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CALIFORNIA ENERGY COMMISSION

In the matter of:

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SENATE BILL X1-2 WORKSHOP

HYBRID IN-PERSON AND ONLINE VIA ZOOM

TUESDAY, NOVEMBER 28, 2023

9:00 A.M.

Reported by:

Martha Nelson

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Mike Smith, United Steelworkers Union

PUBLIC COMMENT

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INDEX

P R O C E D I N G S

9:04 a.m.

TUESDAY, NOVEMBER 28, 2023

MS. GUTIERREZ: Good morning. Welcome to the California Energy Commission's SB X1-2 workshop. My name is Aleecia Gutierrez and I'm the Director of the Energy Assessments Division. While we've held several workshops on various elements of SB X1-2, today's workshop kicks off the discussion for the maximum gross gasoline refining margin and penalty.

Before we begin, I'll go over some housekeeping.

For those in the room, restrooms are located out the atrium to your left. And in case of emergency, please follow our CEC staff out the emergency exit to Roosevelt Park, which is kitty-corner from our building.

We will have a slide at the end of the deck that gives instructions on the docket and how to submit comments. And we'll also have a portion for public comments at the end of the agenda.

The agenda is shown here for today. We'll start off with a welcome and overview of the scope of the workshop. Then we'll follow up with some opening remarks from the dais, followed by a presentation on the economics that -- for margin and penalty, followed by more questions and comments from the dais. Then we will have our roundtable discussion, which is the feature of today, where we will be exploring the impacts and benefits of implementing a max margin and penalty, more questions and comments from the dais, and then public comment and our closing remarks.

So with that, I will hand off to Drew Bohan, Executive Director of the California Energy Commission.

EXECUTIVE DIRECTOR BOHAN: Great. Thank you, Aleecia.

Vice Chair Gunda, Director Milder, good morning. I'm really glad to be able to present to you today. Vice Chair Gunda, your staff have been very busy for the last six months or so.

As you know, the governor signed SB X1-2 in March of this year. We were to, within 90 days, stand up a data portal, which we did, and we started receiving very large amounts of data from industry. We held a workshop prior to that to get feedback from the public, and we held individual meetings with industry members, with environmental groups, environmental justice groups, labor, academia, to make sure we're collecting the right data and to get people's input on the various pieces of this legislation.

The slide you see shows all the different parts of the legislation, the major parts of the legislation. We are not going to go through those all today. Our focus is on the one circle that says today's topic in red, but just a brief history of some of the others.

So the Transportation Fuels Assessment is due by the end of this year to the legislature. That's a look at how the state might implement tools to mitigate or eliminate gasoline price spikes, and to look at the long-term trend over time as gasoline consumption goes down while electric vehicle use goes up. Following that is a Fuels Transition Plan that we are working on with the California Air Resources Board. That's due at the end of next year, and we'll be having workshops on that topic beginning next year.

A number of other things we're doing, in the lower right, you see market management analysis that is going to be conducted by the Division of Petroleum Market Oversight that Director Milder leads.

But let's get into the next slide, which is the timeline for the topic we're going to focus on this morning. This just shows some of the major activities that we are conducting.

It starts with the signing of the bill and the data collection. But last month, you'll recall, Vice Chair, you and your colleagues adopted what we call an OIIP, an Order Instituting Informational Proceeding, of which this meeting we're at this morning is a part of, and that launches this investigation into the propriety of establishing a maximum margin on gross gasoline refining. So we'll be conducting workshops beginning early next year. We are really looking forward to the feedback from a panel we have today, and we invite feedback from any member of the public on this topic.

We are expecting to have a recommendation, so we will be endeavoring to make a recommendation to the Commission itself sometime next year on whether or not to impose a penalty. Ultimately, it will be your decision, but you will be provided with the staff recommendation.

Next slide, please.

So what animates this discussion? I put a few quotes here from the legislation itself. These are the findings. I'm not going to read them all, but essentially, they talk about how there were capacity limitations, there was inventory shortages, the last couple -- it was referring to 2022, but the same situation occurred just this last summer. It talks about how the profits of the industry that supplies fuel the Californians rely on have been substantial, and that there needs to be change to this in order to protect consumers in California. So that's really the backdrop for today's conversation.

Next slide, please, Ryan.

This is just an illustration. On the right is a slide from a press release from the Governor's Office, and you can see some of the profit that the various companies have made in the third quarter of this year when prices were getting very, very high. And again, this is part of what has been undergirding this conversation about managing prices in California.

Next slide, please.

So what does the legislation actually direct us to do? The language says, and I quote, "The CEC may set a maximum gross gasoline refining margin," that's it, there's just one sentence. What I've got on the screen here is some of the things we're charged to look at in order to make this recommendation.

So in order for the Commission to impose a penalty on the refining industry, it must first determine that the benefits to consumers outweigh the costs, which makes sense. In doing so we're directed to look at two things. One is supply and demand. What impact would imposing a penalty on industry have on the supply of gasoline, good, bad, indifferent? And what would a penalty do, if anything, to the price of the pump? These two are obviously very closely related. As supply goes down, price goes up. As there's abundant supply, that often suppresses price.

And then, finally, the legislation says the Energy Commission can also look at any other factors that it deems relevant. So we, of course, invite the Commissioners to weigh in, Director Milder, and again, I'm very eager to hear from the panel and then from the public about what other things we should be considering in making this judgment.

Next slide, please.

When we think about this framing, you know, we ask ourselves, how should we frame our thinking around whether a penalty in this area is a good idea? And there's a number of different ways to look at it. We put up two here and then an other. So again, we invite views of others. But two particular ways to look at it are on the screen here.

I would start by saying, however, that one thing that the penalty is not meant to be is a punishment for conduct that is already criminal. We have the Division, as noted, and they'll be looking at things like price fixing and other conduct that's unlawful. There could be a referral to the attorney general and that sort of thing. This part of the legislation, the penalty we're talking about for today, is not about illegal behavior.

