTE: Well, in that respect I would
- 8 find it very useful to hear from all of you folks
- 9 who know the industry so much better than I do.
- 10 I mean, I think I understand something about what
- 11 market power is after all these years, but where
- 12 are the various places in all of this where
- 13 market power can be exercised? I mean, sure,
- 14 there are not that many refiners, so maybe
- 15 there's something there, but the trading aspects
- 16 are areas where there may be some sort of unique
- 17 set of circumstances that puts market power in
- 18 the hands of an individual that you normally
- 19 wouldn't think of as having market power because
- 20 of timing, or something of that sort, or because
- 21 of the thinly traded situation, or maybe because
- 22 of something to do with import/export situation,
- 23 or -- anyway, it would be very helpful to me to
- 24 just kind of itemize or almost brainstorm all the
- 25 different ways that market power, I mean, some

- 1 forms of market power kind of are always there,
- 2 but there are these situations that can create an
- 3 opportunity. I'm thinking about the energy
- 4 crisis in electricity prices back in 2000-2001,
- there were people who were able to influence the 5
- 6 market who unilaterally or normally you wouldn't
- 7 think of as having a single trader even to do
- 8 that through gaming.
- 9 CHAIRMAN SWEENEY: Yeah, you can do that.
- 10 Now, of course all of those things were litigated
- 11 over about -- I don't know if California hasn't
- 12 settled the last of the things, have they? From
- 13 2000 --
- 14 MS. FOOTE: Well, this is a different
- 15 market from that --
- 16 CHAIRMAN SWEENEY: -- litigations are
- 17 going on. So I don't think those analogies would
- 18 be --
- 19 MS. FOOTE: No, I don't think they are
- 20 analogous, this is a wholly different market, so
- 21 it's one as to which there may or may not be
- 22 those kinds of opportunities.
- 23 CHAIRMAN SWEENEY: I think you could
- 24 identify places where supply can be reduced,
- 25 whether it's in the imports or pipelines and the

- 1 refining operations.
- 2 PROFESSOR BORENSTEIN: Or storage.
- 3 CHAIRMAN SWEENEY: And storage, all of
- 4 those things. I guess my speculation is that we
- 5 will see an event, a physical event, let's be
- 6 hypothetical now, a fire in a refinery in
- 7 Richmond, for example, that reduces supply. And
- 8 then prices spike somewhat, and you can go
- 9 through analysis. Well, if we saw that, then we
- 10 would focus a lot of our attention onto decisions
- 11 that a refiner could make and recover from that,
- 12 and how it could exercise market power. We might
- 13 not in that case then go through all of the
- 14 examples of how a refinery -- a terminal could
- 15 changes things, or how pipeline changes could
- 16 make it, so it's just the idea that basically any
- 17 place in the supply chain that you are
- 18 deliberately holding back supply could have an
- 19 impact, and if we analyze all of them ahead of
- 20 time, I'm wondering how manageable that would be.
- 21 PROFESSOR BORENSTEIN: Oh, well, I think
- 22 actually analyzing them ahead of time will allow
- 23 us to say these are places that look more
- 24 vulnerable and these are places that actually
- 25 look like they're pretty robustly competitive.

- 1 And that would be very useful to do beforehand.
- 2 You know, I don't know the facts but we might
- 3 find out there is plenty of pipeline capacity
- 4 bringing the fuel in, and this I know is not
- 5 true, but to bring fuel in from out of state to
- 6 one part of California, but not to another part
- 7 of California, that would change what we would
- 8 then focus on when an event occurs. I also am
- 9 not entirely convinced that we should just think
- 10 about a big event.
- 11 CHAIRMAN SWEENEY: No, anything that led
- 12 to a price spike, sure. I'm just speculating
- 13 that that's more likely --
- 14 PROFESSOR BORENSTEIN: Not even a price
- 15 spike, but just perpetually higher prices, so if
- 16 we started to see over time the price
- 17 differential between California than the rest of
- 18 the United States, moving in a way that we don't
- 19 understand, then I think that would be something
- 20 we'd want to look at.
- 21 CHAIRMAN SWEENEY: Are you suggesting
- 22 just movements from the status we've had in the
- 23 last few years, or further a full evaluation of
- 24 why the prices are now much higher in California
- 25 than other places?

