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JOINT AGENCY WORKSHOP

BEFORE THE

CALIFORNIA ENERGY COMMISSION

In the Matter of:	)
	) 23-OIIP-01
Maximum Gross Gasoline	)
Refining Margin and Penalty	)
	)
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CALIFORNIA ENERGY COMMISSION

THE WARREN-ALQUIST STATE ENERGY BUILDING

ART ROSENFELD HEARING ROOM - FIRST FLOOR

1516 NINTH STREET

SACRAMENTO, CALIFORNIA 95814

THURSDAY, APRIL 11, 2024

9:00 A.M.

HYBRID IN-PERSON AND ONLINE VIA ZOOM

Reported by
Elise Hicks

APPEARANCES

CEC

Commissioners

Siva Gunda, Vice Chair

On the Dais:

Jeremy Smith, Deputy Director Energy Assessments Div.
Tai Milder, Director Div. of Petroleum Oversight
Nick Maduros, Director California Department of Tax and Fee Admin.
Drew Bohan, Executive Director, CEC

Presenters

Dr. Gigi Moreno, Chief Economist Div. Petroleum Oversight
Dave Hackett, Chairman, Stillwater Assoc.
Tom O'Connor, Senior Director Energy Markets, ICF
Matt Zaragoza-Watkins, Economist

Public Comment

Sophie Ellinghouse
Connie Cho
Amanda Gray
Julia May
Julian Canete
Megan Schwartz
Doug Kessler
Timothy Sher
Aaron Flyer
Peter Krueger
Louis Diaz

I N D E X

PROCEEDINGS

APRIL 11, 2024 9:01 a.m.

DEPUTY DIRECTOR SMITH: Good morning, everyone. My name is Jeremy Smith. I'm a Deputy Director in the Energy Assessments Division. I'd like to welcome and thank you all for joining this California Energy Commission SB X1-2 Workshop

We've held several workshops on the various elements of this legislation, but today's workshop is our second on exploring the maximum gross gasoline refining margin and penalty.

Before we begin the presentation, I'd like to share some housekeeping items with everyone. First and foremost, please be aware this meeting is being recorded. Attendees will have an opportunity to participate in today's workshop by providing oral comments during the allotted public comment period. You can also submit written comments, which are due by 5:00 p.m. on Friday, May 3rd. We will have a slide at the end of the presentation with details on how to submit comments to the docket.

For in-person attendees, restrooms are in the atrium out the door and to the left. If there is an emergency and we need to evacuate the building, please follow the staff to Roosevelt Park which is across the street diagonal to the building.

Would you go to the next slide, please.

On the screen is the agenda for today's workshop. I'll start by providing some background which will be followed by opening comments from the dais. Afterwards we'll have staff presentations by myself and Gigi Moreno, Chief Economist from the Division of Petroleum Oversight.

Following the staff presentations we'll have comments from the dais. In the second half of the workshop this morning we'll have additional presentation by industry experts Dave Hackett, Chairman of Stillwater Associates, and Tom O'Connor, Senior Director of Energy Markets at ICF.

After these presentations, we'll have comments from the dais again, and then we will provide time for public comment followed by closing remarks.

Next slide.

So, before I hand it over to the dais for opening comments, I'd just like to set the stage for today's workshop.

SB X1-2 was signed by Governor Newsom in March of 2023, and went into effect in June. The law prescribes numerous activities that the CEC is responsible for. I won't touch on all these, but I will mention those that we've been most active on since the bill was signed.

First, the law expanded CEC's data collection authority to support the various implementation activities.

Since June of last year, CEC has been collecting additional information on refinery costs and profits, refinery maintenance and turnarounds, and spot market transactions, to name a few.

The law also established the Division of Petroleum Market Oversight to investigate potential market manipulations.

CEC is also tasked with conducting a transportation fuels assessment every three years that looks at how the state might implement tools to ensure a reliable supply of transportation fuels given the supply and demand conditions in the state.

And that leads me to the topic of today's workshop, the legislation authorizes the Energy Commission to set a maximum gross gasoline refining margin and penalty.

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This slide shows the timeline for investigating and making a recommendation on refiner margin and penalty. As I noted earlier, the bill was signed in March of 2023, and the CEC began collecting data in June.

The order instituting informational proceeding was approved at the CEC business meeting in October 2023, kicking off the investigation into the maximum gross refining margin.

CEC hosted the first workshop on this topic in late November last year, which included a presentation by Economist, Matt Zagoza-Watkins, on the economic principles surrounding this concept including how a maximum gross gasoline refining margin might operate in a market lacking competition such as what we see in California.

We also hosted a moderated roundtable discussion with stakeholders from industry, labor, and other groups to discuss the impacts and benefits of implementing a max margin and penalty.

Since that workshop, staff have been analyzing refining margin data, supply, and demand conditions and investigating how refiners can ultimately retail prices would respond if a refining margin and penalty were established.

Today's workshop will highlight some of that work and a Request for Information that was recently released to solicit input on the design and other considerations for margin and penalty framework.

We are endeavoring to make a staff recommendation to the Energy Commission later this year on whether to impose a penalty.

I'd like to introduce the members on the dais this morning. We have Vice Chair Gunda of the California Energy Commission, Tai Milder, Director of the Division of

Petroleum Market Oversight, Nick Maduros, Director of the California Department of Tax and Fee Administration, and Drew Bohan, Executive Director of the California Energy Commission.

I'll now hand it over to Vice Chair Gunda for opening comments from the dais.

VICE-CHAIR GUNDA: Good morning, everyone. Thank you, Jeremy, for opening the workshop and setting the context for the workshop.

I just want to welcome everybody that's present in the room here and joining us virtually.

This is an extremely important topic for the State of California and for the Energy Commission.

I want to first begin by saying thank you to the staff at the Energy Commission, the staff within the DPMO. Director Milder oversees Director Maduros and his staff at CDTFA, and the support we get from CARB and many other agencies who have been weighing to help support the implementation of this extremely important statute.

It's a lot of work and, you know, we are moving as expeditiously as we can in making sure we fulfill the primary purpose of the SB X1-2, which is to make sure the consumers of California are protected at the pump.

In doing so, we have spent a lot of time last year to ensure the data transparency is uplifted and that

its light shine on the data to make sure we can explain -- begin to explain, you know, how the market is structured and what are the barriers and some of the issues that we see that are causing the price spikes at the pump.

So, today's workshop, as Jeremy set the stage on, is a continuation of a previous workshop and really kind of beginning to put our foot on the gas pedal here to like really move forward on making sure the penalty lands this year and lands in a way that it's well-informed and structured and has good public participation. It's really important that we keep our focus on protecting the consumers of California, and it is the primary purpose of the Energy Commission and all the sister agencies.

So, in opening this workshop today, I welcome all the stakeholders who have taken time to provide us feedback and request them to continue to provide us information and feedback to do this as well as we can to really center ourselves around protecting the consumers of California.

We have conditions in California with the supply tightness that really opens opportunities for market manipulation and a number of issues, and it's our job to protect against those issues.

So, with that, I welcome Director Milder to provide his comments.

DIRECTOR MILDER: Thank you, Vice Chair Gunda. I

want to start by thanking the Vice Chair and the whole of the Energy Commission for inviting us and supporting us in our joint mission here.

DPMO is an independent entity within CEC, so we don't speak for the Energy Commission broadly, but we're here to share our input on this important issue.

To that end, we will be hearing today from Dr. Georgina Moreno, who is the Chief Economist at DPMO, who will be one of the presenters.

We're also looking forward to hearing from the other participants today.

DPMO's focus is on protecting consumers and making sure that the market is competitive. Unfortunately, we've seen price spikes in 2022 and 2023, and prices have already been going up this spring, especially in the Bay Area. So, this is a critical juncture.

With that in mind, I will be listening to the presentations today thinking about consumers and protecting the market.

Three framing questions that I think are important are - Will a penalty discourage price gouging? Will a penalty blunt the price spikes that we have seen in recent years or recoup excess profits on behalf of consumers? And third, do we need to realign incentives to encourage refineries to provide adequate supplies in

California? I think it's critical to address these questions head-on in a public forum, and with those questions in mind I'm looking forward to the presentations today.

VICE-CHAIR GUNDA: Thank you, Director Milder. Mr. Maduros.

DIRECTOR MADUROS: Good morning and thank you for including CDTFA in today's workshop, and I'd just like to echo the remarks of both Vice Chair Gunda and Director Milder.

You know, over the past now, year and a half, that this has been an active subject of discussion. It is clear that this is a very complicated issue, and that's why I think it's really important to have this workshop and others like, and I would just encourage industry and others from throughout the State to please participate and provide us the information in a timely and transparent fashion because I think it's very important the State gets this right. And that's why I welcome.

I think the CEC has made great strides over the past year in terms of standardizing the data. You know, this is really going to be data dependent, and that's why I'm looking forward to hearing from industry and others today to make sure we get this right as a State and protect California consumers.

VICE-CHAIR GUNDA: Thank you so much. Director Bohan.

DIRECTOR BOHAN: I just want to say this has been a massive responsibility we have gotten under SB X1-2, and I just want to thank Aleecia and Jeremy and the whole team, but particularly them for their leadership, and I see Dave in the back there as well and just for all the hard work.

VICE-CHAIR GUNDA: Thank you, everyone. With that, I think we are ready to get moving, and I just want to uplift some of the core questions that Dr. Milder framed, and I think at the end of the day it's really to make sure that we understand every pathway we have to both blunt the price spikes as Director Milder framed, and, also, overall reduce the prices at the pump in California.

Back Jeremy to you.

DEPUTY DIRECTOR SMITH: Thank you, Vice Chair. Once, again, I'm Jeremy Smith, Deputy Director of the Energy Assessments Division, and I'll be providing a presentation here.

We go to the next slide, please.

So, SB X1-2 was born from Californians seeing gasoline price spikes in 2022. This graph shows the average daily price Californians were paying for gasoline from January 2021 through today.

While price increases were felt elsewhere in the

country, as was the case in March of 2022 at the start of the war in Ukraine, other price increases are isolated to California.

At the end of September 2022, after gas prices spiked to nearly $6.50 a gallon, Governor Newsom called for an early switch to winter blend, which due to the specifications of that, gasoline increases supply and puts downward pressure on prices.

Californians saw a similar pattern in late summer 2023, and the early switch to winter blend was again used as a tool to help bring the prices down.

We are now in spring of 2024, watching gas prices increasing rapidly and are investigating how establishing a maximum gross margin and penalty might help alleviate this repeating problem and protect Californians from having to make difficult financial decisions to fuel their vehicles.

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So, why explore a penalty? The legislature describes the conditions observed in California in 2022, including increasing refinery costs and profits that led to substantially higher prices than the rest of the country. While capacity limitations and inventory shortages played a role in increasing prices during a 90-day period in 2022, refiners earned a record 63 billion dollars in profits suggesting the high prices were the result of opportunistic

price gouging by oil companies.

Establishing a maximum gross gasoline refining margin and penalty may be the fundamental change necessary to protect Californians from price spikes, stop market manipulation when the market is reasonably balanced, and protect low income families struggling to pay for the high price of gasoline.

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As I mentioned earlier, SB X1-2 authorizes the CEC to set a maximum gross gasoline refining margin and penalty under the condition the benefits to consumers outweigh the costs. This point is critical to the investigation, recommendation, and decision on whether to establish such a framework.

The CEC is charged to look at two things at minimum to make such a recommendation. The first is to consider whether it is likely that the maximum margin and penalty will lead to a greater imbalance between supply and demand in the California transportation fuels market than would exist without it.

The second is whether the maximum margin and penalty will likely lead to higher average prices at the pump on an annual basis than without it.

There is also a directive to explore other factors, some of which will be presented and discussed

during the workshop today, and it's also something we are continuing to seek input on through the Request for Information we released a couple of weeks ago, which I will provide more details on in just a little bit.

Next slide.

The gross gasoline refining margin is defined in the statute as the average rack price of wholesale gasoline sold by a refiner in the state minus the average acquisition cost of crude oil and imported gasoline, minus the costs associated with the low carbon fuel standard and cap and trade environmental programs. This graph shows a weekly breakdown of the components that make up the price of gasoline at the pump between early 2022 and late 2023, including crude oil costs, taxes and fees, environmental programs, and the refinery and retail margins. The gray shaded area with the arrow pointing to it is the refining margin, and particular, that time period is the September 2022 price spike.

As you can see across the graph, while varying crude oil prices contribute to price fluctuations at the pump, the refining margin notably increases significantly during this period.

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This is a look at the same data, but this time rather than just 2022 through 2023, this is the average

annual price breakdown over the last 10 years. There are some key observations I'd like to point to in these data.

First, again, crude oil prices have changed dramatically from year to year, a factor that impacts gas prices throughout the country, not just California.

Next, the refinery costs and profits, which are specific to California and shown in orange with a red outline, have been increasing rapidly in the last two years specifically. In fact, the average refinery margin between 2014 and 2021 was 44 cents per gallon. These margins have nearly doubled that, exceeding 85 cents per gallon for the last two years.

Next slide.

Another way to look at these same data similar to something like adjusting for inflation is just to observe the ratio of these components. This graph shows the fraction of the price paid by consumers at the pump going to each of these various components. Again, the same observations can be made. Crude oil prices fluctuate significantly and refiner margins make up an increasingly larger proportions of gas prices in recent years.

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In addition to analyzing other available data on gasoline prices and refinery margins, CEC has been collecting detailed information on refinery costs and

profits collected under SB 1322. These data are provided by the refiners to the Energy Commission on a monthly basis.

Based on these self-reported data, refining margins in 2022 and 2023 are the highest in the last 10 years, exceeding the levels observed in CEC's analysis of other available data.

Next slide.

I just wanted to highlight some of the key takeaways that we observe in these data. The analysis collected from OPIS and the Alaska Department of Revenue data over the last 25 years -- we lost the monitor in here. Okay, got them back. So, I was saying the analysis of the data collected from OPIS and the Alaska Department of Revenue over the last 25 years shows that the highest weekly refining margins occurred on October 3, 2022 at $2.34 per gallon.

I've been having technical challenges here in the room. Okay, great.

In those 25 years, the weekly margins have exceeded $1.00 per gallon 44 times, of which 19 of those occurrences were in 2022 alone.

Averaging these data by year, the highest margin observed was 2022 at 87 cents per gallon.

Reviewing the M1322 data which goes back to 2013,

the highest annual gross --

VICE-CHAIR GUNDA: Jeremy, would you just hold for one second.

DEPUTY DIRECTOR SMITH: Sure.

VICE-CHAIR GUNDA: Can we make sure it doesn't fluctuate. It means that we constantly move it. Let's keep the mouse being moved for a second so we can keep going. Keep going, Jeremy. Thank you.

DEPUTY DIRECTOR SMITH: Okay. As I was saying, reviewing the M1322 data, which goes back to 2013, the highest annual gross margin was, again in 2022, with this self-reported metric was now over $1.00 per gallon compared to the average over the last 10 years at 68 cents per gallon.

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So, this brings me to the next section of my presentation, which is to discuss the Request for Information which the CEC released on March 27th. By May 3rd we are seeking input to inform our decision on whether to implement a maximum gross refining margin and penalty and, if so, how should that be structured to accomplish the goals outlined in SB X1-2.

Apologies while we work out the technical challenges in here. I'll try to pause as it breaks.

VICE-CHAIR GUNDA: Jeremy, just a quick question.

Are we observing that online as well?

DEPUTY DIRECTOR SMITH: No.

VICE-CHAIR GUNDA: Okay. Can you see here -- apologies to everybody in the room, but we can probably keep going if people can log on to their computers here.

DEPUTY DIRECTOR SMITH: Okay. I can continue.