We put up two different ways to frame this. And the first is just to look at the way the market in

California is structured. It's inefficient. There's very little competition. This is a huge market, third largest market in the world for petroleum, and there's a very small handful of sellers. As a consequence, they're in an outsized position to have an impact on the market, unlike various markets where there's innumerable players.

In addition, there's high barriers to entry. This is not something that someone can decide, hey, let's start a refinery. It's a massive investment, a massive operation, so that isn't realistic, really.

And then in addition, there's limited information. The industry is opaque, partly by design, because we don't want industry players to know what their competitors are doing, because that could have a negative impact on prices. But it also means that the industry itself is sometimes not crystal clear on what's happening. So one way to look at it is just that the market structure is questionable. And that might be a reason for a penalty to reduce the impact on customers of when the market behaves in a way that causes prices to go up.

This is not unprecedented. There's other areas in society where we do this sort of thing. They aren't perfect parallels, but consider things like rent control. Rent control is common in many cities in the United States. And it places an obligation on private industry to control prices. Utility prices are controlled by government regulators throughout the country. Prescription drug price caps are not uncommon. There's minimum wage. And there's other areas. I throw those out as food for thought of how we might think about it.

The second way of framing this that we wanted to offer to you this morning is it's possible that these structural inefficiencies, these market inefficiencies, are being manipulated. We are not suggesting that as the staff of the Energy Commission to you today. We don't have clear evidence that something like that is happening but it's certainly possible with a small number of players, that kind of thing can happen. And so a penalty in that case would be a determined deterrent to that sort of thing.

The players in this market, the refiners, control what supply is in California to a large degree. They produce gasoline, of course, in California. Some 90 percent of the fuel consumed in California is refined in California. So crude is imported, it's refined here, and it's sold in California. But a ten percent-ish is brought in annually by ship. And the refiners are free to bring in more. They're not compelled to do so.

But when supplies start to get tight, that puts the refiners in a position to bring in more fuel to maintain supply at a level that will keep price within reason. And they don't routinely do that at a level that will keep the prices where Californians who rely on this critical commodity can continue to get by without having to make decisions about healthcare and childcare and whether or not they can get to work because they can't afford the price of fuel.

Finally, I would just say the market structure, as we observed in the middle of September, behaves in an unusual way. So there was a trade, I think it was September 15th, a Friday, one trade that took place in this market, and a private entity reports these trades. That trade sent what's called the base price from a little over a dollar to just under $1.50 with one trade. As a consequence, this was on a Friday, on Monday, and throughout the week, the price of gasoline at the pump went up considerably.

So these are all the things that your staff are looking into, and we don't have definitive recommendations or answers for you today. And, again, hopefully learn more today and get some explanations and some thoughts from the folks on the panel.

Next slide, please, Ryan.

This slide is a little bit complicated, but what this shows is the year 2022, January 1 starts over at the left, and what we're looking at is the price of gasoline.

So this was 2022. If you look at the first circle there on the graph, that was shortly after the invasion of Ukraine.

And to give a little background, the green color on this graph is the crude oil price, and you'll see it moves up and down throughout the year. The next wedge above that, the gray, is the refinery costs and profits. That's what we're focused on. That's what SB X1-2 is all about, so I would call your attention to that gray line. And then the one above it, the dark blue wedge, that's the distribution costs. So in this industry, you have refining and refining costs. And then once the refiners sell the product to others in the distribution side, all the way down to the pump where you fuel your car, that's the distribution side. So refining in gray, distribution in all the different players in that chain in the blue.

And what you can see is that around March, soon after the February invasion, the price went up. The price of crude went up, the refiner margin went up, and the distribution margin went up. Then they went down after a while, and there was another small spike in the summer.

And then I'll call your attention to the oval all the way over to the right. This was last September, and you can see the price of crude actually dipped. It certainly didn't go up a lot. So that wasn't a driver of price. But the price went very, very high. And you can see both the refinery margin in gray and the distribution margin in blue both went up.

Then I'll show a slide in a second that reflects an action the governor took, but the price dropped very, very fast. And you'll see the refinery costs and profits went down very quickly at the very left edge of that oval, but the distribution costs didn't go down nearly as fast. They went down slowly. We'll hear from our economist friend a little bit later about some of these dynamics. But this is just an illustration of how this happened. 2023 wasn't much different.

Next slide, please, Ryan.

This just stacks the year 2022 and 2023 together. Again, you can see at the bottom, the blue, the crude oil cost doesn't change wildly. But in orange, the refinery costs, again, you see in the September, October timeframe, they get very large and then -- in both years. And then trailing them as the distribution costs in green that are larger in the later months after the high increase on the refining side.

Next slide, please.

This just shows in one short period, September 1 to December, the end of December 2022 and 2023. And the boxes represent when the governor announced the -- or called for an early transition to winter blend. This is a fuel mixture that includes a lot more butane. It's abundant, it's low price, and it has the effect of boosting supply substantially. We can't say with certainty that there was cause and effect between the governor's announcement, but it sure is a strong correlation. And we have reason to believe that this announcement was critical to reducing price. And you see that the lines are very similar, slightly different sizes. But soon after the announcement, the price went down very, very quickly, and Californians were in a much better place.

Next slide, please. And I've just got a couple more slides.

This slide is busy, but let me just take a second to deconstruct it. What this slide is trying to illustrate is that one of the key drivers in this industry, like many products that are sold, is supply and demand. So this is really representing supply and then how price corresponded to supply. So the big dark parts of the graph, the orange represents the 2023 inventories. Inventories are the total stock of petroleum in California. And the dashed lines represent the price.

So if you look at the orange this year, you see the trend downward in the middle part of this graph as the inventories went low. Demand gets higher in the summer for gasoline, and inventories drop. Again, there aren't many ships brought in to supplement this fuel shortage, and they could be. But as a consequence of this suppressed supply, you'll see the dashed orange line, the price, going up.