l professor b	BORENSTEIN:	Well,	I	think
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- 2 that's actually a pretty straightforward thing to
- 3 do and I think I've done it, Gordon just did it
- 4 in a way, but I think if we started to see sort
- 5 of a six month or year-long period with much
- 6 higher or lower margins, that's the sort of thing
- 7 we could add value and delve into and say, well,
- 8 why is this happening? So I was on the Attorney
- 9 General's Gasoline Price Task Force in 1999 and
- 10 2000, the issue has been on the table a long
- 11 time, and I remember one of our recommendations,
- 12 that study might be worth pulling up again, one
- 13 of the recommendations was a concern that the
- 14 wholesale market wasn't sufficiently liquid, and
- 15 so there weren't a tanker coming in, actually
- 16 it's back to the '80s or later, had a really
- 17 noticeable effect and the risk of bringing a
- 18 tanker in when it took two weeks to get it here
- 19 was substantial. And one suggestion was do
- 20 something to create a more robust futures market
- 21 in California for California fuel, and one
- 22 recommendation I think was that the State, which
- 23 apparently buys about one percent of all
- 24 California fuel, would sign long term contracts,
- 25 or sign futures contracts for that fuel in order

- 1 to participate in the market and make it more
- 2 likely. I'm not saying that we should be talking
- 3 about that now, but those are the sorts of ideas
- 4 about how to make the market --
- 5 MR. RHYNE: So can I -- not to interject
- $6\,$  -- I want to make sure that I understand what I'm
- 7 hearing from the Committee members. Committee
- 8 member Foote was suggesting what I thought was an
- 9 analysis of where might the California Petroleum
- 10 Market be vulnerable to the exercise of market
- 11 power, or more or less vulnerable, rather than
- 12 sort of a detailed analysis after the fact of a
- 13 specific event. And I'm hearing you, Committee
- 14 member Borenstein, sort of taking that and
- 15 saying, well, one of the things that you looked
- 16 at is the potential for, or made a recommendation
- 17 at one point of adding some liquidity to the
- 18 market under a previous effort --
- 19 PROFESSOR BORENSTEIN: Just to be clear,
- 20 this wasn't mine, we had a group of 30 people --
- 21 MR. RHYNE: Sorry, it was a suggestion
- 22 made by that group to add liquidity to the
- 23 market, and that might be one of many possible
- 24 options that might be recommended going forward
- 25 at some point if analysis suggests it.

- 1 PROFESSOR BORENSTEIN: But actually my
- 2 bigger point was that that committee looked into
- 3 what are the vulnerabilities, what are the sort
- 4 of potential sticking points, and found that this
- 5 problem with not having enough liquidity to
- 6 import gasoline without -- basically it would be
- 7 a big risk, but it's a potential problem in the
- 8 sort of competitive functioning of the market.
- 9 It sounds like that's actually become less of a
- 10 problem, there's more liquidity in the wholesale
- 11 market now. But it needs to get some
- 12 recommendations, I don't know.
- 13 CHAIRMAN SWEENEY: If we're going to go
- 14 down this route, then it would seem useful to
- 15 resurrect any of the past studies that have
- 16 looked at this in depth. And your committee
- 17 presumably was public record.
- 18 PROFESSOR BORENSTEIN: Oh, yeah.
- 19 CHAIRMAN SWEENEY: So it can be -
- 20 MR. HACKETT: No, but I got some follow-
- 21 on work from that.
- 22 CHAIRMAN SWEENEY: So if we're going to
- 23 go down this road, I think it would be at least
- 24 efficient to bring in things that happened and
- 25 the Attorney General's Office may have done some

- 1 things before because you've been asked many more
- 2 times than you can count to investigate this
- 3 market. And there may be something that can be
- 4 made public. I know you're not operating
- 5 generally in the public mode, but something may
- 6 be made public that we can bring if we're going
- 7 to do this. So I guess if we're going to do it,
- 8 I would like us to do it in a serious way, not a
- 9 half way basis, and then recognize that to get
- 10 that handle we're going to have to schedule
- 11 significantly longer meetings because I think the
- 12 debate about this will be in this open meetings
- 13 setting and --
- 14 PROFESSOR BORENSTEIN: Well, in some ways
- 15 we've been spending time on all the set-up of the
- 16 committee, which has been mostly the last meeting
- 17 and a chunk of this meeting, I hope we won't have
- 18 to do that again, so now we can spend time on the
- 19 present.
- 20 CHAIRMAN SWEENEY: Yeah.
- 21 PROFESSOR BORENSTEIN: I will try to find
- 22 that report and you guys probably got a copy,
- 23 because I probably won't be able to find it, and
- 24 I also wrote a paper in 2004 on market power
- 25 issues in California's gasoline market, which