So, we're seeking answers to several questions in this Request for Information. First, should a maximum margin and penalty be established, and what are the pros and cons to consumers if one would be enacted?

Second, how would the maximum margin be designed to encourage appropriate market behavior? What should the margin be set at? Should the margin be changed periodically? And how would the maximum margin promote a better balance between supply and demand in California? How would it protect consumers from higher prices? Are there additional factors to consider when assessing the impacts on disadvantaged and low income communities? And, finally, under what conditions should the CEC consider granting refineries an exception?

Third, how should the penalty structure be designed? Again, how would this structure encourage the appropriate market behavior? And should the penalty, again, be periodically adjusted?

Finally, the fourth category that we're seeking

input on in this RFI is to inform the actual decision-making process. How should these various concepts that we review and evaluate be scored against each other to ensure the best maximum margin and penalty framework is ultimately recommended? How should these different ideas be evaluated to ensure the greatest benefit to consumers to encourage, again, the appropriate market behavior? And should some aspects of the framework or suggestions be waited or prioritized over others?

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All right. So, there are just a few factors that we would like to highlight here that we should be considering when designing the appropriate margin and penalty framework.

First, to ensure benefits to Californians the penalty should not simply be passed on to consumers. If this ends up behaving similarly to say a tax, then it will likely show up in the retail price.

As an example, on the screen you can see the 2017 state excise tax increase and the effect it had on prices at the pump just increasing immediately with it.

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Another consideration is that not all refineries are the same. Refineries are often part of a larger company with different business models and different

involvement in the supply chain. This can range from companies that are involved in everything from crude oil extraction to retailing. With that business model, it is possible the penalty is simply offset in other areas. In contrast, some refineries do not operate retail outlets and simply refine crude oil into gasoline and sell that into the wholesale market.

Considering these differences, how can a max margin and penalty encourage appropriate market behavior without falling harder on some companies than others?

Next slide.

And finally, how would a max margin and penalty impact the retail margin and prices at the pump? In many of the recent price spikes the CEC has observed the concept of up like a rocket, down like a feather, meaning that prices come down much more slowly than they go up when refiner margins increase. Thus, would capping refiner margins fix the issues we're concerned about? Or would it simply transfer to the retail margin and pass on to consumers?

Next slide.

So, hopefully, this discussion has helped identify some of the key factors we're considering when investigating and recommending a maximum refining margin and penalty.

Again, to those listening in, if you'd like to respond to our Request for Information and weigh into this process, we would greatly appreciate that and encourage it. The RFI was posted to the docket 23-OIIP-01. We are requesting responses to that same docket by 5:00 p.m. on May 3rd. If you are responding, please include this text here, the Maximum Gross Refining Margin and Penalty in the subject line of your email submission just to ensure it's collected.

I'd also like to note that respondents should not include any proprietary or confidential information in their submission.

Next slide.

So, that concludes my presentation. I'd now like to introduce Dr. Gigi Moreno, Chief Economist in the Division of Petroleum Market Oversight, is joining us online for her presentation. Thank you.

VICE-CHAIR GUNDA: Thanks, Jeremy. Before Gigi jumps on I just want to apologize to the people in the room for the visuals here. I think there's a couple of steps trying to be made. One, a screen is being put out, and then the second, they're trying to print the slides for everybody in the room. But if you have access to a laptop, please join the link. Thank you so much and apologies for the inconvenience.

DR. MORENO: Looks like my Zoom shut down. Okay.

VICE-CHAIR GUNDA: Gigi, we can hear you.

DR. MORENO: Okay. Can you see my screen?

VICE-CHAIR GUNDA: We have a deck cued up here. You can just say next and then people will move here.

DR. MORENO: Yeah. Good morning. My name is Gigi Moreno and I am the Chief Economist in the Division of Petroleum Market Oversight.

Today I will share an economic perspective on the -- on a potential maximum gross refining margin and provide theoretical foundation for this type of policy.

I will also share some thoughts about why such a policy may be appropriate in California's refining sector.

In the November 28th workshop that Jeremy mentioned on the maximum gross gasoline refining margin and penalty, Professor Matthew Zagoza-Watson provided a theoretical foundation and explained that the petroleum refining sector is an imperfectly competitive industry. Today, I will expand on some of the concepts he presented.

It should be on slide two, so can you guys see slide two? Is that what's showing? I can't see that.

DEPUTY DIRECTOR SMITH: Yes.

DR. MORENO: Okay, very good. So, let's review what we mean when we say that the gasoline refining industry is an imperfectly competitive market, and what

makes it imperfectly competitive.

In this sector there are barriers to entry largely due to high fixed costs and regulatory constraints that favors large firms. As a result, a few large firms dominate the market and production among firms is interdependent.

In addition, demand for gasoline is shrinking, leaving less room for many firms to operate efficiently in this industry.

Moreover, gasoline demand is highly inelastic. This means that when prices increase consumers cannot easily reduce the amount of gasoline they consume. This market attribute makes it easier for firms to exercise market power.

In imperfectly competitive markets with high barriers to entry, profit incentives often deviate from consumer and societal wellbeing.

Here are some examples of industries with barriers to entry due to high fixed costs and regulatory barriers. These are all imperfectly competitive industries that are regulated to keep excess profits in check.

Next, I would like to show why these types of industries may require oversight. Consider a stylized representation of a market where demand is linear and marginal costs are constant.

In a perfectly competitive market -- excuse me -- price and output will be determined demand and marginal cost intersect. This is what has been noted as P* and Q* on this graph. This is what we would call the socially optimal price and quantity, and this is where society's overall wellbeing is being maximized after accounting for all costs.

Now, recall from your Econ 101 class that in a perfectly competitive market the invisible hand of price signals assures that the social optimum is achieved with no government intervention.

I think that this is where most students of economics zone out because they seem to forget the next important detail. The invisible hand requires that markets have free entry and exit, complete information, no uncertainty, no externalities. When these assumptions fail, we have imperfectly competitive markets.

In an imperfectly competitive market price will be somewhere above the perfectly competitive price. Where exactly it is above the perfectly competitive price depends on the extent of market power and the extent to which it is exercised or abused in a market.

In this market each firm has market power to set prices and influence market outcomes. And the social optimum is not achieved if the market is left to its own

devices.

Imperfectly competitive markets may require oversight to promote competition and innovation and to protect consumers from price gouging.

So, instead of -- when we're looking at a market that's an imperfectly competitive market, instead of assuming or instead of relying on the perfectly competitive social optimum as a benchmark, we want to assess imperfectly competitive markets based on allowing these markets to earn what we call normal profits or a reasonable rate of return.

So, normal profits are the returns that are necessary to get a firm to invest and produce output in an industry at a reasonable rate of return. So, in this chart I cited Q^{IC} and Q^{PC} to represent what may be a -- conceptually what may be the output and price that generates normal profits in the sector.

And keep in mind that market price, quantity and profits in imperfectly competitive markets may be reasonable, but they're not going to be economically inefficient, so we're always going to have some level of what we might call, what economists call market failure. And so, that's a reason that we would need to have some oversight in these types of markets.

And so, how do we determine whether or not

profits are normal profits or profits are reasonable? And we could do that in several ways. We could consider looking at similar markets using the same resources or perhaps, the same industry in different locations. We can look at historical outcome. We can also look at how costs are changing, and, whether or not, margins are changing in the same way.

All right. So, now -- so, then that allows us to then define what we mean by excess profits. So, let's suppose that in an imperfectly competitive market the output is now Q^x and the price is P^X. And this is a price that's above the reasonable returns price. And when returns in an industry deviate from what is reasonable or normal profits, we call those excess profits. When these excess profits are persistent, then that raises concerns about the possibility that firms in this industry may be exercising market power and possibly abusing it.

So, that's when these types of markets will require oversight and sometimes intervention to realign the profit incentives with consumer wellbeing.

All right. So, that's our stylized model. So, now in the real world, how do we know when profits in real world markets are excessive and require realignment? What we do is we study the industry, we try to understand the demand in a particular industry and production and pricing

dynamics.

Now, let's turn to the real world of the petroleum refining industry to look at some of their data that's helping us understand the dynamics in this market.

U.C. Berkley Professor Severin Borenstein observed California gasoline prices persistently exceeding U.S. prices after 2015 -- that was the Torrance refinery fire date -- even after controlling for costs and regulatory distances between California and the rest of the U.S. This unexplained premium for California gasoline is referred to as the mystery gasoline surcharge or MGS.

Professor Borenstein's plot here clearly show the sharp increase and the MGS after February 2015.

So, that's one piece of information that we would want to look at to see, well, what caused that change, what caused that increase, that premium, in California, that mystery surcharge in California after 2015. So, we want to explore and understand what's going on here.

Now, here in this chart, I plot the refining margins, and this is data from the Energy Commission's website and from the dashboard, so this is from publicly available data.

This chart shows margins for all gasoline distribution channels in 2023 dollars. We see that margins are quite volatile going month to month, and if we focus on

the orange trend line, we see that on average margins have been increasing since 2012.

Now, going back to this concept of setting a benchmark to be able to compare whether or not in industries experiencing excess profits, we can see this graph and see that it's -- that we can look at -- we can set the time period 2012-2014 as a benchmark. You can see that this might make a reasonable benchmark. It might not be the only benchmark, but this is a benchmark that we might consider to measure what normal returns might be in this industry, and this period, 2012-2014, is before the Torrance fire, and I shaded this period in this graph, and you can see that margins fluctuated but were on average relatively stable.

So, I plotted and this green line is the average refining margin for all gasoline channels during the benchmark period.

We see a few things here. We can see that the trend line in orange is rapidly increasing relative to the benchmark. We also see that after 2024, the margins tend to be above the green line, which suggests possibly excess returns based on relative to this particular benchmark.

So, let's explore specific spikes that we see during this period, which actually I'll go back and I'll show you, so this would be June 2022. We can look more

closely at September 2022 and September 2023 in the next slide.

All right. So, here we've seen -- at these three peak periods we see that, for example, in June 2022, relative to the benchmark refinery margins were 241 percent larger than the margins during -- than the average margins during the benchmark period. At the same time during the same time period, the cost of crude had decreased by 8.6 percent relative to the benchmark, and I know crude is not the only cost. This gives you a sense of cost comparisons.

So, now let's look at the peak in 2022. We see that in September 2022, the refinery margin increased 257 percent relative to the benchmark, and during this time period the cost of crude increased -- I'm sorry, decreased by 30 -- a little bit over 30 percent, and then in September 2023, refinery margins were 219 percent larger than the benchmark, and crude costs had decreased by 32 percent.

So, while these data show compelling evidence that margins and the gasoline refining sector may be exceeding normal returns and may be excessive, these are only a few data points. We are continuing to collect data, industry data, exploring industry data to better understand the dynamics in this market and understand why gasoline prices in California are so much higher than the rest of

the U.S.

If we determine that policy intervention is required to realign profit incentives with consumer wellbeing, the policy intervention proposed in SB X1-2 is a maximum gross gasoline refining margin and penalty.

So, let's explore how this policy would work. So, excess margins signal a misalignment between producer incentives and consumer wellbeing. And a maximum GGRM, gross gasoline refining margin and penalty, will reduce the incentive to strategically limit production, provide the incentive to increase output if capacity is available, and decreases price as a result. It does not dictate price. It does not set a cap on price, and that's something that seems to be misunderstood about margin -- maximum margins. Producers are allowed to set price based on output decisions under this type of policy.

So, let's -- and the other piece, too, is that with a maximum gross margin with a penalty policy, the penalty is collected and then would be used to benefit consumers harmed by excess margins.

So, to help us conceptualize this policy, let's go back to our stylized model which measures returns in terms of economic profits. So, total revenue less -- so economic profits are total revenue less all costs, including opportunity costs.

Now, in the real world, we rely on accounting concept of profitability such as gross margins. So, there are some important differences between these two concepts for policy, design and implementation, but not so much for conceptualizing how the maximum gross margin works.

So, please keep in mind as I go through this stylized model that it's a useful simplification of a complex market that allows us to conceptualize. So, think of it much like Google Maps is a useful simplification of the transportation infrastructure, so is this stylized model.

All right. So, in this stylized model, profits will represent the returns to the firm's production activities, so we have a market with leaner demand as before in blue here and constant marginal in orange.

And let's suppose that the industry is producing as Q^X and at this level of output the price is P^X. Now, assume that at this level of production and price that based on our analysis we determined that this is in excess of -- this is of normal profit, so these are excess. Profits are generated as is price and quantity.

All right. So, now suppose -- that's profit in green. Now suppose that we implement a maximum gross gasoline refining margin with a penalty. The policy imposes a constraint on the demand faced by this market,

so, it doesn't set a price; it imposes a constraint on the demand. And this constraint, you can see, can be represented by this equation, and this symbol, pi-bar is the maximum margin that has been determined by the regulator. And notice that this constraint depends on the maximum margin that's determined for this particular market. It depends on the level of output. It also depends on costs.

So, one thing to notice is that as quantity gets bigger, this penalty or this constraint will get smaller. So, higher quantity, lower constraint.

Now, at any point along this constraint, but -- by definition at any point along this constraint, the maximum margin will be satisfied, and so, producers can produce anywhere along here without facing a penalty.

Along this constraint the profits are going to be equal to the maximum profits that are set by the regulators, so pi-bar.

From the perspective of the producer, the effect of demand curve will now be the highlighted demand curve.

So, now what happens to production when we impose this maximum GGRM constraint? So, if firms -- so, if firms continue to produce at Q^X, which we were doing originally before we imposed this constraint, if they're continuing to produce at this level of Q^X, the price will decrease to P^X

minus the penalty, okay. And profits will decrease to the smaller green rectangle, and the amount of the penalty that's collected is in this orange area.

Now, remember that the penalty collected is going to be used to compensate consumers for excess prices, therefore, this orange area is a benefit to consumers.

So, if firms have capacity, that is, is the constraint on output, is the choice to produce at Q^X and price at P^X is not due to true scarcity, then production will not remain at Q^X once we impose the maximum GGRM.

Individual firms are going to see this price P^X minus the penalty and they're going to say, well, if I'm facing this price, I can do a little better by just producing a little bit more. And when the firms produce a little bit more, then enjoy a profit, and the penalty will be adjusted. And then firms will again say, well, at this new price I can produce a little bit more and make a little higher profit.

And, so, firms are then going to have an incentive under this policy to increase output until they reach the point where they can no longer do better by increasing output under this policy, and then they'll reach the point Q^M at a price P^M.

So, that would be the dynamic through which a gross gasoline refining margin with a penalty would

generate higher output and lower price. But keep in mind that this -- what's required for that is that there's capacity to increase. If there is no capacity, then firms are not going to be able to produce more, even with a penalty.

And also keep in mind that by setting a maximum gross gasoline margin, it doesn't set the price. Producers choose the level of output based on this constraint that they face, this gray line, and, so, this is not a price cap.

If the excess profits in this market are driven by scarcity, then the prices will not -- will not increase, and if it is raised by scarcity, then the prices will -- the prices will not necessarily go down.

All right. So, let me give you some concluding thoughts. The petroleum refining industry is an imperfectly competitive market that requires oversight.

Excess margins are margins that are -- persistently exceed the benchmark -- a benchmark, and so that's yet to be determined what the appropriate benchmark is.

A policy that sets a maximum GGRM and penalties can be an effective way of realigning industry and consumer incentives.

Assessing how the California market would benefit

from a maximum gross gasoline refining margin requires us to analyze data about the industry. For example, output, prices, margins, costs, all data sets the CEC is currently working to improve, and to design a system that provides refiners the incentive to align their incentives with consumer welfare. It is essential to consider factors important to stakeholders when we're implementing a maximum GGRM and penalty.

Thank you.

VICE-CHAIR GUNDA: Thank you, Jeremy and Gigi. I think we're going to just move to any questions from the dais.