Same exact thing in 2022. If you look at the blue, it peaks in about the middle of the graph there, the supply, and then it falls off below the orange. You can't even see it. It gets hidden behind the orange. And if you look at the dashed blue line, similarly, you see price going down. And then once the inventories get really, really low, the price spikes very, very high.

So this is just an important slide to get a reference point for how supply of gasoline has a very large impact on price.

Next slide, please.

We are not, this morning, recommending, Vice Chair or Director Milder, any particular approach to the margin, but we wanted to provide for you an illustration of how this would work. So this slide here just looks at the data we've been looking at in the last few slides, simplifies it a little bit, and it spreads out over a calendar year, and over a number of years. And it just shows the price of gasoline over time. And as you see, it's very high at certain points.

What we've looked at is how often over the last -- this is about 20 years. Over these last -- it's

2015 to 2023, excuse me. But over this period of time, how many times did this margin that is the focus of our conversation, how often did this margin go above $1.00? And the answer is five times. It happened five times. And it went over $0.80 cents 18 times. It went over $0.60 cents 46 times. So we show this because if the Commission were to adopt a maximum margin and then impose a penalty above that margin, this slide illustrates what sort of revenue would that generate for the state of California.

And I won't read them all, but if you just look at the dollar level, had this been in place and nothing – no other behavior had changed from the period 2015 to 2023, the revenue to the state would have been $1.2 billion, and it goes higher if the level were $0.60 cents, it would -- the revenue would be $9.5 billion. So again, we're not recommending this at this time, but just wanted to illustrate the options.

I also want to make one note. This data that you're looking at is based on what we call the 1322 data. This was a bill, SB 1322, that passed that gave the Energy Commission substantially increased authority to collect data from the industry. We've been collecting data for decades from the industry, but this really increased the degree, the amount, the specificity, and so that's what this data is based on. Historically, we have reported data for this industry, but we have gotten much of that data from other sources, other private reporting sources from the Energy Information Association, from OPIS. There's a number of players where we get that information.

So on our website today, we have some similar type information that has some slight differences. We're working right now on reconciling those, taking the old stuff we've been using for years and harmonizing it with the new data that we're getting directly from the industry. And we'll be doing that over the next few months.

So that's my presentation. I finally want to ask to just go to the last slide and tee up the questions. We'll be talking about these the rest of the morning, but again, I just want to frame for the audience what we're hoping to get out of this session.

We want to hear from the experts and we want to hear from anyone in the public who cares to comment, their thoughts on these questions: Do the benefits outweigh the costs? If we were to impose this penalty, is this good for California? What kind of impact is it going to have on supply? What about the price at the pump? And is there anything else we ought to be considering? These are the main things that the statute directs us to look at. Staff has some other ideas, but we really want to get others' input.

With that, I'll turn it over and thank you for your time.

VICE CHAIR GUNDA: Thank you, Drew. Thank you so much for setting the stage.

I'm Siva Gunda, one of the Commissioners here of the Energy Commission leading the work on this particular bill. And I'm joined here with Director Tai Milder, who's the Governor Appointee leading our Independent Division, Oversight Division. So I welcome you to, you know, your first proceeding at the CEC in an official capacity.

I just want to begin by saying thank you to the staff for pulling this together. I think we've been, as Director Bohan said, you know, we've been hard at work. It's been rapid fire, a lot of work to keep moving here, but I also appreciate the staff doing it thoughtfully and doing it as collaboratively and in a welcoming fashion as you're able to. So I just want to support your spirit of getting the work done in the right way, just protecting the values of the Commission, protecting the integrity of the data we have and the process we have.

I specifically want to highlight, you know, Aleecia, to you and your entire team, thank you for all the work you're doing and the Chief Counsel's Office, who has been an integral part of this work.

I wanted to just kind of reiterate a couple of pieces that Director Bowen set up. I think for us, you know, setting the penalty and the process of setting the penalty is really important on how we frame it. I'm really looking forward to hearing both from, you know, Matt here, you know, who's going to be discussing economics, kind of energy transition and how to think about penalties and price caps, really looking forward to that presentation, but also from the stakeholders on how do we do this? How do we do this in a way that we frame the penalty?

As Drew mentioned, this particular bill is not about existing law; right? So we currently have law where there is a criminal activity and there is penalty for the criminal activity through the, you know, AG's Office or the legal process. This is new penalty authority that has been given to the CEC to support and protect the consumers of California against price gouging. It's a new element. It's not necessarily illegal activity, it's beyond that, you know, what are we observing in terms of market power, in terms of structural deficiencies in the market, and how do we ensure a structuring of a penalty that could protect the consumers at the end? So that's really what the work is about.

So I'm kind of looking forward to hearing the discussion, looking forward to the staff work on compiling the thoughts that we hear today and developing recommendations over the next year. And, you know, I just welcome you all to do it really thoughtfully, making sure we get the most input we can from all stakeholders.

I also want to just make sure that there's a couple of other elements in the bill apart from, you know, the core element, which is protecting consumers of California. It really sets the stage of two pieces.

One is by improving transparency. A number of legislators said it during the discussion legislative process, that we want to, you know, have the sunlight to shine and really help, you know, reduce the infection. I think that's what I heard the legislators say, so that's an important element. I think the staff have been taking steps in, you know, going through the data we're receiving. I'm really thankful for starting the rulemaking so we can, you know, make the data really clear and put it out as much as we can.

And I want to just make a public appeal to the staff. You know, I know we have, you know, clear mandates on how to protect information, so I want to make sure that we do that. But I also want to make sure that we balance that with putting as much information as possible out. I think an important spirit of the law here is to make sure that data is available to public so we can have the discourse publicly. So let's make sure that we really enhance the processes to both protecting data but also putting it out as much as we can and maximizing that data output.

Second, I think it's the accountability. I think we're all accountable. We're accountable as public servants to do our job. You know, the industry is accountable for what they do. And stakeholders are accountable in how they support the work we do here. So I think this bill is about accountability to making sure that all of us come to the table feeling that accountability and making sure that at the heart of all of this is protecting Californians.