- 1 also sort of --
- 2 CHAIRMAN SWEENEY: Yeah. And maybe in
- 3 doing that, you probably identified a group of
- 4 others that is a group of other studies that you
- 5 viewed had good intellectual quality that you can
- 6 make sure we all get copies of that. Is there an
- 7 easy process, I guess, to make sure it's both
- 8 available to us and available to the public? Is
- 9 that something --?
- MR. RHYNE: Anything that's available
- 11 online we can simply repost under our Petroleum
- 12 Market Advisory Committee site if that's what you
- 13 would choose to do, and that would centralize
- 14 that information.
- 15 CHAIRMAN SWEENEY: I think we need
- 16 something that's centralized, something therefore
- 17 that we can each get an access to, and that
- 18 anybody who is interested in following the nature
- 19 of the discussion here and the public can also
- 20 get that same access.
- 21 MR. RHYNE: I will set up sort of a sub
- 22 folder on Petroleum Market Advisory Committee
- 23 website for Market Power Related Studies and
- 24 Information. That sub folder will be publicly
- 25 accessible and so anything that is shared with me

- 1 and directed to put up there, I will have put up
- 2 there.
- 3 CHAIRMAN SWEENEY: And --
- 4 PROFESSOR BORENSTEIN: Actually, can I
- 5 just add? If the Attorney General's Office or
- 6 anyone knows of a legal discussion of what
- 7 activities are legal or illegal, I suspect you've
- 8 done this analysis in most anti-trust settings
- 9 simply raising your price and acting unilaterally
- 10 is not considered illegal, and I would love to
- 11 see something that actually goes through that
- 12 carefully. I'm not asking you to --
- MS. FOOTE: I bet every oil company has
- 14 internal compliance.
- 15 PROFESSOR BORENSTEIN: And they are
- 16 certainly not going to show them to us.
- MS. FOOTE: That tells everybody exactly
- 18 what is legal and what isn't.
- 19 CHAIRMAN SWEENEY: Right, but if there is
- 20 something that has at some level, I mean, there's
- 21 the standard anti-trust, you know, legal analyses
- 22 applies specifically here, that would be good.
- 23 Now, I guess the time, we have to pay attention
- 24 to the timing of this. I believe that in the
- 25 next meeting we're still going to want to have

- 1 some time for looking at data in even more depth
- 2 than we have now so we can see some of this price
- 3 status, so that would be one of the things that
- 4 we're going to have to do. We've had the basic
- 5 briefings on these things, although we probably
- 6 are going to want an update on the Low Carbon
- 7 Fuel Standard because, between now and then, the
- 8 Air Resources Board is going to either adopt
- 9 those rules or going to modify those, and so we
- 10 either know that they've been adopted or modified
- 11 in some way, so we're going to probably have
- 12 that. But we do envision then starting this
- 13 conversation as early as the next meeting?
- 14 PROFESSOR BORENSTEIN: I'd love to, yeah,
- 15 I think the sooner the better. Actually, that
- 16 reminded me of one piece of data that did not
- 17 come out of the meeting today, which is the
- 18 tracking of the prices of the California Cap-and-
- 19 Trade allowances because they're actually
- 20 (indiscernible).
- 21 CHAIRMAN SWEENEY: Yeah.
- MR. WADE: Are you guys looking for ARB
- 23 to produce that slide?
- 24 PROFESSOR BORENSTEIN: If you want to -
- 25 actually, I don't want just the quarterly options