So, first of all, Jeremy, thank you to you and Gigi. Thank you so much for really kind of the extremely helpful presentation there.

I have a couple of quick questions to just kind of situate myself. Just kind of going back to the slide on the benchmark, just as we consider this, Gigi, how do we think about an appropriate bench mark? You did mention, you know, kind of looking, probably going back 10 years, even before the Torrance refinery, probably a good idea to have kind of a good understanding of the benchmark and then you -- you know, I think what you did in the analysis is to adjust for inflation and other costs, and I'm just kind of taking from what you said that, you know, we will have to

adjust those for different regulatory statutes, but can you just give us a little bit of frame on and expand on how to think about that benchmark setting?

DR. MORENO: Yes. Thank you for that question. So, yes, how do we set the benchmark? That's a really important question. I think what we do is we analyze the data to try to find -- not only analyze the data, but also to let information from industries and from other market participants to try to understand what would be a reasonable comparison time period or a reasonable comparison -- say another geographic location to be able to assess whether or not the benchmark is a reasonable benchmark.

I would also suggest that we consider maybe multiple benchmarks and make decisions based on those multiple benchmarks.

VICE-CHAIR GUNDA: Thank you. I have just a couple more questions. You mentioned on one of the slides as you were kind of walking through the economic theory that if there is capacity, right, that it could have a significant impact, but I think with or without an increase in capacity, what I understand the slides to be is with, you know, some sort of an intervention it could kind of temper the prices. But I just want to understand what are the variables, you know, could it impact. So, I'm just

kind of trying to let -- let me clarify to articulate the question more clearly.

Under the assumption that there is an opportunity to increase capacity, and I think the economic theory suggests that, you know, that refineries are incentivized and the industry is incentivized to move that production up. If there's a constraint on that can you just explain how the spot market might intervene, how the prices might fluctuate, and what other constraints do you think there might be that we should think about? I understand the theory that with some sort of an intervention we will essentially, you know, change the nature of the supply/demand curve and the pricing strategy, and that would be, you know, definitely beneficial, but I'm just kind of thinking through the conditions under which there is not, you know, chance for increase in capacity, or for some other reason the capacity is not increased, how else do you want to think about the other conditions in the market?

DR. MORENO: Right. So, that is a challenge, right. So, if the -- if the industry does not have capacity, so there is no way that industry can respond by increasing output, then you do have a situation where the policy looks more like a price cap within the refining sector. And, so, I think that's going to be an important

consideration when we design this policy.

And the other thing to think about, though, is that because this isn't a price cap policy, that the -- if there is no capacity what's going to happen is you could potentially increase price at the retail end of the market. And, so, I think those are things to take into account in developing this policy. So, those are concerns that need to be addressed.

VICE-CHAIR GUNDA: Thank you, Gigi. Just kind of one last question. Again, super helpful as you're thinking, as you're framing this.

So, could I kind of just summarize kind of on the back of that. You know, given the competitive nature just being imperfect in a competitive market, some sort of an intervention is required to protect the consumer is one takeaway, and in instituting the penalty it has, you know, the potential to not only blunt the price spikes, but potentially protect the consumer bringing down prices.

And, you know, there are certain other conditions that could -- that might have to be looked in in totality, so I think my last question is the SB X1-2 does give us, you know, some authority over eventually the inventory levels, for example, or thinking through plan maintenance as scheduled is there any wiggle room there? Could you just comment on how the totality could better position the

penalty?

DR. MORENO: I think -- I think this could be part of a mix of policy that you suggest. One of the things, you know, in considering an exemption from the maximum gross margin is considered how efficient firms are. If firms can show that they have higher margins because they're really low cost, then they should be compensated for that, so that we encourage innovation to produce fuel more efficiently. So, you know, that would be one way you could use the exemption from the margin.

Or if firms do not have capacity but other firms do, then the firms who have capacity have the incentive to increase output.

And, as you mentioned, there's the -- some policy that can be implemented related to inventory then timing of -- timing of maintenance, I think those are -- those should be included as part of I guess you can say a portfolio of policies to how to make this -- to help us achieve our goal of maintaining some level of competition and protecting consumers in this market.

I don't think necessarily that one single policy is the only way to do things. I think it needs to be a multi-faceted approach.

VICE-CHAIR GUNDA: Thanks, Gigi. Sorry to just kind of go through that one last time, so I just want to

kind of take it through in setting up the penalty as we think through the positives and the conditions necessary for it to be successful, you know, would you suggest that it has to be thought through in totality with other things that we should do, or penalty by itself could be a tool.

The only reason I ask is how do we make the conditions around the penalty setting, if that's the path we are going, to maximize the benefit to the consumers. So, if you could just summarize that, you know, like the penalty framework requires, you know, multitude of -- like in your words like the different facets, and if that's kind of how we should look at it as penalty as a part of the totality that we need to optimize it out. Thank you.

DR. MORENO: Thank you. You know, one other piece of that is -- an important aspect of all of these policies is the data collection, and having good data so that we have a clear picture of what's going on in the market. I think that's going to be -- and transparency in the industry as well. I think that's going to be a key component of making sure that with GGRM and penalty -- the maximum GGRM and penalty work that it's going to be an important piece to any of the other options of policies that we have, the inventory or maintenance. And, so, I think that's an important piece that I probably did not mention strongly enough.

VICE-CHAIR GUNDA: Thank you so much. Any -- Director Milder.

DIRECTOR MILDER: Just one question for me. Thank you.

Dr. Moreno, I think it was your slide number 12 that shows the increase in profitability compared to the benchmark period, and to really stark examples of profit spikes during 2022 and 2023, which would indicate excessive profits, going back to an earlier point you made, why do persistent excess profits signal market power?

DR. MORENO: Yes, thank you. The reason is that if an industry or maybe a subset of firms within an industry can maintain excess profits for a long period of time, that suggests that they're using their -- they're using their market power. They're using their ability to dictate prices in the market. If we've established, say like slide 12, I'm no longer sharing my slides, so in my slide 12 the average monthly margin in the period 2012 to 2014 was 40 cents per gallon. In that period, it was reasonable if that was enough incentive for firms to invest and to stay in this market. We have to ask, well, why is it that margins have to be $1.20 on average, $1.40 on average at peak periods.

And, so, I think when those types of -- if this is truly excess margins and not a structural shift in cost

the way they produce gasoline, this is a persistent margin, then that worries me that there's a big deviation between the profit incentives and the welfare of consumers, and potential market power is being used in a way to drive that wedge between consumer wellbeing and profitability. Have I answered that question?

DIRECTOR MILDER: Thank you.

VICE-CHAIR GUNDA: Thank you. Director Maduros.

DIRECTOR MADUROS: Thank you. Just a couple of questions. One, could you expand a little bit on your comment that it may require multiple benchmarks?

DR. MORENO: Oh, yes. So, I mean, what I was suggesting is that the 2012 to 2014 benchmark it's not, you know, the only benchmark that you could use. There might be other benchmarks that are reasonable.

You'd have to study the market and understand what time period or geography you would need to compare that would identify what is that reasonable rate of return, what is a normal rate of return.

I selected in this analysis of 2012 to 2014 time period because it looked -- there weren't any severe spikes. It was consistent spikes over that time period. And it was also before the Torrance refinery, so we know -- and it wasn't during the pandemic, so we know that I've excluded any extreme events from that.

You know, other benchmarks that I selected that I've looked at is 2017 to 2019, and I get similar results for that. I didn't share those on my slide deck. And so that's what I mean, it's okay to consider different benchmarks, and I wanted to point out that the 2012 to 2014 isn't the only benchmark, it's just the one that looked most reasonable to me given the data that we have.

DIRECTOR MADUROS: Thank you. And one last question. Have you thought about how policymakers and CEC ought to think about imported gasoline, whether from Washington state or from Asia, that might be CARB compliant as refineries here in California transition to green?

Northern California has been transitioning to renewable diesel and the output drops how do we create or implement a penalty that doesn't provide a disincentive or maybe provides an incentive for importing gasoline that might be refined out of state? Have you thought at all about that or do you have thoughts on how we should be thinking about that?

DR. MORENO: Well, I'm always open to additional competition, right, so whenever we can get more competition that's a good thing. But, I mean, I have not considered specifically and I have not looked at data related to imports. I think other considerations when we're talking about imports should be the additional cost. You know, is

it really going to reduce prices? So, that's something to think about. And I think we need to also consider the additional solution that we create by shipping fuel here a much longer distance.

So, I think all those things should be taken into consideration fundamentally. I would be -- I would want to explore the potential for additional competition. I think that would be great. I think on the surface it sounds like a great idea, but I have not studied the data or the dynamics and then considered all the other costs associated with that.

VICE-CHAIR GUNDA: Dr. Moreno, I'm going to just kind of follow up on Director Maduros's question. Given the way the gross margin is being calculated, so it's basically we're removing the taxes where it starts with the rack, removing the crude and taking off the imports. So, I think it's a flag for us to think through. I absolutely subscribe, you know, to what you just said. I think increasing the competition and the liquidity in the market is, you know, through whatever means is kind of like what we are kind of getting to.

You know, if you have any thoughts right now or maybe that's a subsequent, you know, workshop where we are able to get your thoughts on it. But just thinking through the way we are calculating the value of what the gross

margin means and how the import costs are being excluded, it would be helpful to like think about, you know, what potential market power distortion that can create.

DR. MORENO: Yes, so I think it's definitely -- I think we should definitely consider how we compute the margins. That's definitely something we need to talk about. And I think that this is where it's important to get input and transparency from the industry as well.

VICE-CHAIR GUNDA: All right. Thank you. Director Bohan, do you have any questions?

DIRECTOR BOHAN: Yes. Dr. Moreno, thanks for that explanation, very clear and simple, so I appreciate that.

You know, it's been suggested that one or more refiners may take measures to avoid going over a max margin penalty if one were set, so I have two questions. One, do we believe that's likely and why or why not? And, two, if it were to happen, what impacts might we expect to see?

DR. MORENO: So, is your question they're not -- they're not going to exceed --

DIRECTOR BOHAN: It's been suggested that refiners may use tools like exports or reduce capacity, or something like that so that they avoid hitting that level. And I'm just curious if those are threats that are to be taken seriously or if there's widespread evidence that

companies routinely look at that as a cost of doing business, and then, second, if they do that, though, what -- how does that change the way we think about the impact of the penalty, if at all?

DR. MORENO: Right. So, I have not explored that specific question. I think -- I think any regulation can be manipulated by the subject of the regulation, and so I think what's going to be important in our approach is that we develop policy that minimizes the risk of manipulation, because we don't want to create an additional failure in what economists call a market failure.

So, we want to -- in developing and designing and implementing such a GGRM, a max GGRM of penalty we need to consider what are the incentives that the firms will face or will have under this policy and what are some unintended consequences from that. So, I think those would be important pieces that we would have to consider and in the development and implementation of the policy.

VICE-CHAIR GUNDA: Thank you so much, Dr. Moreno. Just want to say again, thank you so much for making that very, you know, simple understandable, you know, kind of both a problem statement and the opportunity here with the penalty. Really appreciate you kind of both framing a solution here and what are the other things that we need to do to enhance that.

Also, Jeremy, thank you for setting the context from the Energy Commission's work. I just want to ask you one question. I know we are planning to, you know, complete the penalty this year. Are there any things that, you know, the public should know in terms of, you know, the data work that we are trying to do to Dr. Moreno's point on enhancing some of the data work?

DEPUTY DIRECTOR SMITH: Yeah, thanks Vice Chair. I'll just say that we continue to look at opportunities to collect more data and provide more information to help make this decision. You know, we've got rulemakings in terms of expanding the refining margin data that we collect, and I think that should help along the way.

And, you know, the only other thing I would say is, you know, again, encourage folks that are listening and participating in this that a lot of this data is available publicly and we would encourage them to weigh in through the RFI to really chime in and talk about how to make these decisions and ultimately arrive at the outcome that we're all looking for.

VICE-CHAIR GUNDA: Thank you. And, you know, again, just incredibly glad that we have Dr. Moreno and DPMO to be able to help support some of this work. And I know you're already doing this, but really request you to continue to work with Dr. Moreno to further the data needs.

Thank you.

With that, I think we can go to the next section. Thank you, Dr. Moreno.

DEPUTY DIRECTOR SMITH: Thank you. On to the next slide. I'd like to introduce our next speaker. This is Dave Hackett. He's Chairman of Stillwater Associates. Dave, if you could take over and share your screen.

VICE-CHAIR GUNDA: Thank you. Jeremy, I just want to understand, instructing the next two presentations, I know we have Director Zagoza-Watkins here as well helping us with the next couple of presentations. Could you just set the stage on how it's going to be done?

DEPUTY DIRECTOR SMITH: Sure, absolutely. So, the first presentation by Dave Hackett, that will be followed up by a presentation from Tom O'Connor, the Senior Director of Energy Markets at ICF, and then we'll invite Matt Zagoza-Watkins to participate in the discussion, comments and questions afterwards to support any other comments from the dais.

VICE-CHAIR GUNDA: Thank you so much.

CHAIRMAN HACKETT: Good morning, Mr. Vice Chair, Directors, staff and workshop participants. I'm Dave Hackett, Chairman of Stillwater Associates.

Stillwater is a transportation and energy consulting company with long experience in the West Coast

fuels markets.

Stillwater has been retained frequently by California government agencies to advise on fuels matters.

I'm here today to talk about the maximum gross gasoline refining margin and SB X1-2.

Our focus today will be on how the MGGRM is calculated and its impact on the market. We will also explore the dynamics of price spikes which are the drivers of this legislation.

So, a price spike in the fall of '22 that was the catalyst for SB X1-2. This illustrates where crude or oil prices are created. For crude oil they're created -- the price can be created at the wellhead, or at the crude oil refinery, or somewhere in between.

The first place that gasoline is priced is at the spot market and in reference to a pipeline hub. The California spot market has hubs at Kinder Morgan Watson in Southern California and Kinder Morgan Concord in the north.

Pipelines move the product to outlying terminals where the product is loaded on to trucks. The truck loading facility is called a truck rack. The price of gasoline in the MGGRM is the rack price, both branded and unbranded, created here at the truck rack.

Trucks then deliver the product to the gas station is where the price is called dealer tank wagon.

That's the delivery price into the station. And then finally, retail prices are seen at the pump.

And, so, what we're going to be focusing on today are the product price in this margin calculation are primarily truck rack gasoline prices and the crude oil price at the refinery.

So that the maximum gasoline gross refining margin is equal to the weighted average rack price less taxes and fees for gasoline sold in California, less the low carbon fuel standard and cap and trade component, less the cost of crude oil input to each refinery, and any gasoline purchases that the companies have made.

What you can see here is the range of -- wide range of data on refining margins over time, and these data are from the M1322 data that the companies have submitted to the California Energy Commission.

And, so, the refineries with the best margin are represented here, the highest margin. Refineries with the lowest margin is there.

Essentially there is about a 63 -- on average there's a 63 cent a gallon difference between the margins.

The red line in the middle represents the gasoline weight average margin for the period.

Now, these margins vary as a function for different sales outlets, also called classes of trade, and

crude oil costs, and essentially they reflect the different decisions that the companies have made on how they're going to run their businesses.

The MGGRM is a gross margin, and gross margin calculations are commonly used to approximate the profitability of the business. This particular chart shows Stillwater investment of gross margin for the three West Coast refining enclaves, Southern California, Northern California, and the Pacific Northwest.

And the MGGRM is a gross margin like a gasoline crack spread comparing the gasoline sales revenue with a crude oil cost. And these are tools. Gross margin calculation generally include other revenue that the refiners generate like jet fuel and diesel, as well as all of their costs.