So I'm really looking forward to it. I'm looking forward to having this conversation and making sure that, you know, we do a really good job for the state of California.

With that, I would welcome Director Milder for his comments.

DIRECTOR MILDER: Well, thank you, Vice Chair, for that welcome and for inviting me here today to participate.

I'm here today on behalf of the Division of Petroleum Market Oversight. From that vantage point, the key question is how a gross margin penalty could be used effectively and also responsibly to protect consumers in the state of California. To that end, I'm looking forward to the panel discussions today. I'll be listening intently to the panelists as they share their perspectives and their expertise.

What I think would be most helpful on this end would be to hear how, as a factual matter, you believe market participants will respond if there is such a penalty. That would include why in your experience you expect that type of response. So specific and concrete factual examples would be greatly appreciated.

I look forward to the panel discussion and thank you.

VICE CHAIR GUNDA: Aleecia, do we have Director Maduros joining us today? Is he able to join?

MS. GUTIERREZ: I don't think he is.

VICE CHAIR GUNDA: He hasn't joined yet? Okay.

MS. GUTIERREZ: Okay.

VICE CHAIR GUNDA: Back to you.

MS. GUTIERREZ: So thank you for those comments.

Next we will move to our presentation by Matt Zaragoza-Watkins.

DR. ZARAGOZA-WATKINS: I'm going to enable my screen sharing here. Just a moment. It looks like we're ready.

Thank you so much, Vice Chair Gunda and Director

Milder for having me here today. Over the next ten minutes or so I'm going to try and lay a little bit of the economic foundation for the discussion that we're going to have later today. I'll be talking about the maximum gross gasoline refining margin, it's a mouthful, so maybe I'll call it the MGGRM, maybe that'll stick or maybe not, it's economics, through, you know, thinking about the theory of prices, why it is that we see the prices we see when firms have an ability to affect prices. What does that look like? When prices are high, does that always mean that firms are manipulating prices? When might that not be the case? And then thinking through regulation. If we're going to set a maximum gross gasoline refining margin and a penalty associated with when firms go beyond that, what impact might that have in the California industry?

I'm here today from Vanderbilt University where I'm an Assistant Professor of Economics, and I'm also currently visiting UC Davis in the Economics Department.

Just recapping a bit, right, and underlining some things that we've talked about, SB X1-2 notes or finds, you know, that although we think that there were some preventable capacity limitations and inventory shortages that largely drove the high prices that we saw in the third quarter of '22, and more recently this year and also in the past, maybe that's not the whole story. I'm going to talk through some of the economics of unpacking that statement. What do we mean by capacity limitations and inventory shortages? Why might that be the case that that would lead to high prices?

And then additionally, SB X1-2 authorizes the Energy Commission to set a maximum gross gasoline refining margin and a penalty for exceeding it; right? So how could that function? What do we think the impacts of that might be?

This really focuses on California refiners and the margins that they face. Of course, refiners are not the only firms that influence price in California and abroad. We have inputs through the petroleum industry upstream. We have spot markets downstream. We have prices at the rack. And ultimately, we have retail prices that, you know, motorists, individual motorists pay. This is really focusing on the refining industry and in particular on California refiners. But again, I just want to emphasize that there are other actors in the space and it will be important to think through what their incentives are and to gather data to try and paint as broad and as rich a picture as we can as we move forward in this proceeding.

So now I want you to think abstractly and harken back to your Econ 101 classes and consider an industry with large fixed costs. This is the refining industry; right? It's other industries that are large and energy intensive and capital intensive as well. But the reason the refining industry fits this mold is because, as Executive Director Bohan said earlier, there aren't going to be any new refineries for motor gasoline in California in the immediate future; right? And so we're really sort of stuck with the capacity and the players in that market that we have now in the short run and possibly the long run as well.

Those firms made an investment, many of them a long time ago, that was very capital intensive and it was a bet, you know, on the future profitability of this industry in California. That investment needs to be amortized over all of the fuel, right, that's produced in California using those resources in order for that firm to make a reasonable return on investment. A lot of the discussion leading up to this has been, well, what is a reasonable rate of return; right? Have we seen reasonable rates of return? Have we seen rates of return that are beyond that? And, if so, what should we do about it?

Graphs. So here we have a market that's competitive in perfect competition and in the long run. Any firm could enter, again, so that maybe doesn't reflect the refining industry that we have in California now.

There is no uncertainty, right, so that doesn't reflect necessarily the underlying volatility that exists in oil prices and how that can drive prices at the pump as well.

And so we have on the vertical axis price, and on the horizontal axis quantity, and three curves. The blue curve is the marginal cost; right? That's the cost for a particular firm to produce one additional unit of a good. The red curve traces out average total cost.

To the left, average total cost is above marginal cost. And the reason for that is because there are these large fixed costs that we're talking about of making an investment to become a refiner, and you have to amortize those costs over the quantity that you sell. As you sell more and more quantity, the average cost associated with those fixed costs decline.

And eventually, if we think that it costs more and more to produce an additional unit of the good, right, as we bump up against the capacity constraints that refiners may really have, right, or input costs associated with production increase, we hit a point where the marginal cost of production of producing that one additional unit exactly offsets the average total cost of production. That's the point at which a refiner in this case, or any firm, is going to have totally covered the fixed cost of investment that was required; right? This is where they're breaking even.

And in the long run, we expect firms in competitive industries to participate or to produce at that break-even point. If they're making profits that exceed this. That's going to be an industry that's enticing to enter, and that's going to lead firms to come in. If they're not earning sufficient profits such that their marginal costs equal their minimum average total cost here, that's going to be an industry that firms want to exit. It's not going to be desirable to participate.

Our green line is demand; right? And so we expect that the pressure of entry in a competitive market is going to lead firms to enter up to the point where they're just meeting that minimum average total cost. And if other firms can enter, then we expect the demand that any one firm faces is essentially going to be a flat line. You can produce however much you want, you can sell at this price, that's our market price, that's governed by competition amongst many firms, or you cannot sell. That's what a competitive industry in long run equilibrium with no uncertainty looks like, but surely that's not the industry that we have here in California.