- 1 though because that's not enough data, so there
- 2 are other indexes.
- 3 MR. WADE: Yes.
- 4 CHAIRMAN SWEENEY: Okay, so that's the
- 5 first topic. And I think -- I don't hear any
- 6 Committee member or anybody seriously objecting
- 7 to it, I just have my concern about the viability
- 8 of it, but we'll find out. We'll start it and
- 9 we'll find out how many rabbit holes that we end
- 10 up having to go down, but there's no reason to
- 11 not start that.
- MS. FOOTE: All it takes is a really good
- 13 Chair, and we know we've got that.
- 14 CHAIRMAN SWEENEY: Yeah, we've got, I
- 15 mean, you've got pretty nice chairs in this
- 16 conference room, they're a little hard, but if
- 17 we're going to have a long meeting, I'd like
- 18 softer chairs if we could.
- 19 Okay, are there other topics that any of
- 20 the Committee members would like to bring to the
- 21 table, or any of the people from the various
- 22 State agencies? In which case I think it's time
- 23 to go to the public comments.
- 24 MR. RHYNE: Okay, so I'm going to mention
- 25 before we get into public comment, if there's

- 1 anyone online who would like to comment, the
- 2 phone line is open and we also have the chat
- 3 function on WebEx, so if you find it easier to
- 4 provide your question via the chat function,
- 5 please do so, but we will also ask that, as you
- 6 unmute your phone if there's a lot of feedback,
- 7 to be careful and just mute that again, otherwise
- 8 we will have to mute you from this end.
- 9 CHAIRMAN SWEENEY: How do you deal with
- 10 the order so that people know when they can get
- 11 in --?
- MR. RHYNE: I would recommend that we
- 13 start first with the people in the room, we open
- 14 the floor to those, anyone in the room who does
- 15 wish to speak we'll ask you to provide your name
- 16 and title so that the Court Reporter can have
- 17 that. And seeing none, I don't think we have
- 18 anyone here.
- 19 CHAIRMAN SWEENEY: No, we don't have.
- 20 MR. RHYNE: If there is anyone online,
- 21 I'll ask you, you can use the chat function to
- 22 let me know that you have a question; once you
- 23 do, I will sort of let you know to go ahead
- 24 first. So I'll pause for a moment. Anyone who
- 25 wishes to address the Committee with a question

- 1 or a comment, please just pop into the chat
- 2 function on WebEx and let me know now, and then
- 3 I'll call out your names in the order that I see
- 4 you pop up here. So I'll just pause for a
- 5 moment. So, Mr. Chairman, I don't see anything
- 6 popping up on the chat window.
- 7 CHAIRMAN SWEENEY: Then I'd like to
- 8 invite anybody who is there that is having a
- 9 computer problem to just speak up right now.
- 10 Hearing none, I'd like to move on to the next
- 11 issue, Action Item Topics for Next Meeting.
- 12 We've really mostly done that. But are there
- 13 other topics that you -- I think we've listed
- 14 each one of the things we want to do.
- MR. RHYNE: Before we add anything new,
- 16 please let me recap what I have.
- 17 CHAIRMAN SWEENEY: That's helpful, thank
- 18 you.
- 19 MR. RHYNE: So the first item is the
- 20 Energy Commission Legal is going to provide just
- 21 an exact sort of status with regard to this
- 22 Committee and its ability to access both, or not
- 23 access, both Petroleum Information Reporting Act
- 24 data, as well as proprietary data, under what
- 25 circumstances they can be accessed and under what

- 1 forums, and whether or not there are any
- 2 requirements to sign things like an NDA.
- 3 MS. ARENS: We hope to have that by the
- 4 next meeting, but at the very least, we'll give
- 5 you an update on the status of our analysis.
- 6 COMMISSIONER SCOTT: Yeah, we probably
- 7 need an answer at the next meeting, so I'm not
- 8 quite sure when the next meeting will be, but we
- 9 should figure out how to make sure that we have
- 10 some clear answers for you all. We'll continue
- 11 to volunteer the Legal Office to you, have that
- 12 if we can, and I'll check with them to make sure
- 13 it's okay in writing to you in advance, to your
- 14 point, that we don't spend so much of the meeting
- 15 kind of on the procedural stuff. And you can
- 16 take a look at it, and if you have questions
- 17 maybe we can jump in with questions instead of
- 18 walking through a memo in detail, but that's up
- 19 to how you all would like to --
- 20 CHAIRMAN SWEENEY: Because this is
- 21 relevant, maybe we should talk about the
- 22 timeframe that we have in mind about the next
- 23 meeting, we'll still do the doodle poll to do it.
- 24 Are we considering doing it roughly quarterly
- 25 now? Do we see a need for moving it faster than