And because the calculations are done differently, it's difficult to reconcile a refiner gross margin with the MGGRM. And, so, therefore, in my view the MGGRM is not a complete picture of refiner profitability, but it is useful. You can learn from that calculation.

Now, refineries do -- two refineries currently report quarterly gross margins for the California refining business, Valero and PBF Energy. And in this chart are data that go back to 2017. Refiners report this quarterly, and Valero's numbers are in the orange and PBF's are in the

blue. We've got net income as well as gross margin in here. And you can see where during the COVID period that margins were, you know, considerably lower than they are now. 2022 was a banner year for all of the oil companies. 2023 was a good year as well, but both companies struggled in the fourth quarter. So, you can see that these can be fairly volatile.

So, I want to turn to price spikes, and price spikes are the reason that really, frankly, that we're here. And in our view there are three times, world events, unplanned maintenance and market manipulation. And world events examples include Hurricanes Katrina and Rita came ashore in 2005, and it did heavily damage the refining oil industry in Louisiana and in Texas. This raised gasoline prices around the country and improved the margins for refiners in California, but there were no really -- there were no shortages of gasoline here in the state.

Unplanned maintenance, I think we're all familiar with this. The biggest example was the Torrance explosion in 2015 led to a lot of volatility.

And then, finally, marked manipulation, and we are aware -- and we have observed manipulation in the gasoline spot market specifically around the 2015 Torrance outage, and this activity has resulted in litigation initiated by the California Department of Justice.

So, then, let's turn to -- I'm going to show you a very busy graph. But what's going on in this graph, we're going to look at three sets of prices. The red line here is the spot price of gasoline in L.A. called the L.A. CARBOB R. The blue price is -- I think of this as the reference price for gasoline in the world market. The New York Mercantile Exchange also known as NYMEX, and then we need to have crude oil in here as well, and we're using West Texas Intermediate on the NYMEX as our reference for crude oil.

So, we can see three kinds of -- we're talking about three kinds of world events-Ukraine, potential manipulation, refinery issues.

And, so, let's start with refinery issues. Down here at the bottom where we have the refinery issues sort of highlighted, you can see this gold bar. Well, the gold bar is the difference between the spot price in Los Angeles and the NYMEX price. So, essentially this is the difference in the markets due to -- well, local conditions, you know, real farther away from additional supplies and everybody and the quality of our gasoline is different, and so that creates additional costs. It's when these gold bars start to spike, that is to say when the L.A. price gets a lot higher than the New York price, that you know something is going on locally. Locally means here in

California.

Okay. So, coming back to world events, here's the run up to -- the start of the Ukraine war. Actually, the run up begins, you can see in crude oil, this in '22, begins here and comes up and then as embargoes were imposed and the like, then the market gyrated. For the most part, in this area, certainly early on, the L.A. market -- well, the redline went up with the New York market and the blue line, but in this period here L.A. continued up but New York dropped down and that's why you see this spike in the difference between the two markets.

From our perspective we also think that there are periods in here that where potential manipulation is possible, and we see those periods, especially with these spike here. This is when you get a big -- a really big deviation between L.A. and the NYMEX, and, so, you see that in the spring of '22, certainly in the fall of '22, and in the fall of '23.

And then there are -- and so that's how we're looking at this. And if you've got an organized way to think about these spot prices, then that helps you in your analysis of the various policies. Will these policies have an impact on -- allow this kind of volatility in the market? And, so, I think we are all looking for solutions to that volatility.

All right, so we'll press on then. We think that September, '22 spike contains elements of all three issues. Gas and inventories were low that fall due to poor refinery reliability. Our opinion is that this is as much a hangover from COVID as anything else.

Some plants had overdue turnarounds, pushed into the fall, from the fall to the spring, as the refineries planned to go in, the turnaround continue to run because of the runup due to the war. And then other refineries had unplanned maintenance.

There was a shortage of import cargoes driven by the lack of tanker availability caused by the international trade flow disruption that resulted from the Russian embargo. It was reported to us that refiners couldn't find tankers to make the deliveries because the tanker market had completely changed.

And then when we look at the trading patterns and drill down into the details of the spot market activity on an individual basis, we see patterns that suggest the possibility of manipulation.

Okay. So, now let's switch to that question that we were asked which is how will refineries respond to a maximum gross gasoline margin. What we have -- we've been told and what we hear is that refineries will not violate the margin, and so, if that's the case, then they'll

quickly move their margin to the maximum margin. And, so, once the program is implemented, assuming it's implemented, then refineries' behaviors will start to change at that point.

In the case of the margin being below the max, refineries would probably leave prices up close to the maximum level, and we get this -- we come to this conclusion from our experience in Hawaii where in Hawaii the government said, hey, maximum gasoline price and refiners moved their prices to as close to the maximum as they could get them.

All right. So, now we're going to -- I'm going to walk you through a map here. We're going to talk about how one would look at the calculation.

On this chart I've got three curves. This is the OPIS basket racks for the second half of 2023, and we'll use this as our -- as the model for our rack price.

And then the blue line is the OPIS spot market price, and, of course, what you can see is the rack price follows the spot price very closely.

And finally, we have a crude oil price in here, that's the NYMEX.

And what we're going to do in the next slide is going to subtract the cost of crude oil, list cost of crude oil from this rack price, and we're going to show you what

that curve looks like.

And, so, in this first half of the slide, we've done that. What you see here is the OPIS basket racks minus WTI on a weekly basis over this six-month period. And here's that late-September price spike that we saw in 2023 and we observed earlier.

And, so, let's assume that somewhere in here a maximum gasoline gross refining margin was imposed, and for the sake of this exercise we'll put it at $2.00. Now, no recommendation has been made about maximum gross margins at this point, but I use this to illustrate where we're going with this.

So, the shaded area below the line is the potential additional refiner margin that would be available, and the shaded area above the line is the area that represents potential refiner penalty.

And, so, during the late-September spike with the MGGRM in force, we're assuming refineries would only price up to the $2.00 margin in this example which would benefit consumers. Consumers -- refiners -- consumers who are supplied by refiners wouldn't necessarily be seeing this higher price passed to them.

However, after the spike when the prices fell quickly, see, the prices zoomed down here, refiners would be slow to decease prices, trying to maximize the margin

under the max.

Competition from nonrack sellers would eventually force rack prices down. This is the effect of the competition from nonrefiner rack sellers. We call that line AB. So, there's an area under line AB which has got a slope of about 3 cents per gallon per day.

This area looks to be greater than the area above -- during the price spike, and what this illustrates is that consumers might be worse off with a maximum gasoline margin. What they did is they paid more here and paid less there. But with a margin in, I think an example is they might have paid -- saved a hundred units here and then had to pay back 110 or 120 there.

So, then talking about -- also talking about things that refiners might very well do, here's our margin, right, which is gas price, minus crude oil price, minus purchase gasoline cost. And what we know is that they create and closely manage the rack gasoline price. This is an activity that they do every day. They try to manage their crude oil cost, but this is not as -- they don't have as fine a control over crude oil cost as they do over gasoline price, and then purchase gasoline cost has been what it is.

However, in the event of an MGGRM, where they have to manage this rack gasoline price closely, they may

very well be making less margin than they would otherwise, and so, they will come up with other things to improve their margin under the cap.

As far as gasoline price is concerned, one thing might be -- one concept might be to add fee-based revenue generators, and in this case I would think of this as you might think this is a baggage fee that the airlines charge. It's not even in the price of the ticket, but if you check a bag, you're going to pay extra for that.

An example here could be a dollar a truck loading fee that's billed separately, so at the end of the month or the end of the week the customer gets a separate invoice from the rack price invoice, or there could be other administrative processing or booking fees.

On the crude oil cost side, they would have incentives to increase their crude oil costs, so they could buy, for example, crude at a high price from an affiliate, or they could blend in other raw materials into the crude oil price, raising the crude oil cost, or they could charge all the crude all with just costs to crude, and one of those ways would be, say, lease the refinery tank farm to an affiliate who charges them, gives them an invoice for services. So, you'd expect that they would look for ways to increase their crude oil cost.

Then, finally, purchase gasoline cost. In this

particular case they could put together a buy/sell with another company where they bought gasoline at a high price in San Francisco and sold it back at a high price -- similar high price to a competitor in Los Angeles. That would be an example.

So, if, indeed, they will work and not exceed the gasoline gross refining margin, businesses will change to optimize around that decision.

Okay. So, we talked about short-term stuff and we saw a whole list of potential list of things they can do. On a medium-term basis they would look to move volume out, regulate the classes of trade, in this case the rack market and develop other sales channels, and as we talked about, might find ways to increase the crude or gasoline costs and manage the margin with a higher gasoline price.

And then on a long-term basis, if the maximum is too restrictive because it reduces long run profitability, refiners will consider an early market exit, or find other creative ways around the regulation to make an adequate return on investment.

So, that's the presentation at this point. I'd be happy to take questions or are you going to go straight to Tom from here, Jeremy?

VICE-CHAIR GUNDA: Jeremy, are we going to go to the next presentation? Thank you.

DEPUTY DIRECTOR SMITH: Thanks, Dave. We'll do comments from the dais after the presentations. So, now I'd just like to introduce the next speaker, Tom O'Connor, Senior Director of Energy Markets at ICF.

DIRECTOR O'CONNOR: Thank you, Jeremy. Let me know if I'm visible there.

DEPUTY DIRECTOR SMITH: Yeah, we can see it. Thank you.

DIRECTOR O'CONNOR: You've got a -- okay, there we go.

Okay. Thanks, everyone. I'm Tom O'Connor. I'm the Energy Director and Energy Markets Director at ICF, and I appreciate the opportunity to discuss the recommendation we've made to the Commission on this work.

ICF does a lot of work for California agencies as well as California utilities, and we're very involved with state impacts of various energy issues throughout a number of the states in the country and are happy to be able to be doing work for CEC on this important opportunity.

Let's see. Okay, so, you've heard a lot about the gross gasoline margin. I just want to make sure it's clear, the way we've looked at it here is basically it's as described here. The margin is the controlling mechanism under SB 1322. The one -- and the one caveat I want to say is I think Dave was talking about the gross gasoline rack

margin. Most of the data we've looked at and you're going to see here today is inclusive of all channels of gasoline sales. Rack sales, branded plus unbranded only represented about 30 percent of California's refinery gasoline sales. So, it's two narrow of a band to be able to fully appreciate and regulate, and those tend to exclude some refiners from the process. So, we look at everything here you're going to see on a -- looking at all sales channels from refiners.

And as Dave indicated, higher gross gasoline margins are going to correlate to higher refinery profits. However, it does not represent the actual profits of refineries because it does not include refinery operating costs, and California's refineries have some of the highest operating costs in the country. It doesn't reflect impacts from refinery performance, inefficiencies, outages and so on, and, also, it doesn't take into account the relative value of other products produced in the refinery.

For example, gasoline and diesel are much higher than crude oil price normally, but other significant production streams in California, like petroleum coke, and gasoline byproducts, and, also, LPG and so on, are well below crude oil. So, you don't get a full look at the total refinery profits from the gross gasoline margin as its defined.

So, we're going to look at a couple of factors driving -- you know, driving supply and demand and apologizing for probably some of these things earlier today.

What you're looking at on this chart is the average gross gasoline margin as I just defined it, including all channels of sales from 2013 to late 2023 based on data reported by most of the state's refiners under SB -- under 1322.

Supply and demand issues have a major impact on gross gasoline margin. You can see clearly the increase in average margin following the Torrance event in 2015, and then in 2022 and 2023, and also the relatively short peak in 2019.

What I want to point out is that the closure of the Marathon Martinez Refinery in late 2020 resulted in a much tighter gasoline market in California, particularly as demands increased in the 2021 post-COVID recovery period. In other words, the game had changed. We're not in 2013 anymore or even 2015. There's less production. Refiners in order to meet their sales demands, you know, have to import more, and that's more expensive.

So, the Rodeo Refinery closure in March is going to tighten the market in Northern California significantly further, and you're probably seeing some of that with the

most recent data from CEC that came out last night. Production is down, stocks are down, and I haven't seen the data today, but I'm guessing prices are going to be up.

Also, you can't easily see this from the chart, but gross gasoline margins are seasonal. The demands decline in the winter months due to higher RVP which means more supply. The demands go down slightly in the winter months, but the production goes up because of the butane added in gasoline in the winter months. So, that usually results in the November to February period on average over the last 10 years having a 17 to 23 cent per gallon lower gross gasoline margin than during the March to October periods. So, that is -- that's very significant and also demonstrates supply and demand makes a significant difference.

The next factor affecting gross gasoline margins is the sales mix, and this is probably the most critical factor.

The data received and analyzed by our team indicated that there's significant diversity in sales channels for each refiner. The bar chart shows that some refiners sell no gasoline at DTW or dealer tank wagon delivered basis, but some also have sales shares as high as 80 percent. So, that could mean some refiners may not be impacted significantly by this margin ceiling or margin

penalty if DTW sales channel is excluded. So, it sets up kind of an unfair situation, so we wanted to look at things reflecting all these different sales channels.

Some people sell bulk and spot sales that range from nearly zero to 50 percent of their sales. Unbranded has some up to 50 percent and branded roughly 25 percent.

So -- and you can see from the prices at the bottom, and again, keep in mind this is over 10 years of data, but DTW and branded prices, and again, these are delivered prices to the service stations for DTW and rack prices for branded and unbranded, and bulk and spot are out the refinery date for the most part.

So, branded and unbranded do have significantly higher prices, and if you apply one threshold or one gross gasoline margin basically to all the refiners, you're going to see some significant variations in impacts to refiners because they have different sales channels.

Refiners that sell bulk and spot are selling to parties like Shell, BP, Exxon Mobil and others. The purchasing parties are effectively bypassing the margin management and are not required to report their sales to the Commission. So, that sets up two different types of marketers -- multiple types of marketers in California even at the rack and at the DTW level.

So, basically my point is people are bypassing

the regulation because of how they buy gasoline versus the refiners who are tasked with actually producing the gasoline for everyone in California.

So, the gasoline marketing strategy has a big difference, and I think those things have been entrenched for refiners for years, and I think that's not a simple thing for them to change, and the potential here is it might happen because of a regulation like this.

So, let's take a quick look at the final factor -- I don't know if it's final, but the purchase mix. Crude oil is a prime feedstock for all the refineries in California, but some refiners are supplementing, or almost all refiners are supplementing their gasoline production with purchases, and, based on report data over the past 10 years, some refiners supplement as little as 4 percent, others as much as 25 percent. The average crude price over that period has ranged, as you see in the slide, from $68 to $71 a barrel which is a relatively small difference. All the refineries in California are very competitive and can process lower cost crude and have invested billions to be able to do that.

So, that difference is only seven or eight cents per gallon per se. And when you add in the fact that there's some gasoline purchases for some of them, it might increase that from 69 -- up to $69 to $74 a barrel, which

is maybe about a 12 cent a gallon range of impact based on input costs.

So, there's a big range in gross gasoline margin from supply and demand events in different sales channels and, also, crude costs have an impact. And each of the sales channels has significantly different operational costs. It costs money for refiners to deliver gasoline to a service station. Some have proprietary additives that are more expensive; others have generic. Some refiners are inherently more efficient than others, and each refinery produces a different mix of products and byproducts and has a different operational history.

So, that leads us to suggest a totally different approach to profit sharing and finding a way to explore how a mechanism may actually work.

Our proposed approach is to recognize those differences by using an individual refinery's historical gross gasoline margin as the benchmark for identifying relative profit levels. When a refiner's gross gasoline margin exceeds 90 percent of all their monthly gross gasoline margins in the past 10 years, they would be subject to giving up a portion of their profits above that threshold. Note that each refinery will have a different threshold aligned with their sales channel.