Now, in the short run, sometimes there are instances where markets are out of equilibrium, even competitive markets. And so here we have an example where demand, right, has risen above the intersection of marginal cost and average total cost. Imagine this is a situation where a refiner has locked in purchase agreements to buy oil at a particular price, put a forward contract and expectation of supplying the market with refined product, and then suddenly the global price of oil jumps up.

Now from the refiner's standpoint, the opportunity cost of using that oil as an input doesn't reflect to the true cost that they paid, right, that earlier price, but it should reflect the new or higher price, recognizing that because oil is a storable good, right, and because refined products are storable goods, the cost of replacing the oil that they have on hand isn't going to be the price they paid, but rather the price they would have to pay today.

And so in those short run instances, when you see big shifts in oil prices, we should expect to see that captured as rents by a refiner. And so in the short run, we can have these instances where marginal cost is above average total cost, and that's not necessarily a red flag, it's just the reality of the situation, you know? And likewise, right, we can have instances where that price would be below minimum average total cost in the short run. And that would be the opposite story; right? A refiner locks in a price, the oil price drops, and suddenly the price of replacement is less than that, and the margin that they're getting is significantly less than what you'd expect in the long run.

Oil prices aren't perfectly forecastable. There is uncertainty in this market, and there is risk that they face, but our expectation is that over the long run, right, that the marginal cost and average total cost that they're paying should be about equal, right, so we should have an equal number of high side instances and low side instances around this sort of general gravitational point.

Now, again, those are competitive markets, and now that's competitive markets with a little bit of uncertainty, but that's probably not what we have here in California.

And so you can see on the right side of my slide here, we've got California oil refinery locations and capacities. And you may not be able to make out the print on that exactly, but the underlying takeaway is something that's been referenced earlier today already, that really there are five firms that dominate capacity in this industry. And if you think about the concentration that is associated with the shares of capacity that these firms have, that's what, you know, economists or antitrust lawyers tend to think of as a fairly concentrated industry. It's not a monopoly; right? There's not a single firm, but it's certainly not a competitive industry where there are many firms that have no direct effect on price.

More likely what it is, is that any individual firm at any individual time is pivotal, that is their decision about how much quantity to produce is going to have an impact on the total quantity available, and therefore on the price that consumers have to pay.

And so to the left, this figure illustrates that scenario. Now instead of having that flat line of demand, right, where a refiner has no impact on price, they face a downward sloping demand curve. And then the second curve, which is somewhat interior there, is the marginal revenue curve. So these firms are profit maximizers and they want to make sure that the marginal revenue that they're earning from production, the additional profit that they get, is equal to the marginal cost of supplying that additional unit.

Now from an economic efficiency standpoint, why is that problematic; right? We want them to be producing in the long run at where marginal cost equals minimum average total cost, but where they're producing in this scenario is interior to that, right, at this intersection of Q and P of the dashed lines, and we can see there that marginal cost is significantly below price. And the dashed line, or sort of box that's filled out by -- or filled in by economic profit, those aren't sort of profits as you and I typically think of them, rather they're profits in excess of what we would expect to see in a competitive market.

Why is profit in excess of what we should expect to see in a competitive market problematic? It's problematic because it means that there are fewer people, right, who are able to purchase the necessities that they need to go about their lives, right, and they're paying too high a price for it. It's allocatively inefficient, and it's something that we want to avoid.

And so one of the challenges here for this industry is that it's clearly concentrated. We're seeing instances where gross gasoline refining margins are exceptionally high. And we're wondering, is this an instance where we're seeing windfall rents associated with declining oil prices and firms having locked in contracts early on, or is this an instance where firms aren't fully utilizing the capacity that's available to them in order to profit maximize as opposed to welfare maximize?

And so as the State of California, as the California Energy Commission, it seems like your goal is to try and increase welfare by regulating prices in a way that's going to benefit Californians broadly.

And so just to think about how that might work, right, here we have this final figure, I promise, where we have the price that a firm with market power would choose, and then below that we have a regulated price. I say regulated price, but what I actually mean here is a regulated maximum gross gasoline refining margin; right? So it's not going to be a price cap. Rather, it would be a penalty associated with differences between the input costs, including the costs of labor and capital and transportation, right, all of the things that are necessary to cover the production and transportation of transportation fuel. And so the difference is between the price that those refiners are earning in the market and the costs.

And so you can imagine that by setting a penalty associated with what the maximum gross gasoline refining margin might be, that's going to change the incentives of the firm. Now if they withhold quantity in this setup beyond this point where MC equals demand, they're not going to earn any additional profit, because the additional profit that they would earn would potentially be extracted, right, by the government as a penalty. That changes their incentives; right? Their profit function is now different, because when they withhold quantity, they don't earn additional profit. They just lose profit in terms of the difference between the cost of production and the price that they're allowed to charge. This is the sort of regulation that exists in the utility industries broadly.

This sort of regulation requires a lot of information. It requires the regulator to understand the cost structure of the firms. It requires the firms to provide information about their selling prices, about the quality of the services that they're providing, and about their underlying cost structures. So I really encourage you throughout this proceeding to pay careful attention to the sort of information that you might be able to gather to fill in the details of this picture.

So just, you know, to sum up with a few key takeaways here, right, in the long run, competitive firms should produce at a minimum average total cost, that point where they're just covering their fixed costs, but not earning exceptional profits beyond that. In the short run, though, prices and profits can deviate from that. That's not necessarily a source of concern, but if it's persistent, that indicates possibly that firms in this industry have pricing power.

Looking at California's petroleum refining industry, it appears pretty concentrated. And so that at least raises the question, to what extent are they choosing quantities, not necessarily to maximize social welfare, right, but rather profit maximizing quantities that deviate significantly from what would be allocatively efficient?