- 1 three months from now, say two months from now?
- 2 Any thoughts? First I'd like to ask --
- 3 MR. RHYNE: So the charter is pretty
- 4 clear that you adopt it earlier and I believe
- 5 also in the Bylaws that the meetings are meant to
- 6 be at least quarterly, however they could be more
- 7 frequently if you as Committee members, or the
- 8 Commission, request it to be so for a particular
- 9 event, or something going on. I would think, and
- 10 I'm thinking out loud here, based on what I have
- 11 with regard to data requests and the direction
- 12 that I heard you moving with regard to the market
- 13 power sort of topic focus, that three months may
- 14 be appropriate.
- 15 CHAIRMAN SWEENEY: I think it's going to
- 16 take you some time to gather this data, you can
- 17 make those judgments yourselves, do the legal
- 18 analysis, and do the filtering of it --
- 19 MR. RHYNE: Which would be right around
- 20 the May timeframe.
- 21 CHAIRMAN SWEENEY: Yeah. So I would
- 22 propose roughly on the order of three months
- 23 unless somebody suggests differently. But then
- 24 we'll do the doodle poll to figure out some time
- 25 that we can -- what was really good, you kept

- 1 working the problem until you could get all
- 2 members of the committee able to do it, and I'd
- 3 like to keep shooting for that target.
- 4 PROFESSOR BORENSTEIN: So then the
- 5 related question is location. I'm not sure this
- 6 worked for everybody. We are happy to host, but
- 7 if you want to move back to the CEC, we're happy
- 8 to do that, too.
- 9 CHAIRMAN SWEENEY: I have a strong
- 10 preference that, even though it's impossible to
- 11 park in Berkeley --
- 12 PROFESSOR BORENSTEIN: It's not
- 13 impossible, I'll show you.
- 14 CHAIRMAN SWEENEY: You've got to give me
- 15 good information. But I would much rather go to
- 16 Berkeley than Sacramento.
- 17 PROFESSOR BORENSTEIN: I would too, but I
- 18 suspect there's a whole bunch of people here who
- 19 would --
- 20 CHAIRMAN SWEENEY: How about some of you?
- 21 COMMISSIONER SCOTT: We're happy to come
- 22 to Berkeley, that's fine.
- 23 PROFESSOR BORENSTEIN: Would a Friday
- 24 afternoon be -- do you live down here?
- 25 COMMISSIONER SCOTT: I live in

- 1 Sacramento.
- 2 PROFESSOR BORENSTEIN: I know there's
- 3 some Sacramento people who actually live in the
- 4 Bay Area and Friday afternoons are better.
- 5 CHAIRMAN SWEENEY: And you're in San
- 6 Francisco?
- 7 MS. FOOTE: I'm in San Francisco.
- 8 MR. HACKETT: I'm in Irvine, but my 90-
- 9 year-old mom is up here, so it works out pretty
- 10 well for me to drive up and spend a couple days
- 11 with mom and then come over for this meeting, so
- 12 this is fine.
- 13 CHAIRMAN SWEENEY: So how do you guys
- 14 feel about coming down here versus Sacramento?
- 15 PROFESSOR BORENSTEIN: This is good?
- 16 Okay.
- 17 CHAIRMAN SWEENEY: Okay, so we got the
- 18 related issue pretty well solved.
- MR. RHYNE: Great. So we'll target the
- 20 next meeting to be here in Berkeley, potentially
- 21 this room, in fact, and I will set up -- and
- 22 that's on the list of to-do's now -- set up a
- 23 doodle poll, again working through the same
- 24 process we did last time to identify black-out
- 25 dates first, set up the doodle poll, and then

- 1 we'll schedule a meeting date.
- 2 CHAIRMAN SWEENEY: All right, and it
- 3 worked well, and I just want to reemphasize I
- 4 think it's important to find a time when we're
- 5 all in the room and you did that really well this
- 6 time, and you've got a track record now.
- 7 MR. RHYNE: Okay, let me go through the
- 8 remainder of the to-dos here. So I will be
- 9 working with our Web Department to add a place on
- 10 the Petroleum Market Advisory Committee website
- 11 for Market Power Issues. There's also a standing
- 12 request for anyone who has access to or knows of
- 13 a study focusing on market power to provide that
- 14 to me, as long as it is publicly available, it
- 15 can't be something confidential or proprietary
- 16 that we can't share with the public. And, Mr.
- 17 Chairman, I would actually suggest that we open
- 18 that request to even the general public who might
- 19 be listening if they would provide a publicly
- 20 available document, I don't think it would be a
- 21 problem at all.
- 22 CHAIRMAN SWEENEY: I think that's quite
- 23 appropriate. I would like to request if they do
- 24 that, let us know what its status is: is this
- 25 something that has been published in a peer