A review of the actual operational cost data

indicates that there were wide inconsistencies in how refineries reported, and we agree with the refiner's contention that it is impossible to allocate expenses solely to one product. Rather than include operational costs, we think it should be excluded from the potential margin penalty assessment. This allows refiners the incentive to reduce their costs with energy efficiency investments, cogent-type investments which are in everyone's interest.

Let's take a look at what that means with some examples on how this could work.

There's a profit sharing penalty in this example. The refinery is at the 105 cent per gallon as their target, or ceiling, before incurring profits. You can see over the past 10 years, similar to some of the slides Dave and others have shown, that the Torrance period is in a penalty area and '22 and '23 are in penalty areas. So, basically there would have been -- this process there would have been profit sharing in those periods.

Our proposal uses a monthly average reported gross gasoline margin, which the Commission receives usually two to three weeks after the month end, and compares that to the history 10-year threshold. And again, when we look at this for this particular refiner, they're selling at some percentage of DTW, some percentage of

branded rack, maybe some unbranded, maybe some spot. The average over the past 10 years is 105 cents per gallon.

So, when the -- so, in comparing to the history we have several tranches of penalty. If they're 10 cents above that 10-year average, they would yield 40 percent of their profits above the ceiling. If they're 20 cents per gallon above, they would yield 60 percent. And anything above that, they would yield 80 percent.

What's important to note is there's almost never any associated increase in refinery operational costs during these spikes.

Each year the 10-year period would update, so the threshold will vary from year to year.

We'll take a look now at how this actually calculates, and we can look through this calculation. I'm not going to go through any great detail here, but basically if this refiner X is selling 60,000 barrels a day of gasoline, or 1.8 million barrels of gasoline in a month at 105 cents per gallon threshold, and in June, 2022 gross gasoline margin was 155 cents per gallon, then as measured with the mix of DTW and everything minus crude costs, then they would yield 25 million dollars and 25.7 million dollars back to the state of California after the calculations are done at the end of the month. The refinery still retains 12 million dollars in that revenue

above the ceiling, so -- and, so, there's a sharing here. In this case -- in this case the amount that the -- the 50 cents a gallon that was exceeded, exceeded the threshold, incurred all three tranches of volume. So, the profit sharing percentages still incentivize refiners to run crude, sell gasoline above the ceiling as you can see from the retained profits.

Okay. So, a little more data on it, additional perspective. You know, based on this the chart looks at the period from 2013 where profit sharing may have been triggered. Apart from the Torrance incident in 2015, most of the penalties would have occurred from 2022 and 2023. You will note that the impacts hit all refiners regardless of their sales channels because that's how the sales channels methodology here works.

California, and these are big numbers, California would have received about 850 million dollars over this period, primarily in the 2022 and 2023 period, assuming a 90 percent threshold, and it would have received 570 million if it was a 95 percent threshold. In other words, if you -- the benchmark here, if I go back to the earlier presentation, the benchmark here is a 90 percent threshold. They can also be a 95 percent threshold, depending upon how the Commission wants to allocate the money that may be viewed as excessive.

So, in this case, in the 90 percent case, refiners would have had to give up 850 million dollars over the last 10 years, but they would have retained 1.2 billion dollars in the 90 percent case, and again, that's over the 90 percent threshold. So, they're already getting what's under 90 percent threshold.

And I think what's important here is also, you can see these are actual numbers from different refiners, and if you can figure them out, good luck, but we can back them up with data.

And the key point here is that everybody, regardless of their sales channel, you know, depending upon how they're excelling, could be subject to this penalty.

And also, you'll also notice the Martinez impact, and apologies to Marathon and everything, but it's important because it made the market tighter, and supply and demand is, again, the primary driver.

So, California is now more vulnerable to price spikes, and they're probably going to become more vulnerable to price spikes with the Rodeo closure. And those folks are going to be continuing to be supplying their customers probably through imports, you know, or blend stocks that they get in, but the -- you know, the fact is that California is a little closer to the edge day in and day out because of the shutdown which was done

basically to provide renewal diesel into the California market for both refiners, which was a good and admirable thing for them to do, but it puts gasoline on the hotseat.

Okay, I'm almost done. I'm not going to go through everything here, but the benefits of this methodology is it doesn't put a ceiling on the gross gasoline margin which could certainly result in aberrant market behavior to avoid the cap. It provides a way to return some refiner profits to impact the constituents in California while still preserving an incentive for the refiners to run the refineries.

And, of course, there's dark sides to every regulation, and this mechanism as its proposed really impacts refineries only. The people who purchase wholesale gasoline are free to sell that gasoline at retail without restriction during price spike periods. They don't suffer any penalties from it. So, that's one impact of this that, you know, hasn't been anticipated I don't think.

And then secondly, of course, the earlier prices spike up and then they float down like a feather, that's definitely there in California. So, retail dealers can charge what they want and their response to price spikes and the duration of the escalation definitely needs to be studied, but it's not something under this -- under this regulation. They will come under more pressure over time

as competition for lower gasoline sales increase.

And then, I guess, obviously refiners are going to find ways to try to maximize their profits under this regulatory structure, and we're not quite sure how they may do it. Dave had some suggestions on what they may do, but I don't know whether this strategy that we've proposed here is something that would possibly endure the incentive for them to continue producing fuel and not try to shrink the market or export fuel.

I appreciate your attention. Everybody has given you a lot of numbers today, and the proposal attempts to strike a balance between the required profits for a massive industrial infrastructure and the need to provide some compensation to citizens who have suffered during periods of very high refining margins they can pass through to the wholesale and also critically the retail market, and this may be one way of helping that.

I do not believe -- I do not believe that this mechanism is going to create more fuel for the state of California. I think there are a number of options the state has looked at which may be able to do something like that to help mitigate margins, but it's going to take more than one regulatory action to kind of harness the transition that we're going to be going through over the next few years to make sure that the consumer impact is

minimized, and I'll stop there.

I'm going to stop sharing my screen now, too, Jeremy.

DEPUTY DIRECTOR SMITH: Sounds good. Thank you, Tom. I'd like to thank both Dave and Tom for providing their expertise and providing these presentations for the discussion today.

Before we move to comments from the dais, I wanted to say one thing real quick. It seems like we've got the IT issues resolved in the room, but if you do want a copy of the slides, we did print some of those out. They're in the front room.

And then I'd also like to welcome Matt Zaragoza-Watkins here to just initiate the discussion with Dave and Tom with a couple questions before we move to the dais, so, thank you.

MR. ZARAGOZA-WATKINS: Thank you, Jeremy. I'm Matthew Zaragoza Watkins. Thank you for the opportunity to participate today.

I think what we've heard this morning represents just a tremendous amount of work and expertise that has gone into thinking about how to maintain and improve the competitiveness of what is a very complex market. I think it also underscores there's still a lot of important work that's left to be done so that we can understand how these

markets function and the impact of the regulatory intervention on this market might be. But again, I appreciate the very thoughtful comments and analysis from Dr. Moreno, Mr. Hackett and Mr. O'Connor.

I can try and synthesize what I heard this morning. I think we see that we've identified from historical record several examples of instances where prices in California have risen significantly above the competitive benchmark. And if we can think about a sort of organized way of analyzing those, the drivers of them are underlying fundamentals of input costs. So, when crude oil prices rise and prices rise around the world and in California as well, we're unsurprised by that. Those are fundamental drivers of scarcity.

When refinery margins, that is the spread between crude oil prices and NYMEX, the New York Mercantile Exchange, prices at New York Harbor rise, what that reflects is a true scarcity in refining capacity in the United States. And when spreads rise between L.A. and that New York Harbor, what that represents is true and potentially artificial scarcity that exists in the California market.

And amongst those sources of true and artificial scarcity we have sort of a taxonomy that breaks it down into three main potential drivers, right. Market

manipulation which comes from instances where a few actors are able to significantly change wholesale prices over a short run and which doesn't necessarily reflect fundamental scarcity, right. I mean clearly gathering data is going to be a method for creating transparency and trying to mitigate that.

We have the exercise of market power, that is where firms restrain their potential supply in order to maintain prices above that competitive benchmark. I mean that can happen persistently, and as Dr. Moreno pointed out, we've seen that here in California.

And then we can have true scarcity, right, when unexpected outages lead to an inability to expand capacity, potentially bottlenecks driving imports leads to fundamental imbalance between supply and demand that market actors couldn't address.

Now, that's all a lot of preamble into asking questions, and so the first question I'll ask is for Mr. Hackett.

So, it seems like your analysis, Dave, there's real assertion that refiners would quickly move their margins up to the maximum level. It relies on the assumption of sort of no (indiscernible-audio skips) of additional supplies, right, that movement of refiners, moving their prices higher, doesn't lead alternate

suppliers to increase the quantity that they're offering in order to capture those, you know, higher margins, which then would have kind of a downward pressure on price, right. And I wonder if you could just expand a little bit on sort of your uncertainties around exactly what those dynamics might be.

CHAIRMAN HACKETT: Well, as we saw that one graph, we'd consider that headroom, and they would be -- on an everyday basis they try to charge as much as they can, and the market restrains them from that. What you would see, though, is all of a sudden you've got a new incentive for them to figure out how to get the price closer, and certainly in our view would figure out how to improve their margin under this situation. But they are restrained by nonrefiner competitors, and so we think that could be 15 or 20 percent of the market, and that provides some balancing mechanism, but their drive will be to maximize their margin under the calculation, and a piece of that will be trying to get as much price as they can.

MR. ZARAGOZA-WATKINS: And to what extent do you think that the adoption of maximum refining margin would induce additional supply or additional capacity into the state?

CHAIRMAN HACKETT: Well, I don't see anything within this program that would increase supply. Tom

O'Connor just said that. In many of the instances you might find opportunities to -- that could improve your bargaining by buying high price gasoline, and, so, there may be something there. But fundamentally this doesn't improve logistics. It doesn't increase refining capacity. It doesn't provide incentives for investment.

MR. ZARGOZA-WATKINS: And just with the regs the taxonomy of market manipulation, market power and then true scarcity, and again, you sort of alluded to this in your comments already, to what extent would a maximum refining margin potentially address some of those, and to what extent does SB X1-2 have other mechanisms for addressing them, do you think?

CHAIRMAN HACKETT: Yeah, thanks for that question. If you go back to our analysis of the spot prices, you see world events and unplanned maintenance and market manipulation, it's our view that SB X1-2 gives the Energy Commission through the Department of Market Oversight the ability to understand what's going on in the spot market provides transparency to the spot market, and it's our belief that that transparency will significantly limit the kinds of market manipulate that we've observed in the past. And when that happens, then that part of the -- that one feature of price spikes will be reduced we think dramatically. And, so, that solves a lot of the problems

that have been vexing us all for a long time.

MR. ZARAGOZA-WATKINS: Thank very much, Dave, and again, I just really appreciate your thoughtful analysis, and obviously we'll continue to chat as we work through these issues. Still a lot to figure out.

Mr. O'Connor, in sort of reverse order, regarding that taxonomy as sort of manipulation market power and then true scarcity, how do you see implementation of the maximum margin as you've kind of outlined it addressing those?

DIRECTOR O'CONNOR: Well, I think the fact that the process is -- and again, I'm talking about the process that we've recommended. The fact that the process is in place, the refiners are going to be aware of that. I mean, I don't believe they're going to be able to do anything to drive their prices up to the maximum because there's just too many players involved in the market and they'll lose market share.

So, if the current market is balanced and prices are from most refiners under the ceiling, I think life will go on pretty much as normal. When markets get tight, you know, and we're watching the Northern California market right now, when prices get tight and the spread in the Bay Area is well over the NYMEX, it's a red flag that supplies are tight and that the market needs to be monitored for possible manipulation.

Manipulation is one thing. The fact that if supplies are very scarce there's going to have to be -- there's going to have to be -- the industry is going to be doing something to try to take advantage of that by increasing -- if they can't increase production because shortages in production are what's driving the spike, they're going to have to try to ramp up imports or move product from Southern California to Northern California. In prior years they had to move from Northern California to Southern California because Northern California was oversupplied, you know, on average.

So, they'll be looking to get product in from the Pacific Northwest or further away to be able to balance the market again. And that's going to cause prices to -- that's a legitimate reason to cause prices to increase to attract imports.

If you have some rogue trades to take place like we had happen last year, I think the monitoring of those trades is going to do something to help identify that quickly and also, you know, and recognize that.

I also think it wouldn't be a bad idea to try to sit down -- you know, some of the folks at the Commission there to sit down with parties like OPIS or Argus and try to get their feedback. If that's been done I'm not aware of it. But get them to sit down to basically go over how

they come up with prices and how they validate the prices that they publish every day. I think that could be somewhat revealing and I think it would be a good thing for the OPM to investigate.

MR. ZARAGOZA-WATKINS: Thank you, and just one last question for you, Mr. O'Connor. Your analysis is somewhat different from Mr. Hackett's in the sense that it supposes that refiners would pass through higher prices in response to scarcity and that potentially it would be a profitable strategy to increase prices even in a world where there's a cost sharing component. How do you imagine that flowing through in impacting retail prices?

DIRECTOR O'CONNOR: Well, retail prices I don't believe are going to be changed by what I'm proposing, okay. In other words, if the spot market increases, the proposal that we have is not going to do anything to reduce retail prices. It's not going to reduce spot prices which is basically going to capture what would be deemed by a historical perspective which is, I think, something that Gigi was talking about, you know, look at what -- how do you determine what is -- what is a price -- a margin maximum. If we look at that over history for each refiner based on their sales channels and basically say some of this money is going to get plowed back, and the higher you go above your historical 90 percent or 95 percent point,

whatever it is, that's going to get plowed back to consumers so that they can get some benefit from the higher price spikes.

So, it's not going to affect that, and I think there are a number of other initiatives that the Commission is looking at that can mitigate the price spikes more quickly, the RVP process was one that obviously you can only do that at certain times during the year, but, you know, that's one tool to be used. But I think there are a number of tools that could be used that would complement this margin management proposal so that -- so that refineries really would probably try to do everything they can to -- they still are going to make more money, you know, due to the price spike, but it's not going to be as much because some of it is going to get plowed back.

I can't remember if I mentioned it off the top, but that 850 million dollars penalty over the 10 years, that's about a penny a gallon for all the gasoline sold by the refiners that reported the information. That's a penny a gallon that will, you know, amount to a lot of money because it's a lot of volume.

So, I think that's -- probably said enough.

MR. ZARAGOZA-WATKINS: Thanks, Tom, that's very helpful, and again, I'll just say thank you to Dave and Tom. I really appreciate your analysis. I'm looking

forward to working with you in the future.

VICE-CHAIR GUNDA: Thank you so much, Mr. Zaragoza-Watkins for kind of keeping us up there. I think I want to just pick up right where you left, so I think, Tom, again, you and Dave, thank you so much for the presentations. It was really helpful for us to be contextualized today in the broader kind of strokes of the opportunity of regulation by Dr. Moreno and then kind of like really kind of think through, you know, these two different points of view and start building the record on how the Commission could exercise the tools that have been given to the Commission to, again, really focus, laser focused on protecting the consumers at the pump.

So, Dave, if you want to come on line, I really would like to invite a discussion here between you and Tom. I think there's a fundamental position that I took away from this which is, you know, from, Dave, your presentation, the penalty, if set up, could blunt, you know, the overall price spikes, and the contention there would be the industry might try to maximize within the confines of the penalty.

Tom, what I heard from you is it doesn't really blunt the price spikes, but really gives you an opportunity to kind of crawl back or, you know, share, whatever the word is, the profits of the industry to kind of, you know,

again, certain benchmarks to put it back into the pockets of the consumers in some shape or form.

So, could we just expand on that a minute? I think I would like to have that a little bit more explored here. Tom, if you have a question for Dave, or, Dave, if you have a question for Tom, I would welcome that.