And you can see that a price cap, right, can, if properly designed, induce regulated firms to increase their short run output.

I guess I would just underscore this last point, which is that in the long run, of course, those capped prices need to still cover the average total cost of the investments that these firms have made; right? But with proper information and guidance, it's surely something that can be done.

Some final notes. Look, this has been a pretty stylized presentation of a really complex industry with a lot of additional players. And so as we move forward, I would just offer these additional questions as food for thought.

So do firms engage in other activities, right, like hedging, that's going to affect potentially their gross gasoline refining margin? Is that something that we want? How would a penalty affect those decisions?

Do the firms produce other products that don't face the same potential maximum gross gasoline refining margin? And how would imposing profit cap on the production of that particular product affect their incentives to produce other products?

Do firms engage in other vertical arrangements? So my second -- third slide showed this value chain where there are many participants that had opportunities to affect the price at the pump. This is clearly targeting a large and important element of that value chain, but there are others. And it's important to understand how this element of the value chain interacts with those other elements of the value chain in order to make sure that the incentives you create are going to have the intended consequences.

Finally, what's the opportunity cost of producing gasoline in the short and long run? As we see transportation-fueled demand in California decline through policy, right, that's going to change the structure of this industry as well. And so we want to understand how those policy-driven changes would interact with this maximum gross gasoline refining margin to make sure that the incentives are aligned.

With that, I conclude. Thanks very much.

VICE CHAIR GUNDA: Thank you so much, Dr. Zaragoza-Watkins. First of all, thank you for responding to us and being here as a part of the discussion today. I know we reached out to you pretty late in the game, and you were kind enough to come and share your expertise, especially with your expertise on energy transition and markets. So thank you for adding your voice to it.

So I think I have a couple of high-level questions, I think you already covered it, but if you're able to expand a little bit more. One of the things we've heard as a concern during the legislative process is if there were to be a penalty, then the refinery industry has to shut down or are kind of close, or those penalties, not revenues, penalties that are going to be captured by the state to then reinvest in the state could potentially be passed on in other ways, too. So, you know, could you speak about the eventuality of those statements and anything that you might be able to help frame the question?

DR. ZARAGOZA-WATKINS: Yeah, absolutely. So I think there are sort of two scenarios here.

One, in that second graph that I showed where, for whatever reason, the producer was just enjoying rents associated with having made some good decision earlier on, the oil price that they paid was less than the current oil price, and so in that instance, you'd see a gross gasoline refining margin that was really high; right? And what that reflected was true scarcity. I promise this is an answer to your question.

In an instance where there is true scarcity and refiners don't have an opportunity to increase output in response to a penalty, then we should expect to see that at the end of the day, prices will still be high for transportation fuel in California because there's no way to manifest more; right?

If what's actually happening is that there is an additional opportunity to produce and that the gross gasoline refining margin is reducing a refiner's incentive to withhold capacity, then we shouldn't expect necessarily to see those higher prices pass through. In fact, we should expect to see lower prices pass through, right, because the effect of the gross gasoline refining margin penalty would be to expand quantity.

And so maybe the succinct version of that answer would have been, it really depends; right? If the gross gasoline refining margin has the effect of expanding capacity, then we should see lower or at least no higher prices. If it doesn't have the ability to do that, prices will be what they are.

VICE CHAIR GUNDA: So I take it from your comment that it's really important -- it's kind of important to look at the data and figure out, you know, a structure that allows for that eventuality of increasing the production or increasing the competition, for lack of better words.

So one other piece there has been a discussion around if, you know, there is no -- two pieces, I think. One, from your observation as you talk about the competitiveness of the market and the concentration of the market, are there metrics that you observe? Like, you know, for example, comparing that to elsewhere in the country versus in California, do you observe statistics around competitiveness, statistics around how much production we're having, whether it's capacity? Anything like that would be really helpful.

DR. ZARAGOZA-WATKINS: Yeah, absolutely. Off the top of my head, I can tell you that California's refining capacity is utilized less than the national average; right? So that is to say that California refineries have an ability to intake crude and output transportation fuels; right? And what we see is that California has consistently brought in less crude than it has the ability to refine. And that's an indication of an industry that could be exercising market power; right? That at least has some inefficiency in it that could be wrung out.

In the longer run, again, I say it's really important to collect data so that you can understand the market structure. And there are some telltale signs, right, in particular, pass-through, which is this idea of how costs, input costs are passed through to consumers. In concentrated industries, we often see that pass-through can be in excess of 100 percent, particularly in industries like transportation fuel, where the responsiveness of consumers to price changes is very modest.

And so with proper data, you'd be able to analyze different differences in pass-through rates. And a telltale sign, again, would be pass-through in excess of 100 percent.

DIRECTOR MILDER: Just one question, Doctor. From your slides, I gleaned it was critical to have accurate data as to average total cost, because a firm may leave the market if the penalty is set at the wrong level. Do you agree with that takeaway? And if so, can you expand on why it's critical to have accurate data in setting a penalty?

DR. ZARAGOZA-WATKINS: Absolutely. Yes, I do agree with that characterization. And fundamentally, the reason it's important to have accurate data is because you want to understand the incentives that firms face. We can perhaps assume that firms are going to act in their own self-interest, right, which typically means that they're going to maximize profits in the short run and only stay in markets that are profitable in the long run. If we understand the profitability of the industry from the self-reported data that's verified, right, to be accurate, then we have a clearer picture of what the incentives are to participate in that market. And from that, you can refine a penalty structure -- because I couldn't help myself -- to make sure that it's an attractive industry to be in, but not one that's inherently inequitable.

VICE CHAIR GUNDA: Thank you. I think I have one more minute. I could keep asking you a million questions, and that's both taking me back to school, but also just helps to, you know, think this through, you know, in a public sphere.

So I think one specific question that kind of you laid out is around the profit maximization versus welfare maximization. And I, you know, really appreciate you stating that because a part of the state's mandate here, and I think the singular mandate for us, is public good and figuring out how do we protect the consumers in a market that's designed to operate, you know, in a well-functioning market where people make profits.