- 1 reviewed literature? Is it something within as a
- 2 consulting report for a particular client? If
- 3 so, who is the client? So we can have a little
- 4 context and know about that. But, yes, I think
- 5 that would be very valuable.
- 6 MR. RHYNE: The Committee has asked for
- 7 at the next meeting an update on the Low Carbon
- 8 Fuel Standards, which should include a slide, at
- 9 least on Cap-and-Trade prices, not necessarily
- 10 the auction prices, but in fact the --
- 11 PROFESSOR BORENSTEIN: Those are two
- 12 separate topics, Cap-and-Trade and --
- 13 CHAIRMAN SWEENEY: Yeah, those are two,
- 14 yeah.
- 15 PROFESSOR BORENSTEIN: An update on AB
- 16 32.
- MR. RHYNE: Right, AB 32.
- 18 COMMISSIONER SCOTT: Let me just note, I
- 19 think, Sam, your timing, did you say a July Board
- 20 Meeting, so that --
- 21 MR. WADE: If it would be fully adopted
- 22 by May, the Board should act in July if they feel
- 23 it's appropriate to do so.
- 24 CHAIRMAN SWEENEY: But don't you have the
- 25 first meeting which they tentatively review it at

- 1 that time?
- 2 MR. WADE: Yeah, there is no voting
- 3 action at that February meeting.
- 4 CHAIRMAN SWEENEY: So would the thing
- 5 they review be substantially different than what
- 6 you presented, possibly?
- 7 MR. WADE: It is possible, but there's a
- 8 procedure for changes between those two Board
- 9 hearings in response to stakeholder comments --
- 10 CHAIRMAN SWEENEY: So maybe a short
- 11 report saying nothing has changed?
- MR. WADE: Yeah, okay, we can do that.
- 13 We can also provide the Cap-and-Trade prices and
- 14 LCFS prices.
- 15 CHAIRMAN SWEENEY: Right.
- 16 MR. RHYNE: And finally the last item on
- 17 here was for me to set up a doodle poll and
- 18 schedule the next meeting.
- 19 CHAIRMAN SWEENEY: Great. The other
- 20 thing that's implicit is sending us the draft
- 21 Minutes of the meeting relatively soon after the
- 22 meeting. It's much better for memories. The
- 23 longer we wait, the fuzzier memories might be, so
- 24 if you get that reasonably early, and then the
- 25 Committee members can all give any comments they

- 1 have while their remembrances are fresh.
- MR. RHYNE: Given that we've established
- 3 now what those Minutes can look like, and the
- 4 fact that I've got a good set of notes here, I
- 5 don't see that being a problem. We'll get those
- 6 out relatively quickly.
- 7 CHAIRMAN SWEENEY: Great. Anything else?
- 8 MR. RHYNE: Okay.
- 9 CHAIRMAN SWEENEY: Okay, now, there's a
- 10 last item on here.
- MR. RHYNE: So the last item on the
- 12 agenda was intended originally, or was originally
- 13 thought to be an item that would be held in
- 14 closed session and, in fact, it was mentioned in
- 15 the meeting notice as being a closed session item
- 16 to consider Bylaws. Bylaws as distinct from the
- 17 charter are binding on Committee members and have
- 18 been drafted by our Legal Office, and they have
- 19 recommended that in order to be in compliance
- 20 with the Open Meeting Laws, that we really should
- 21 have this discussion and perhaps adoption in an
- 22 open session, and so as directed by the Chair, I
- 23 have added that to the Agenda as an open item,
- 24 and Mr. Chairman, the Draft Bylaws are there in
- 25 your packet and I do have a version available.