DIRECTOR O'CONNOR: Well, I think it's just a different perspective of how we're looking at it. I mean I -- I'm trying not to impede the normal market process as much as possible. In other words, I'm not trying to set up anything that would cause a refiner to say I shouldn't continue to run crude oil; I shouldn't continue to produce fuel; I shouldn't think about exporting fuel just to keep under a cap. You know, I get better value by producing CARBOB gasoline and selling it in the state of California, as long as the demands in the state of California make that economically attractive to me.

So, as demands decline over the years, you know, refiners are going to have some difficult decisions on what they have to do, and I think there's going to be a lot of ups and downs in the supply/demand balance over that period of time, and that, I think, this process enables that to be monitored clearly, and it's actually a very simple calculation that can be done every month to determine what needs to be done. And it certainly allows latitude for

refiners to basically say -- I mean if a refiner, you know, shuts down unexpectedly and their gross gasoline margin goes through the ceiling because they created a problem and they may be subject to a penalty at that point, they might say, hey, you know, we should be an exception here this month because we created the market that we're not selling any gasoline in this market.

But I think Dave is just looking at it from a different perspective, but I'm certainly inviting his comments.

CHAIRMAN HACKET: I completely agree with Tom about the supply/demand issues, and I'm glad he pointed out the Martinez shutdown in the summer of 2020 has changed the marketplace.

This has kind of happened over the years. The market has gone from being long to short to being long to short again, and you see that in the 10-year thing on the margins. A lot of that is a function of supply and demand in the marketplace, and now here we are in 2024 (indiscernible-audio stops) and so the going forward here is going to be rougher than it has been. I think the market is short (indiscernible-audio stops). So, the onshore people are -- the refiners who we're talking about here are necessarily going to have probably a better margin than they've had in the past, and so then the question gets

to be how do you manage that. I think that -- and so one of the ways you manage that in my view, you know, we talked about this earlier, is we figure out how to bring transparency to the spot market and you dampen down manipulation driven spikes. I think that's clear that that needs to be done.

Tom's concept about profit sharing at the margin once it gets to be above a certain level is interesting. I hadn't thought about that before. That's a new one on me, and so, that will take a little bit of thought from my perspective.

VICE-CHAIR GUNDA: Thank you. I have a few more questions, but I want to first go to Director Maduros and then Director Milder.

DIRECTOR MADUROS: Thanks. A question I guess for both of you based on Dr. Moreno's presentation because I know, Mr. O'Connor, in your remarks you said, you know, I think both of you said you don't really see this providing sort of more supply into the market. Dr. Moreno in her presentation sort of outlined, at least in economic theory, how this would alter the supply and demand curve to provide an incentive for refiners to actually produce and sell more into the market if they do, in fact, have that capacity, in which case you would think in economic theory again that those would show up actually in the retail price as well

because there would be then, you know, an increase in supply and more competition out there in the market.

I'm wondering -- I mean all of this I guess there are two parts of this that are interesting to me. There are lots of parts that are interesting, but one is if you -- and both of you have mentioned the possibility that there's some market -- power market manipulation going on. Do you think that there's more capacity out there that is being artificially restrained, and then, two, how do we incentivize -- I mean if we are 15 percent short, how do we incentivize or allow more imports because it seems like sort of the primary importers are also the primary people who have refiners here, and if you -- if not having a lot of extra supply coming into the market leads you to have very high prices for what you are producing, do you have an incentive to actually bring in more, and if there are other people -- you know, we've talked some and I've got some more questions about sort of discussions about the nonrefiner rack sellers, but they're largely buying from these same in-state refiners as well, or the same group of refiners, but I'm not sure. Can you talk a little bit about those issues, and I've got more questions, but --

CHAIRMAN HACKETT: Well, let me go first. I don't think there's spare capacity to increase production. If there were at the kind of prices that we're seeing,

refiners would take as much as that as they can, and so I think they're running as far as they can.

And, so, I think Gigi's analysis is really interesting, and I'm looking forward to getting into it and understanding it more, but I heard it was conditional on there's no capacity to increase production, and so that's where I think we are.

Tom, do you agree with that?

DIRECTOR O'CONNOR: Yeah, I agree with you, Dave. I think the refiners are running as hard as they can. I haven't ever known or met a refinery manager that didn't try to make a few more bucks if they could do it, and oftentimes they ran too much and killed their own margin.

But I think they're trying as hard as they can. I think they're fighting, you know, some fundamental issues, you know, with the refineries' unreliability and trying to deal with, you know, the transition. You know, the two refiners that made the decision to go renewable diesel spent a tremendous amount of money to do that, and they're off the market now in terms of running crude to make -- to make gasoline and diesel.

The other thing I'll say is that the logic of the economics of increasing capacity with refineries it's a little different. I mean, if I was making widgets and I had more capacity, I could increase -- I could make more

widgets. But if I'm a refinery, most of the refineries in California are already maximizing gasoline production as much as they can. So, if they ran more crude, if they had the capability to run more crude, they'd probably be making more diesel, and that's not going to have the same -- I mean diesel is not badly priced in California, but it doesn't help make gasoline. So, unless they add some additional capacity to make more gasoline, which they're not going to invest in in the current environment because it's going away, you know. So, the theory of the capacity increasing being able to generate more gasoline to me is -- it's okay. It works for most industries, but I don't think it works here because running more crude to make diesel, it's just going to get exported, so --

CHAIRMAN HACKETT: And another way to sort of think about it is --

VICE-CHAIR GUNDA: Tom and Dave, apologies, just kind of -- if you could entertain this question as well into what Director Maduros asked, and I'm just kind of taking, you know, the perspective here from you.

So, assuming that it's factual that, you know, the refineries are running full throttle, wouldn't this at least kind of give -- begin to give incentives to delay potentially the timing or those kinds of things to keep the capacity going -- existing capacity going?

DIRECTOR O'CONNOR: To delay?

VICE-CHAIR GUNDA: Yeah. So, here's where kind of like where I -- I think that we're kind of hearing a few different things and I understand this is a complex issue. It is kind of -- I think there is an agreement, you know, that the overall capacity is tight, right. There's an agreement generally that the capacity is tight, and we need to do everything we can possibly do within the tools that we're given in SB X1-2 to increase that liquidity, right. And at a minimum, even if the capacity were not to be increased, you know, there's that idea of kind of taking some of those profits and to the benefit of the consumers if we can blunt the price spikes, right.

So, all of that was laid out by you two. What I'm kind of getting at is if it is tight and if there is market power, you know, as the demand declines as the demand is expected to decline, what conditions under which a penalty could actually slow down the determents? I mean it just seems intuitive that, you know, that we are trying to increase the capacity and given the current demand maybe we don't have enough capacity, but after demand goes down, the liquidity grows, right, and then it finally is kind of making a decision on whether they should, you know, kind of the commission can work, whatever it is. But there is that headroom, like that's where I'm going.

CHAIRMAN HACKETT: And, so, the way we think about this is that the decline in demand is driven by regulation, that's improvement in vehicle miles traveled and a transition to an electric economy will reduce gasoline demand over time. And, so, with that reduction in gasoline demand, the margins will go down here, as long as the refiners -- refinery count stays where it is, they will lose margin and essentially what will be lost is the imported barrels. Those will kind of back out and as demand goes down until you get to the point sometime in the future, before the end of the decade we think, that margins will get to the point where the next refinery will shut down. And, so, that's, you know, three to five years from now, something like that. Very difficult to tell, of course, but that will be the dynamic, the decrease in demand will come out of imports until it gets to be the margins are unsustainable and the next refinery shuts down.

DIRECTOR O'CONNOR: I don't disagree with that, and that could very well be the timeframe. I think, you know, we've looked at that and, you know, the next refinery is probably going to be in Southern California, but so much depends upon, you know, whether the CARB forecasted decline in gasoline demand in California is going to be accurate or whether it's going to be a slower decline, and the refiners are just going to -- they're going to have to watch that,

and as they've said, the margins will start declining. It will make less incentive for imports. Refiners if they can feel they can buy the product cheaper within the state, they'll do that and back out imports. And then at some point a refiner is just not going to have the ability to stay afloat, and they'll shut down, and the market will then rise up again and may incentivize imports again, and you're going to go through that, that cycle, as you go through the transition.

And eventually you're going to probably have, you know, one to two refineries in Northern California and maybe a couple in Southern California, but you're still going to have to supply Arizona and Nevada, so I don't think those refineries are going to go away, but the transition period over the next 10 to 15 years is highly dependent on the EV penetration, and so it makes predicting very difficult.

But, you know, under a set of circumstances you can certainly make a forecast, and when the -- if the average finery utilization drops under, you know, 70 to 80 percent, I mean you're going to have a refinery shut down. The fixed costs for California's refineries are very high, and that's difficult to overcome if the margins are declining.

VICE-CHAIR GUNDA: Director Milder.

DIRECTOR MILDER: I think I want to talk about this capacity issue for a moment, and then I have a margins issue that maybe I'll come back as we go through questions here on the dais.

Regarding capacity, both Mr. O'Connor and Mr. Hackett, you're talking about refinery capacity as though it is sort of a fixed number. I just wanted -- and maybe that's something with the SB X1-2 transparency that we can revisit and sort of create more of a record on in a future proceeding, but I just wanted to sort of confirm when you think about the capacity that our refiners have to bring products to market during a price spike, during a period of shortage, I want to confirm that it's likely the case that the refineries could bring in more supply via imports of intermediate feedstocks that they could use to produce more finish gasoline as well as finish gasoline, itself, and blending components, such that I think capacity as a fixed number is something that I think we should perhaps revisit with a bit more complexity.

CHAIRMAN HACKETT: Well, I think that it would be useful to get a real look at the analysis to see where these capacity restraints might be, that is to say do they have all of their process units filled up to the maximum capacity, not just running (indiscernible-audio echoing). So, we're taking a look at that.

They certainly do have the ability to bring in blend stocks and finish gasoline (indiscernible-audio echoing). They're capable of doing that.

DIRECTOR O'CONNOR: And I would also add to that that the -- you know, there are other parties that can bring in gasoline as well to take advantage of the market, and they watch the market, the traders and people of that nature. Vitol and people like that will try to utilize their ability to buy and sell the (indiscernible-audio echoing) product into the California market.

But in terms of refinery capacity, most refiners have demonstrated that they can bring in blend stocks and finish gasoline. It's primarily blend stocks they turn into finish gasoline and provide that into the market. And the economics of that are typically good or they wouldn't be doing it.

And we can look at that -- and we've looked at that data from the standpoint of the data that's been provided, you know, by individual refiners, in terms of what gasoline they've bought, and you compare that to what they've sold gasoline for and they're on average making money doing that, but it's far less money than they make by processing food to make gasoline.

The thing is, as Dave said before, I think they're at capacity in making gasoline from crude, but they

all have the capability of (indiscernible-audio echoing) blend stocks and feed it into the Kinder Morgan system and get it to California consumers.

DIRECTOR MADUROS: I may come back to that issue, but there was also some discussion this 10-year, sort of running on a 10-year historical average. If a penalty structure were designed that way are there, you know, we clearly have some higher price channels in California than others. How do you think about what that might do to, I mean are you basically locking in people's historic profitability, are you penalizing people who maybe were operating, sort of serving more affordable end of the market than others if you were to just sort of base it on their 10-year historical profitability? I mean I know it's not profit, 10-year historical margin rates. How do you think about that or am I thinking about it not the right way?

DIRECTOR O'CONNOR: No, I mean that's a good question. And we looked at this a number of different ways. You can look at 10-year historical, you can look at a 5-year. You can look at 90 percent, 95 percent as a threshold. You can look at different penalty tranches that we look at, so there's a lot that we can study on this, but the main issue -- the main issue is -- is that you're recognizing that the different channels that people are

selling in, so if refiner A is selling primarily to the bulk spot market, it doesn't -- I mean that's a lower value. It's a lower revenue, but they don't have any of the costs associated with -- you know, with in some cases transporting fuel to terminals or the service stations that is basically delivering into a pipeline. And that's a very low cost operation, and they're probably additizing with a relatively generic additives, but they're selling to unbranded customers. So --

DIRECTOR MADUROS: The additive -- I don't think -- that's a very small price, I think. I mean even the difference between the CARB required additive and the branded additives, I don't know that that would show up that heavily in the penalties.

DIRECTOR O'CONNOR: Well, no, I guess what I'm saying is when you sell to an unbranded -- when you sell to unbranded, basically they're supplying a lot of little mom and pop stations as you'll see, and some of them are bigger. They could be selling unbranded to Costco, for example. And those refiners are getting product out there to disadvantaged areas, and that may be their target market for the unbranded sales. Those buyers make out every day because they buy at significantly lower prices than some of the Chevrons and Shell stations that you see in California. But nobody is stopping that channel from taking place.

We're just basically saying if you're selling in the unbranded market, that's part of your overall sales profile.

I think, Dave, you were going to say something. I don't want to keep talking.

CHAIRMAN HACKETT: I'm good on this one.

DIRECTOR O'CONNOR: Okay.

VICE-CHAIR GUNDA: I know we are over time but I want to maximize this discussion as long as possible. Artie, would you just ping me when we have to absolutely stop for public comment.

DIRECTOR MILDER: Thank you, Vice Chair. One quick question for Mr. Hackett. A big issue here with the penalty is about the incentives that refiners face. And you mentioned both price spikes and also refinery maintenance events. From an incentives perspective how do price spikes on the spot market impact refinery profitability and why is that the case?

CHAIRMAN HACKETT: The price spikes do improve with (indiscernible-audio echoing) profitability. And I kind of got this lesson in spades 10 years ago, nine years ago when I was on a petroleum market advisory committee and we were watching the volatility in the spot market that happened after the Torrance event. And the volatility was not explainable from fundamentals. It was clear to me at

that time that (indiscernible-audio echoing) manipulation. And I sat at the dais right where you guys are in May and said, why isn't somebody doing something about this spot price.

But I sort of thought (indiscernible-audio echoing) should be reacting to that, and then a while later and thought about it, the fact of the matter, all the other (indiscernible-audio echoing) events in the spot market benefit from that. Anybody who is a seller and in here benefits from that. Those higher prices improves their margin, no question about that. But they can feel good because they can say, well, it wasn't us. We didn't do that. We don't behave like that. It wasn't us. It was those other guys, but they still collect the margin. And, so, in my view our policy should be directed at fixing these problems in the spot market.

I've already talked about market manipulation, but another one that Mr. Maduros kind of touched on was imports. I think it's going to be important for -- to understand what's happening with the import market, the capacity of the industry to bring imports and the like to ensure that there's no market power in the import receiving segment of the business.

DIRECTOR MILDER: And briefly, from your chart it seemed as those these price spikes are correlated with more

significant refinery maintenance. Why is that the case?

CHAIRMAN HACKETT: When a refinery goes down suddenly generally what will happen is that their trading people have to go into the marketplace, may very well go into the marketplace in order to purchase gasoline to meet their contractual commitments. It doesn't always happen. There have been times when refineries have had problems and (indiscernible-audio echoing) buyers. Basically, it starts off as a reaction to some kind of unplanned shortage of supply within their supply system.

VICE-CHAIR GUNDA: Thank you. Dave and Tom, just one question. I think it is really important to establish for the record as we consider the penalty this year, so I think what you both -- what I take away from all the presentations today is the industry, it's legal, illegal, that's not what we're talking about, is always going to maximize their profits, all right. That's what they're going to do. And when the price spikes happen, right, what I heard is that it is increased profitability to the industry, right. Again, just kind of as a fact of statement. And when the price spikes happen, the consumers in California, especially those in, you know, in the income bracket that cannot afford those price spikes are going to be significantly impacted, right. So, that's another -- you guys don't have to comment on that. I can comment on

that.