Could you maybe comment a little bit on past examples or current examples, as you see in energy transition, that are kind of balancing this act between profit maximization and welfare, and any examples, if you are able to today, or we can continue to discuss, that the state or the government has become a part of to help secure that welfare?

DR. ZARAGOZA-WATKINS: Yeah, I can give lots of examples of industries where government and the private sector are grappling with these issues now, and it's certainly common for government to play an active role.

We can think about just the electricity

generation industry, right, and kind of the radical effect that renewable energy has had on prices in the wholesale electricity market here in California, but really all over the world. There, again, is an industry where electricity generators are making big investments or big bets and putting steel on the ground, and it's not going to go anywhere. And yet, the marginal cost of generating electricity with wind and solar, when those resources are operating, essentially zero; right? And that's pretty different from the marginal cost of operating a resource like a natural gas-fired power plant here in California.

And if there are enough hours in the year or day where those renewables are dominating the generation profile, you know, it's possible that natural gas-fired power plants and fossil fuel-fired power plants will not have an incentive to participate in the short run or to continue to stick around in the long run; right?

And so in recognition of that, regional transmission operators have come up with capacity markets, essentially as a side payment mechanism to cover those fixed costs. I think those who are receiving capacity market payments would argue that that's been an instrumental part of making sure that they stay in the market and keeping the lights on.

In contrast, Texas is an energy-only market. I wouldn't say that capacity markets are the only reason why Texas has experienced more volatility, but that's a system where the state has decided that they don't want to play an active role, and it's certainly a more volatile price.

VICE CHAIR GUNDA: Thank you so much, again, for lending your expertise and look forward to your continued engagement in this process.

With that, I'll pass it back to you.

MS. GUTIERREZ: All right. Thank you, Matthew.

We are going to move into our roundtable discussion, which is one of the features of today's workshop. I invite everybody that's on Zoom and in the room to do a quick stretch break, because we will power through.

And right now, I will invite Ethan Elkind to put his camera on. He's the Director of the Climate Program at the Center for Law, Energy, and Environment at UC Berkeley and UCLA.

So, Ethan, we will go ahead and have you start to introduce our panelists.

Panelists can come up to the table and we'll put your tent card in front of you where you sit. If you have a laptop with you, you will be invited to connect to Zoom so we can get a close-up shot. If you don't, do not worry. We will have a wide camera shot to capture all of you.

Thank you.

MR. ELKIND: Great. Well, thank you very much. Hopefully, everyone can hear me. I apologize, I can't be there in person. I had some last-minute schedule issues that I couldn't move. So unfortunately, I'm going to be chiming in here by Zoom, but really looking forward to moderating this discussion. I just want to thank the Energy Commission staff, Vice Chair Gunda, and everyone involved for helping to organize this and making my job hopefully easy.

So we've got a great panel here and a lot of issues that I think are teed up based on what we just heard. So I'm going to go ahead and introduce the panelists one by one. I'm going to ask some general questions. I may have some follow-ups. And then, of course, we'll have an opportunity to hear from the dais, and public comment following this as well.

So first, I want to introduce Cathy Reheis-Boyd, President and CEO of the Western States Petroleum Association. We're also joined by Connie Cho, Just Transition Policy Strategist for the Asian Pacific Environmental Network. We have Elena Krieger, who is Director of Research at Physicians, Scientists, and Engineers, PSE, for Healthy Energy. We also have Jamie Court, President of Consumer Watchdog. You've already heard from Matthew Zaragoza-Watkins, Assistant Professor of Economics at Vanderbilt University, who will be joining this panel as well. And last but not least, we have Mike Smith, Chair of the National Oil Bargaining Program for the United Steelworkers Union. So very pleased to have all of you joining for this roundtable discussion.

And I'm going to kick it off here and we'll go one by one. I'll have some general questions, as I said. And the first question is: If the Commission is to set a max margin with penalties, if that is exceeded, do the benefits to consumers outweigh the costs?

So I'm going to start that one. I'm going to direct that first to Cathy. I'll give you the chance to start it off and then we'll go through one by one of all the panelists to weigh-in. But the question is: Do the benefits to consumers outweigh the costs?

So, Cathy, all yours.

MS. REHEIS-BOYD: Thank you. Thank you, Ethan. I appreciate that.

And thank you, Commissioner Gunda and Director Milder for having us today.

I do have to give one caveat. You're going to have to just bear with me for one second, because WSPA does not know and we don't have access to any confidential business information of our members, and I do have no information on how they would respond. What you're going to hear from me today is my own opinion based on my own experience, so that’s my caveat.

So to this question of net benefits, or do the benefits outweigh the costs, we don't think they do because we don't think there are benefits, we think there are only costs.

And I do want to address something that Executive Director Drew Bohan did mention this morning, was we've got to address the fundamental reasons for rising gas prices. And in our opinion, that includes many, many things, some of which we've talked about, but it's lack of supply with a continued strong demand. It's an isolated market. We don't have pipelines, crude, or products that come into the state. We have expensive gasoline that certainly is the cleanest on the planet but it takes a lot to make it. So the spec is difficult. You heard how the governor took an action to have the waiver be put in place and the prices were reduced because the cost was reduced, understandably.

To get product here, or crude, it's 30 to 40 days on a ship, which increases costs and increases greenhouse gas emissions. We know from information we submitted to the docket that you have from Solomon Associates, that Alaska crude is $5.00 a barrel, Brazil is $4.00 to $5.00 a barrel, Middle East is $5.00 to $6.00 a barrel, and California crude from the San Joaquin Valley on a pipeline is $1.00 a barrel. So there is a direct impact to cost and price at the pump from not producing crude oil here in California, and we are blessed with a lot of it. We just can't get permits from the state of California to produce it.