- 1 MS. ARENS: I would just like if we could
- 2 circulate it.
- 3 CHAIRMAN SWEENEY: It's one sheet, I'm
- 4 still looking for this.
- MS. FOOTE: Do you want to borrow mine?
- 6 CHAIRMAN SWEENEY: I must have one right
- 7 here. There it is.
- 8 MS. ARENS: We can certainly discuss the
- 9 subject today, but in terms of adoption if we
- 10 want to move to adopt it, we would need to do
- 11 that at the next meeting.
- 12 CHAIRMAN SWEENEY: Yeah, I think the
- 13 useful thing -- now, has this been posted on the
- 14 website so everybody --
- 15 MR. RHYNE: It is now up online, so
- 16 anyone on WebEx can see it.
- 17 CHAIRMAN SWEENEY: Okay. Let's take a
- 18 moment to read it.
- 19 Okay, now help us fully understand the
- 20 relationship between this and the charter. You
- 21 say these are binding on us, the charter is not
- 22 binding. But this in many ways repeats in a more
- 23 formulaic manner the things that are in the
- 24 charter. Help us understand what we're voting
- 25 on.

- 1 MS. ARENS: You did adopt the charter
- 2 today, so --
- 3 CHAIRMAN SWEENEY: Yeah, we adopted it.
- 4 MS. ARENS: So that will likely be binding
- 5 on you, but the bylaws have some specifics that
- 6 are not contained in the charter, for example, a
- 7 resignation, non-delegation of duties,
- 8 confidential information, what constitutes a
- 9 quorum, but decisions will be made on a consensus
- 10 basis. Those are some examples of procedural
- 11 items that I don't believe are in the charter.
- 12 The Bylaws also have an article, Rules of Order
- 13 which are not binding, but in the event you
- 14 wanted to do something and you weren't sure of
- 15 the procedure there, you could turn to these
- 16 Rules of Order. So this, I think it would be a
- 17 more procedural item.
- 18 CHAIRMAN SWEENEY: So we have two
- 19 questions that we face. Do we feel, first, are
- 20 there things that anybody sees now that they'd
- 21 like to change? And, 2) do you feel comfortable
- 22 enough with these that you'd like to adopt them
- 23 today or wait until a subsequent meeting?
- 24 MS. ARENS: Well, I think we must adopt
- 25 them at a subsequent meeting because we haven't

- 1 noticed potential adoption of the Bylaws. The
- 2 notice that went out of the published agenda was
- 3 just for discussion of the Bylaws.
- 4 CHAIRMAN SWEENEY: Fair enough.
- 5 MS. ARENS: So we can certainly discuss
- 6 them today, but if you want to think about
- 7 adopting them, that would need to wait --
- 8 CHAIRMAN SWEENEY: Okay, excellent. Does
- 9 anybody see any objections here? I only see one
- 10 thing, but I don't object to the words. If
- 11 anybody wants to play games with Roberts Rules of
- 12 Order --
- 13 PROFESSOR BORENSTEIN: I hate Roberts
- 14 Rules of Order.
- 15 CHAIRMAN SWEENEY: I hate them. I think
- 16 that that has to be definitive at the end, but if
- 17 anybody starts playing that, I'm going to resign
- 18 within the 30-day notice.
- 19 MS. ARENS: Well, we could, you know,
- 20 those were a suggestion by our Acting Chief
- 21 Counsel to put that in there as something you
- 22 could turn to if you wanted to, but if you don't
- 23 like them, we can delete this.
- 24 MS. FOOTE: There's -- actually, I like
- 25 Roberts Rules of Order myself because everybody

- 1 pretty much knows what they are and how they
- 2 work, and anything else --
- 3 CHAIRMAN SWEENEY: Could be worded as --
- 4 MS. FOOTE: -- as being misunderstood.
- 5 There is sort of a Roberts Rules of Light that I
- 6 think League of Women Voters and organizations
- 7 like that sometimes send out to nonprofits and so
- 8 on that, you know, we might look at. But I think
- 9 we've actually been operating on Roberts Rules of
- 10 Order pretty comfortably. So far.
- 11 CHAIRMAN SWEENEY: It's the spirit, but
- 12 there's a formality of Robert's Rules of Order
- 13 that we have not followed all the way in asking
- 14 who is going to speak, how much time they're able
- 15 to take, who gives the floor, it's that formality
- 16 that I don't like. The spirit, I think it's a
- 17 very sensible --
- MS. FOOTE: Those are optional.
- 19 CHAIRMAN SWEENEY: Yeah, I think the way
- 20 we're running the meetings, if anybody objects,
- 21 you know, we can talk about it easily. So I
- 22 don't object to saying this, my intention is that
- 23 if we get down to using the details of Roberts
- 24 Rules of Order, then we really miss the point of
- 25 what we're trying to do, we're trying to get an