So, as we think through that problem lens, right, what I'm taking away from this conversation is there's a problem, right, in terms of the impact to the consumers at the pump, and, you know, whether the behavior of the industry ethical, unethical, I'm going to just not comment on that. But industry has no incentives to reduce the prices at the pump.

And what I took away from Dr. Moreno's presentation this morning is in these conditions where there is imperfect competition a regulatory framework is necessary to protect the consumers when the prices of something like a commodity like this which is so essential to mitigate those price spikes to ensure they're protected.

So, I just want to like, you know, frame that as my statement. Would you offer anything to that?

DIRECTOR O'CONNOR: Well, I kind of feel that the -- I agree with Dave that the price spikes, and I think I mentioned this to Drew??, it's true, when the price spikes occur everybody takes advantage of it because they raise their prices because they feel they have to raise their prices because if they don't, then they're going to -- if their rack prices don't increase, if their DTW prices don't increase, then they're going to sell more gasoline than maybe they have to sell. So, they try -- they typically

will react together and the market will go up.

In theory, that should attract more supply coming into the state of California. But I don't -- I have a tough time, yeah, you know, refiners want to maximize their profits, but they also -- I think they also -- well, I guess I'm going to say here that they don't -- they don't have that incentive to bring it back down, but, in fact, they do in most cases ultimately bring it back down. When it comes back down you can see in most cases, even the ones that are non-RVP related, came back down in June of 2022 very rapidly. But, again, the retail price at the pump is different. That doesn't come down that quickly. So, I think it's not necessarily the refiners that are sustaining the higher prices for the state of California consumers. You know, they should and do react to a spike up in producing more fuel if they can or importing fuel, and I believe they do that and that's part of why things decline. But I think the -- you know, I think some of the measures that the Commission is looking at to potentially improve supply and so on would be beneficial to implement along with the margin management system.

CHAIRMAN HACKETT: From my perspective I think it's -- I think that the Commission is doing the right thing by looking at the root cause issues of the volatility, looking at the spot market and looking at any

potential market power in the import sector of the -- of the industry.

VICE-CHAIR GUNDA: I --

DIRECTOR O'CONNOR: I'm sorry.

VICE-CHAIR GUNDA: Go ahead, Tom.

DIRECTOR O'CONNOR: I was just going to add that the resolution of the -- the source of the spikes and the resolution of the spikes are also somewhat dependent upon, you know, California CARBOB regulations which make it very difficult for others to produce it, make it very difficult, you know, I think California refiners are maximizing how much they make, but when the time comes that there's a shortage, it's very hard to get somebody on the Gulf Coast or in Korea to be able to quickly respond to be able to meet that stipulation.

So, you know, again, you could quell the spot market very quickly in California, by simply allowing refiners who may carry a million barrels of non-California gasoline in storage to be able to selectively use that gasoline to help minimize the spot so that people don't feel compelled to have to -- to have to go begging for CARBOB gasoline and then just wait for the -- wait for somebody to finally throw out an offer that's 30, 40 cents a gallon above where the market is today.

So, that involves issues with the CARB and

everything, but it's frustrating to see that you can't do that, whereas on the East Coast if we have a hurricane and we need to put a waiver in place to be able to sell CBOB instead of RBOB in New York, or Atlanta, or someplace like that, they can do that. EPA grants those waivers. But there's no waivers capable in California to do something somewhat similar to quell the market.

VICE-CHAIR GUNDA: Thank you. I'm just going to note the time. We have four more minutes. Any other questions?

Again, I just want to say thank you, Dave and Tom, for providing your perspectives and answering the questions we have. Really helpful to build the record and, you know, as we continue on these conversations, but thank you. Look forward to talk to both of you again.

Jeremy, back to you.

DEPUTY DIRECTOR SMITH: Yeah. First, I'd just like to echo the appreciation for Dave and Tom for joining us today and providing their expertise and helping us to better understand these complex issues and make progress towards our goals to enact policies that provide benefits to Californians.

As the Vice Chair said, I know we're short on time, so I just want to mention this very briefly before we go to public comment.

Feedback is welcome and appreciated as the CEC continues to investigate and consider whether to recommend a maximum gross margin and penalty.

If you'd like to provide a written comment, those can be submitted to Docket 23-OIIP-01 by 5:00 p.m. on May 3.

There is a second way to participate in this. It's also to respond to the Request for Information. Those responses are also due by 5:00 p.m. on May 3.

Okay. With that, I'd like to turn over to Eric. We'll go to public comment. Thank you.

ERIC: Hi, everyone. As we move over to public comment we'd just like to say that one person per organization give comments, and comments are limited to three minutes.

If you're in person we ask that you come into the dais. Please state your name and spell it out for us and we will give you three minutes.

MS. ELLINGHOUSE: Okay, I think we're all good. Oh, very scary to hear a voice like that.

Sophie Ellinghouse, S-O-P-H-I-E, E-L-L-I-N-G-HOUSE. I'm the General Counsel for the Western States Petroleum Association.

We want to remind the CEC that SB X1-2 prohibits this body from adopting a margin, cap or penalty if those

things will actually hurt Californians more than helping them.

As the law itself recognizes, the only way you can know that is by first evaluating the actual market evidence and assessing whether a margin cap will lead to an even greater imbalance between supply and demand than we have today, or even higher prices at the pump.

The evidence collected to date by third-party experts, and even the CEC's own DPML have been clear about the underlying market reasons for California's high prices and that ongoing market volatility can be traced directly to chronic obstacles to market supply and sustain strong demand from Californians. A cap addresses none of these things.

First, chronic structural fuel supply obstacles that account for price volatility remain unaddressed in California. This is only compounded when California continues to pursue policies that shrink in-state supplies of fuels while discouraging capital investments and proposing the increase to cost of compliance with existing state programs.

There's also no supply help on the way from other states. Most refineries outside of California cannot produce fuels that meet our strict specifications, and even for the few that do, California is not directly connected

to other domestic refining centers. So, getting those fuel supplies here is more difficult, expensive and time consuming.

So, because of this and because California has chosen to reduce its own in-state supply, the state is forced to depend on importing fuel from overseas. This is slow, expensive and exposes us to the uncertainties of the global market. It also makes it more difficult to satisfy in-state demand in real time. All of this means that the more products we must import across an ocean, the more expensive our gas becomes.

Our members cannot change these economic realities, nor can we change decades of state policies that have caused California's consumers to become increasingly dependent on a global market that we cannot and do not control.

We are hoping that the delayed Transportation Fuels Assessment will evaluate all this in more detail.

Second, (indiscernible) leaders encourage investment in new and expanding refinery capacity in California which will only further diminish our in-state gas supplies. Refining is a cyclical business, and the CEC's own data has demonstrated that. Penalizing profits will make California a less attractive investment for companies.

Additionally, energy affordability issues must be considered and continuously re-evaluated as they evolve. This includes how California's steadily increasing electricity rates will likely make transportation electrification efforts more difficult, thus extending reliance on transportation fuels.

Finally, independent experts have already concluded that a cap on gross refining margins had the potential to harm consumers and drive up prices by further aggravating the structural supply constraint issues, exactly what you all are trying to prevent.

Thank you.

ERIC: Anyone else like to make a comment in person?

MS. CHO: Hello. My name is Connie Cho. I am a Policy Advisor with the Asian Pacific Environmental Network. We organize Asian immigrant and refugee communities that live next door to the biggest polluters in our state, including oil refineries.

And our communities right now are paying twice over because of the power and profiteering of refineries -- refiners, first, with their health and, second, at the pump with their pocketbook.

So, we expect to submit written comments, but I did want to provide some high-level reaction, especially

since the CEC staff are in the room and I'm here.

So, first, a lot of gratitude and encouragement to the state for setting up really important regulatory infrastructure, staffing and data collection processes to set a more robust foundation to steward the energy transition away from fossil fuel, which is necessary to respond to the climate crisis and should not be left to the whims of the oil industry that has literally fueled the crisis in the first place.

The industry has a record of deceptive practices significant enough for the attorney general to file a lawsuit on that premise.

In particular, I want to offer gratitude to the Commission DPMO leadership who have shared their thoughtful guiding questions, the Energy Assessment Division Staff presentation for their Herculean work so far, and Dr. Gigi Moreno for the extremely thoughtful foundational shared framework at the start of this workshop.

What seems clear to me in this workshop is that the DPMO CEC and beyond the whole state will really need a regulatory tool to address this market of imperfect competition as it has started to do in separate tracks in workshops like the one this afternoon, and as advocates we will be considering all of these together.

It's important to encourage the state to use this

opportunity now to engage in a holistic thinking process and provide partnership to the Governor, the Legislature and other agencies that regulate parts of the oil industry as you collect data and build this infrastructure to regulate the industry to address the system in its whole complexity.

And to that end, more information is crucial to the design of any policy intervention, and as a environmental justice advocate I know how much the industry will fight tooth and nail to dispense or distort, slice and dice the data to their favor. So, I want to offer a few remarks which I'll write on later.

So, we support the comments made in discussion about investigating supply constraints stated by refiners. In particular, and I think this is low hanging fruit for the Commission, we do urge you to collect information of what relates to the whole picture of refining operations where portions of each barrel of crude are domestic and foreign exports and it's not carved out what products are they, where are they going, because they have produced more CARBOB than non-CARBOB products for exports.

How can the state additionally verify the margins data that the refiners are providing? We also support to the extent that it's under consideration feasible that the state consider refiners who are also distributing and

pricing retail prices differently in the same way our communities who live next to these refineries experience different impacts and maneuvers to avoid accountability based on the refiner.

So, we appreciate the effort to examine the potential and likely reactions of oil refineries, but we also ask that you keep our communities in mind when you're designing your policy intervention. Thank you.

ERIC: Anybody else like to make a comment in person? Okay. For the next portion we will be moving over to the Zoom. Once again, one person per organization may make a comment. Your comments are limited to three minutes.

So, first, Amanda Gray, can you please state your name and spell it out for us for the record, and we will start the timer.

MS. GRAY: Thank you. My name is Amanda Gray, A-M-A-N-D-A, G-R-A-Y. I'm with the Arizona Petroleum Marketers Association.

APA's membership includes both small and large retailers and distributors of fuel in all parts of the Grand Canyon state. We're proud to represent family-owned companies and their second and third generations.

The fuel industry in Arizona is dependent on California refineries for fuel supplies. Arizona has no

fuel refineries, so we bring in the vast majority of gasoline, diesel and aviation fuel via pipeline, one from the west originating from the Los Angeles area in California and another from the east originating in El Paso, Texas.

I don't usually testify in hearings in other states, but the implementation of this California policy has a high likelihood of affecting Arizona fuel supply and price. As a result, I have both concerns and questions for your consideration.

I have concerns that the CEC will not account for out-of-state impacts resulting from the implementation of SB X1-2. California refineries have already experienced supply challenges based on the state's policies that discourage oil and gas exploration, refining and capital investments. This makes it harder for the industry to supply Arizonans with transportation fuels that they need. Decreasing the incentive to invest in oil and gas infrastructure through a margin and cap penalty can further reduce fuel supply capacity and increase long-term prices for Californians as well as Arizonans.

Because the law only directs CEC to seek to defray increased costs to California consumers, I'm concerned that the drivers in Arizona will be left to bear the costs of market policy changes.

I also have concerns about CEC policies that could reduce or seek to even stop deliveries of refined products to neighboring states like Arizona. It's my understanding that in a workshop last August regarding the transportation fuels assessment there was discussion about a policy of export coordination. I'm not sure what that means, but I think it's important that the CEC makes clear if intent with neighboring state stakeholders about what that policy would seek to do and how its costs would be allocated. Would the CEC encourage reducing or stopping deliveries of fuel to Nevada or Arizona in response to market volatility happening in California where refineries have to reduce production if they're coming close to violating a cap imposed by CEC and, if so, how will that impact Arizona supplies coming from California. These are very important questions.

Surely, the Legislature was not intending SB X1-2 to shift market volatility, supply concerns and higher costs on to neighboring states.

We would request more detailed information on how CEC envisions its proposed regulations are going to govern out-of-state exports of gasoline and other refined products and what costs it will -- the regulations will impose on other states like Arizona.

Thank you for your time and the chance to speak

today.

ERIC: Okay, thank you for your comment. Next, Julia May, can you unmute yourself, state your name and spell it out for us, and give us your comment, please.

MS. MAY: Thank you. Julia May, Communities for Veterans --

VICE-CHAIR GUNDA: Julia, can you please unmute on yourself. Thank you.

MS. MAY: Can you hear me now?

VICE-CHAIR GUNDA: Yes, thank you.

MS. MAY: Thank you. Julia May, Communities for a Better Environment. Thanks very much for the illuminating presentations and discussions. Very helpful. I have three points.

One, we need to once more emphasize the missing set of numbers in the proceeding regarding California refineries exporting gasoline overseas, reducing the supply in California. I'm not talking about Arizona and Nevada, our nearby states. I'm talking about California refineries profiting by supplying gasoline over the Pacific Rim outside the country to China, India, Brazil, Mexico and others. We're very concerned about the gap in the assessment. Even as California residents reduce their own gasoline demand, refineries in California increased exports. We've previously submitted comments about this.

This gap affects your assumption about whether refineries could increase production or not. You identified scarcity as a major factor during price spikes, but scarcity can also be caused by exports, not just by refineries shutting down. Such exports are not theoretical. A lot of this data comes from CEC.

So, we would really, once more, urge you to do that evaluation. There's been a lot of excellent evaluations, but we need to include exports of finished products like gasoline out of the country.

Two, in addition to making gasoline, refineries could be required to store additional gasoline ahead of a shutdown to increase supply and smooth out the lumps in supply. That can be done before a shutdown. Maximizing support for in-state storage and use instead of for export is an important factor. Right now, we know that at least a portion of refinery gasoline storage is used to support this export market, and the storage is even increasing, so we ask that you evaluate storage as well.

Three, we must remember that the price gouging by the industry is happening within the bigger context that California and the world are currently captive of fossil fuel markets, and they're held hostage for both the financial and the health costs.

In South Coast District they found they'll never

meet the smog standards until we have zero emission transportation, and they will have to phase out most of the stationary sources of pollution as well. So, we'll never meet the smog health crisis and fix it, nor avoid the catastrophic climate change without a phase out.

So, we understand it's hard. California has to balance two things, help consumers who are now dependent on gasoline and being price gouged while we also gradually shift to affordable zero emission transportation. We keep that in the context as well.

So, the preceding has been really helpful, but it's also a matter of life and death that we plan the phase out and we don't fall for oil industry fear tactics about this long-term phase out.

So, thank you very much.

ERIC: Okay, and thank you for your comments. Next up we have Julian Canete. You are unmuted.

MR. CANETE: Thank you. Julian Canete, California Hispanic Chambers of Commerce. I'd like to thank the Commission for the presentation and the staff for their work, their hard work in this area.

A couple concerns from a small business perspective. We represent over 800,000 Hispanic businesses throughout California through our 125 diverse and Hispanic chambers and business associations throughout the state.

The thing that concerns us really center around costs and the initial -- you know, the final impact on our small businesses and consumers.

There's three points. Number one, penalties will be passed on through the supply chain all the way down to the consumer, and this equates into higher gas prices and, of course, more pain at the pump for consumers and small businesses.

To avoid hitting the margins, refineries will have to ramp up production which will shrink a supply that is already dangerously tight and lead to a more volatile market and gas shortages.

And finally, this all equates to less supply means less competition, you know, and simple economics, you know, this has never worked in favor of consumers or small business.

Thank you for the opportunity to address you.

ERIC: All right. Thank you for your comment. Next up with Estella.

MS. SCHWARTZ: Hello. My name is Megan Schwartz. I'm Catalyst Environmental --

ERIC: Hold on. I was going in order. You're next, Megan. I apologize.