- 1 intellectual progress on this. So I don't object
- 2 to it, but just as long as nobody wants to take
- 3 too much emphasis. What?
- 4 PROFESSOR BORENSTEIN: We have way too
- 5 good a Chair; that will never happen.
- 6 CHAIRMAN SWEENEY: But you need better
- 7 seat covers on these chairs.
- 8 MS. ARENS: We may not prefer language
- 9 here for Article 5 is discretionary, it says
- 10 Roberts Rules may govern the committee, and so if
- 11 there's a particular instance when you want
- 12 guidance, my intent here was to allow you to use
- 13 those rules, but if you wanted to be less formal
- 14 in the ordinary course of business, you wouldn't
- 15 necessarily have to.
- 16 CHAIRMAN SWEENEY: Yeah. I think I don't
- 17 object; and so if I look through I don't see
- 18 anything. First, the substance of what we're
- 19 doing we've already agreed to in the charter.
- 20 The processes that a member can resign, I thought
- 21 that was implicit anyway. Thirty days written
- 22 notice, sure, you give 30 days, but if you stop
- 23 performing you stop performing. Non-delegation
- 24 of duties, so I don't see anything remarkable to
- 25 object about this. But does anybody see anything

- 1 they don't like?
- MS. FOOTE: It looks good to me.
- 3 CHAIRMAN SWEENEY: So then because
- 4 they're not noticed, they should be noticed for
- 5 next meeting, and they'll be the first item of
- 6 business, no, the second item after the Minutes
- 7 adopted.
- 8 MR. RHYNE: Okay.
- 9 CHAIRMAN SWEENEY: Okay, are there other
- 10 items of business?
- 11 MR. HACKETT: There were some letters in
- 12 our package, people expressing concerns about the
- 13 impact of the work slowdown in the ports, and so
- 14 can you talk about why we got those?
- 15 MR. RHYNE: So the Committee was provided
- 16 some information on background that covered some
- 17 letters that were sent to the Energy Commission
- 18 regarding two different issues, one was the work
- 19 slowdown at the Ports, and second was the ongoing
- 20 labor issue that has affected at least two of the
- 21 refineries here in California and an additional
- 22 one in I think it was Washington that Gordon
- 23 mentioned. That information was provided
- 24 precisely because, while the Energy Commission
- 25 has no position with regard to the labor status,

- 1 and those are being worked out by the appropriate
- 2 parties at this point, those are issues that can
- 3 have corollary ripple effects on the petroleum
- 4 market in California, and it is always possible
- 5 that those topics could come up at these
- 6 meetings. And so in providing that information,
- 7 it was meant as a piece of background information
- 8 should somebody comment or mention, "Oh, you know
- 9 that letter that was sent," and you as Committee
- 10 members, I think, certainly had good reason to at
- 11 least be aware of what the content of that letter
- 12 was and, in fact, what it said.
- 13 CHAIRMAN SWEENEY: I think that was a
- 14 very good practice; that is, if things come to
- 15 your attention that could be relevant for us, get
- 16 it to us in our hands and we'll decide, each
- 17 individually, what weight we should give to the
- 18 bit of evidence that is presented for that. But
- 19 if you keep the stream or flow of information up,
- 20 then we have the opportunity to respond or not
- 21 respond. So thank you, I think that's the right
- 22 way of doing it. In which case I declare this
- 23 meeting adjourned.
- 24 (Whereupon, at 4:32 p.m., the meeting was
- 25 adjourned.)

## REPORTER'S CERTIFICATE

I do hereby certify that the testimony in the foregoing hearing was taken at the time and

place therein stated; that the testimony of said witnesses were reported by me, a certified electronic court reporter and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

And I further certify that I am not of counsel or attorney for either or any of the parties to said hearing nor in any way interested in the outcome of the cause named in said caption.

IN WITNESS WHEREOF, I have hereunto set my hand this 2nd day of March, 2015.

Kent Odell
CER\*\*00548

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## TRANSCRIBER'S CERTIFICATE

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

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Karen Cutler Certified Transcriber AAERT No. CET\*\*D-723