MR. KESSLER: Sorry. Okay, thank you. My name is Doug Kessler. I am the Executive Director of Si Se

Puede of the Central Valley, and I want to thank you for the important information.

As Julian just said, we represent and educate people in small rural communities in the Central Valley, and these people, you know, whatever you do (indiscernible) higher cost on them, so I ask you to really think about what you're doing, really look at this. You know, the price in some of our communities is already over $6.00 a gallon and it's just going to continue to go up. I don't see how with what was presented that it's going to be of anything to help the consumer. And these are, you know, very poor communities that do not have the time to come testify at these hearings, can't afford it. They are, you know, in very impoverished areas.

Thank you very much for allowing me to speak, and that's it.

ERIC: Okay, thank you for your comment. Okay, Megan should be good to go now.

MS. SCHWARTZ: Thank you. My name is Megan Schwartz. I'm with Catalyst Environmental Solutions Corporation.

Our team conducted a review of economic literature regarding market interventions and price fitting in the oil and gas markets specifically related to this bill, and it shows an historic parallel to the crude oil

profit tax period essentially to capture a perceived excess in profit and lower consumer prices.

However, the prevailing finding from the numerous economic analyses of this regulatory approach is that it is ineffective in lowering consumer and retail prices and has not historically resulted in a less volatile market for consumers.

The literature is consistent in demonstrating that both retail price controls and profit taxes can contribute to reductions in domestic supply and an increased dependence on foreign oil. Therefore, the use of excise taxes to capture perceived excess in profit has not historically resulted in achieving the goal of lowering consumer prices.

Following the energy crisis of the 1970s, there were many iterations of price setting on the domestic oil market. A consistent technical finding in economic literature is that inefficiencies in the market appeared as a response to price setting. By setting domestic prices below the world market rate of oil, the U.S. saw an overconsumption of imported oil and underproduction of domestic oil. Likewise, the crude oil windfall tax of 1980 was effectively a temporary excise tax that replaced the price cap regulatory structure, and it also was not successful in its primary goal to generate revenue for the

federal government following the first stages of market deregulation.

The transition away from direct price setting at the federal level was found to contribute to a lowering of gasoline prices by reintroducing market efficiency and competition measures. The removal of a disruptive market intervention framework allowed operational changes by gasoline wholesalers and retailers that were consistent with the pace of innovation with the emerging technology and consumer demand propelling them.

Fostering economic efficiency directly contributed to lowering gasoline prices after the price caps were removed.

Beyond the 1970s and ‘80s federal efforts, Hawaii is the only state to ever introduce legislation regarding direct price controls as a response to high consumer prices. This regulatory framework was in place from 2005 to 2006 and there were varied economic results.

The technical assessments that were done on behalf of the state indicated that a potential wholesale price cap would not directly achieve the goal of lowering retail prices for consumers.

In 2008, following the termination of the gas cap program, economic analysis found that spot pricing mechanisms required under the price control schemes are

difficult to (20:19:24) to the global price of crude, and because of this the setting of a price cap acted as an artificial control to the conditions of setting prices in the global spot market.

Further, the fluctuation of crude oil prices globally was not functionally accounted for in the price cap formula in Hawaii and showed a continuation of gas cap from 2006 to 2008 that would have resulted in lower prices.

Thank you very much for your time.

ERIC: Thank you for your comment. Next up, Tim. Unmute yourself, state your name and please spell out your name for us for the record and make your comment.

MR. SHER: Good day. My name is Timothy Sher, T-I-M-O-T-H-Y, S-H-E-R.

As a representative of the Asian Food Trade Association and their organization comprising of 40 Asian food distributors supporting and delivering to tens of thousands of small businesses, I stand before you to voice a strong opposition to the scoping plan. This plan, if implemented, will undoubtedly inflict severe harm upon small enterprises, particularly those by Asians who are still grappling with the aftermath of COVID 19 disruptions.

California’s business landscape is already growing increasingly challenging for small ventures, and the imposition of additional costs through the scoping

plan, especially amid a looming recession, will only exacerbate their struggles.

Minority-owned businesses in particular will face the harsh reality of having to make difficult decisions potentially resorting to layoff of staff or, worse yet, closing their doors permanently.

What is most disheartening is the apparent lack of outreach from CARB staff to ethnic chambers and small business associations to engage in meaningful discussions about the impact of the scoping plan on our communities.

It seems that only certain groups are being consulted, neglecting the broader spectrum of voices that should be heard. This one-sided approach fails to provide a comprehensive understanding of the feedback, a ramification associated with the scoping plan. It is imperative that all stakeholders, regardless of background or affiliation, have the opportunity to contribute to this crucial dialogue. The future of our small businesses and the wellbeing of our communities depend on it. Thank you.

ERIC: Thank you for your comments. Aaron, you're up next. Please state your name and affiliation.

MR. FLYER: Thank you. Good afternoon. Can you hear me?

ERIC: Yes.

MR. FLYER: Great. My name is Aaron Flyer from

Tinley, Austin, LLP on behalf of Italy 2 which is a fuel resaling company.

We just wanted to voice our concerns about potential unintended consequences that may not have been or may not will be fully -- may not be fully evaluated, excuse me, in the course of this rulemaking. As even Dr. Moreno has stated today earlier (indiscernible-audio echoing), first of all, it's still unclear what effect a price cap could have on the market and how the market will respond. There's also additional data that still needs to be reviewed by CEC and as an ongoing process with an undefined deadline, and so we would urge the CEC to release its studies that it's relying on well before the public commentary begins so the industry and interested (indiscernible) have an opportunity to review that data and beyond the (indiscernible-audio skipping) being relied upon.

We would ask the agency submit that as (indiscernible-audio skipping).

ERIC: Aaron, you're breaking up. Are you still there? I think we lost him. Okay, Tessa, state your name and give your --

MS. ROBINSON: Good afternoon. My name is Tessa Laxalt Robinson, L-A-X-A-L-T, R-O-B-I-N-S-O-N. I'm with the Nevada Trucking Association where we have over 500

member companies.

As over 95.3 percent of goods in the silver state are moved by trucks, Nevadans depend heavily on California's fuel. Actually, we have over 90 percent of our fuel comes from California.

Sharing the largest border with the Golden State we know from firsthand experience how detrimental public policies can affect the nation as our residents get hit first and hard.

Our members are concerned for the detrimental costs all Nevadans will feel, with the lack of access to fuel our big rigs. Thank you.

ERIC: Thank you. Aaron, are you still there? You were breaking up at the end, so we want to give you the opportunity to restate what you were saying before you broke up.

MR. FLYER: Thank you. I'm here. Can you hear me?

ERIC: Yes, we can hear you now.

MR. FLYER: Thank you. I will be brief. I'm not sure of my time record when I broke up.

But I just stress two more points. First, there appears to be a disconnect between the data that's being used to evaluate margin caps here and all of the other data being collected for other transportation fuels from other

entities beyond simply refiners as part of the spot market transactions, and we would ask that the Commission explain the connection between that data and the data that's being used to set or consider margin caps.

ERIC: Thank you for your comment. Next up, Peter. Unmute yourself and state your name and give us your comment.

MR. KRUEGER: Good morning. My name is Peter Krueger, Peter, P-E-T-E-R, Krueger, K-R-U-E-G-E-R. For the record, I am the State Executive of the Nevada Petroleum Marketers and Convenience Store Association. Our association represents Nevada fuel terminals, jobbers, retailers, and we're all so dependent on California fuel supply which accounts for more than 90 percent of the refined product that is shipped and used in the state of Nevada.

In Northern Neva where I am in Reno, we are literally at the end of the pipeline, and, therefore, all product arriving in excess of 95 percent comes via the pipeline. Any interruption we've seen in the last number of years in the pipeline has a catastrophic impact on our supply.

In Southern Nevada we obviously rely on tourism, so price becomes a critical factor as well as supply.

I'm not going to repeat the comments that my

colleague Miss Gray from Arizona highlighted which apply to the state of Nevada by and large. But we are concerned that CEC is not considering, at least in workshops and things I'm aware of last year, what the impact on the out-of-state sources or out-of-state users would be. We understand that California has supply challenges. They have interruptions. People have been talking about scheduled interruptions and scheduled turnarounds, but what really hurts us and where we see the greatest price increase are unscheduled interruptions in supply like fires and other catastrophes, earthquakes and other natural disasters.

We cannot understand here in Nevada how any kind of artificial margin cap or penalty that we feel would further reduce supply capacity and affect us here in Nevada.

Another concern, of course, is we read it, CEC is tasked to look at defraying the increased cost consumers, but again, what about that you supply from outside the state.

I think by and large it's fair to say that our members are -- need more detailed information on how CEC envisions its proposed regulations, how it will govern exports of out-of-state product and import of out-of-state crude as well.

So, these are important issues and we look forward to, hopefully, having the continued dialog with CEC such as this provides, but there are some very great concerns for us that are recipients of California refined product. Thank you.

ERIC: Thank you for your comment. Next up, we have Louie Diaz. Please state your name clearly before you give your comment. Thank you.

MR. DIAZ: Good afternoon, Board Members. My name is Louie Diaz, L-O-U-I-E, D-I-A-Z, and I am from Teamsters Local 848.

I work in the trucking and transportation field and any new proposed regulations that will cost our industry more in rising fuel costs cannot be absorbed by our members. We all agree that one day energy will convert, but until we have the proper infrastructure to support the electric path, we cannot push thousands out of their jobs.

We oppose any fast track path to changing current regulations that took years to put into place and aren't working.

Thank you for allowing me to give a brief statement.

ERIC: Thank you for your comment. Now we ask -- I don't see any more hands on Zoom, so if you're calling in

we ask that if you would like to comment, please dial star nine to raise your hand. Once we acknowledge you, press star six to mute and unmute yourself once we allow you to speak. Once again, state your name and spell it out for us for the record and give us your comment.

So, it looks like we have no more hands raised, so we'll end public comment.

DEPUTY DIRECTOR SMITH: I just wanted to thank everyone for attending today's workshop. For those that provided oral comments, for those that already or plan to submit written comments, thank you for participating in the public process.

I do just want to point out one small mistake in the slide I was presenting before we went to public comment. Written comments submitted to the docket are actually due by April 25th at 5:00 p.m. as it was written in the workshop notice. I apologize for that. Responses to our Request for Information, however, are due by 5:00 p.m. on May 3rd. Again, apologize for the confusion. We'll update the slide to reflect that change before we post the presentations to the docket.

Before we close, I'd just like to thank the staff of the Transportation Data Fuels Analysis Unit that helped prepare materials for the workshop, the members on the dais for providing their thoughts and comments, and the other

presenters for sharing their valuable insights.

Over to you, Vice Chair for any closing comments.

VICE-CHAIR GUNDA: Thank you, Jeremy. When are we starting the next part of the workshop?

DEPUTY DIRECTOR SMITH: We have another workshop scheduled to start at 1:00 p.m.

VICE-CHAIR GUNDA: Okay, thank you. So, we will keep closing remarks here short.

I'm going to start with Director Maduros.

DIRECTOR MADUROS: Just thank you, again, for including CDTFA. I think this is really important work and a very important discussion.

Just one thing I would hope would get looked at more, and I think it would be useful if people who are planning to submit written comments included some more information on this, is around the import pieces, as Dave Hackett discussed, and I know the WISPA??? (20:33:00 representative here today talked about how expensive it is to import refined product. The numbers I've seen, you know, it doesn't seem that expensive, and I know industry also says that California operating costs are very expensive. It seems like, you know, all things can't be true, and so I would love to understand more the interplay between those costs both on the California production side and on the import side, presumably from locations where

production is less expensive, if, in fact, California is a very high expensive place to produce, and to think about how any sort of penalty structure could provide increased incentives for imports, or if there are other barriers to import that CEC ought to address in the months going forward.

DIRECTOR MILDER: I would like to add my thanks to the panelists today and to staff.

In regards to some of what we heard during public comment, at the DPMO, we welcome a robust dialogue and we want voices from stakeholders, including voices from industry, including trade groups, lawyers, spokespeople, the like. Just, once again, invite an honest dialogue about what we're grappling with here, including the fact that what we're discussing here, the penalty, if you've listened to the presentation for several hours today you'll see that penalty is very different than I think some of the strawmen caps that folks are trying to talk about. I think having a dialogue about what it is we're really dealing with here and having constructive dialogue with industry would be most helpful.

On that front, I have to say I heard a reference to something DPMO allegedly or purportedly put out that I don't think is accurate at all, and, so, I again would ask that as industry is engaging on this issue, we do so in a

forthright way and that's the way that we can engage in an honest discussion. We may not disagree about how to interpret facts or policies, but some of the baseline facts here I think are things that we can discuss honestly.

In closing, I think it's jarring to see the amount that the price spikes have raised compared to the benchmark of what was profit in this industry a decade ago. I think it's accurate to say that price spikes are really profit spikes for industry, and the question I think that remains open that we've been discussing is why isn't more supply coming into the state or made on line when the profits are as they appear to be. I look forward to exploring those questions about excess profits and these policies as we go forward this spring and this summer.

VICE-CHAIR GUNDA: Thank you, Director Milder, Director Maduros and Director Bohan.

I also just want to begin by saying thank you for the participation today from everybody that's calling in, in the room, and specifically to the panelists that have taken time to really walk us through. Jeremy, to you for your presentations, Dr. Moreno, Dave Hackett, just kind of really thoughtful conversation, and, also, Tom, just kind of set the conversation here.

I do want to associate my closing comments with both what Director Milder and Director Maduros kind of

mentioned, but I just wanted to close off by just making sure in the spirit of that honest discussion, and transparency, and comments there are some things that are really articulated today, and those are when the spikes happen, profits happen, and the spikes happen, consumers, especially low income, get hurt.

And the spirit of SB X1-2 is to ensure protection for the consumers at the pump. And currently there are no incentives for industry to minimize their profit to support consumers. There are no incentives.

And today what I take very clearly today is some regulatory intervention is essential in protecting the consumers on such an important commodity in an imperfect market which is all established today in the discussion.

It's also been established that there are multiple things we can do, and none of them are mutually exclusive. One, we could take some of the profits and put it back in the consumers' pockets, whether that increases supply or not and stop the problem. We could do things to ensure that the amount of liquidity in the market is high and the competition is high, and we could do things to ensure that the planning is better and the data transparency is there, and when planned maintenance happens there are enough reserves, you know, that are planned for to protect the consumers. All of these are not mutually

exclusive and as we think through this, there is absolutely a desire from the Legislature in implementing this bill to blunt the spikes. There's absolutely a desire, and that's something we will be looking at. And there's absolutely a desire to make sure that supply and demand conditions over this transitional period are carefully maintained so the price spikes -- the overall prices do not go up.

So, all of these are going to be taken in totality, and I do want to make sure that we don't -- you know, as we think through the penalty as one of the many solutions in the (indiscernible), penalty by itself will have some impact and we are going to consider those impacts, the positive impacts of that.

And finally, I do want to put this in the context of as we do this, you know, we are going to do an assessment. We are going to do a transition plan with CARB and ensure that there is transparency, and I just don't necessarily hear regularly from out-of-state stakeholders commenting on our proceedings. I just want to take the time to say thank you for voicing your concerns, and we welcome discussions, and we will ask staff -- directing staff to follow up to make sure your perspectives are reflected in the work we do.

With that, I'm just going to adjourn for the day and thank you, everybody, for being here.

(Adjourned at 12:40 p.m.)

CERTIFICATE OF REPORTER

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 9th day of September, 2024.

Elise Hicks

ELISE HICKS, IAPRT CERT**2176

CERTIFICATE OF REPORTER

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IN WITNESS WHEREOF, I have hereunto set my hand this 9th day of September, 2024.

MARTHA L. NELSON, CERT**367