Vessel availability, obviously impacted by several of the wars that we have all experienced. We have constrained ports. We've got constrained terminals. We've got storage. We've got aging infrastructure in the state that I am quite concerned investments are not being made because there's no incentive to do so. That impacts price and cost.

Permitting is very, very difficult. I already mentioned the getting any new drill permits for crude oil.

The fact that the Commission has not stepped in to local government who is reducing gas stations and reducing competition is something we should seriously look at, certainly in this period of where we are and where the state would like us to go. And we know the policies certainly have cost. Not that they are not meritorious, but at least $1.30 and $1.32, as we've seen previously, certainly impacts.

So if the CEC believes that capping profits is the answer here, what is the acceptable amount? What is the percentage? How are you going to determine that? And are you going to apply it to all California corporations?

Because I'm going to give you one example that I just read from a company, Zero Hedge. You might want to look them up. Their whole job is to widen the scope of available information in this space. I have nothing against Google. Google made more dollars, more money on less revenue and pays lower overall state tax rate than any of my members, any of our members, with a net margin that is double. So are we going to have a similar discussion on other sectors that have a higher net margin or a higher margin?

So if the CEC caps prices supply could be restricted, it could cause rationing. It could restrict growth, causing the economy to shrink and harm consumers. So if you're looking at gross margins, it could easily penalize refiners inconsistently. And if you're looking at net margins, it equally brings the uncertainty for this industry to supply the market 24/7, which is an enormous task when you got 40 million people driving 36 million internal combustion engines every single day. And we invest in it all. We invest, as you all know, we believe in an all of the above energy strategy and we do every one of them, including electric.

The last thing I'll mention is we did submit to the docket yesterday a literature review of profit caps and price controls in the energy space done by Catalyst Environmental Solutions out of Santa Monica. Please review it, because they went through the history of actions taken in the United States, in the UK, in Hawaii, all throughout time that have not had any benefit to the consumer and, in fact, caused prices to increase. So I do think it's important to look at history and at least analyze what they've put together in the complete literature search we've submitted to you, because I can't find one that had a benefit to the consumer.

Thank you.

MR. ELKIND: Thank you, Cathy. And I appreciate your comment that, you know, you don't have access to confidential business information.

I'm just curious, as a follow-up, have your members shared with you any specifics about how they would respond to a margin, a max margin, and a penalty?

MS. REHEIS-BOYD: Absolutely not. And we are under very strict antitrust provisions with the State of California, with the federal government. They would never do that, nor would we ever participate in that kind of a conversation.

MR. ELKIND: Okay. Appreciate that.

MS. REHEIS-BOYD: I would just add on the electricity side, just because it was brought up, I'm going to say Dr. Matt because I can't even think about how to pronounce his last name but -- I thought Reheis-Boyd was bad.

But the one part on the electricity side, utility rates, you look at the electric -- and we're not, we're not a regulated entity like the utility, so to compare the refining industry to the electricity side is interesting. But utility rates could increase four to nine percent annually between now and 2025. And if you look at the investment-owned utility profits, they have jumped sharply up related to growth in the rate basis; right? Because that's due to the infrastructure projects that are approved, that goes right into the rate base, and it's a guaranteed rate of return.

So the price tag for any initiative on the electricity side, whether it's wildfires, grid reliability, decarbonization, is increasing the electricity costs dramatically. So more investment they make with a guaranteed rate of return is going to increase electricity prices. So we got to keep that in mind, as it's going to increase the capacity in mind, as it's going to take two to three -- two to five times electricity grid capacity that we have today to meet any of these goals, according to a recent Stanford study.

So it's both sides of the equation; right? It's the investment in infrastructure we need currently in the existing system, and it's the investment in infrastructure we need on the energy evolution or the energy expansion side. Both of those have to match up if we're going to do this.

So I'm looking forward to the Fuels Transition Study, Commissioner Gunda, because I think that's where we're going to get to the real heart of how to increase supply and minimize cost and increase investment.

MR. ELKIND: All right, let's have that same question about the benefits to consumers outweighing the cost.

Let's go to Professor Matthew Zaragoza-Watkins. You can take the next crack at this one.

DR. ZARAGOZA-WATKINS: Sure. Can you hear me?

MR. ELKIND: Yes.

DR. ZARAGOZA-WATKINS: Hey, Cathy, right. So Professor Matthew Zaragoza-Watkins. ZW is okay.

And, yeah, I guess going in reverse order there, I think my reference to the electricity industry was particularly wholesale market design; right? And so that's, you know, before it hits the transmission system, before it hits the distribution system, before we start talking about SMUD and PG&E and their regulated rates.

But I think it's interesting to point out, right, that when we think about utilities and those rising costs, there is transparency there. And we know that the reasons those average costs are rising is because there are capital investments that are being made and those costs need to be amortized. And we can decide whether the rate structure, there's, you know, a whole other debate going on, right, in California right now about whether the way that prices are passed through to consumers is equitable, but it's certainly transparent. I think that's important here.

So I guess what I would underscore, right, is we need data. And I understand that it's not data that you have, right, but data about what the costs are that are necessary to support the continued operation of the refining industry, to support the energy transition, and to make sure that those costs are covered, but not necessarily to allow for significant excesses beyond that, particularly if it's coming as a result of firms exercising market power.

With regard to price controls, I guess, again, I would say that natural monopolies in utility industries are a really good example where profit caps have been successful; right? They don't provide perfect economically-efficient incentives relative to a world in which we have many firms competing aggressively in markets;

right? But in situations like California, where even though it is the third largest market in the world for refined product, it's one that's dominated by a few firms. And the scope or the size of the investments that those firms decided to make in order to refine that product are large enough that it's not attractive to have other entrants come in, right, and participate in that market.

You know, in settings like that, oligopolistic settings, right, to use the jargon, I think we have seen a lot of success, not necessarily with price regulation and control, right, because as we discussed, there are lots of things that are input costs that vary in ways that are beyond the control of California's refining industry. And so it's those instances where you rigidly control price without necessarily having a dynamic system that accounts for changes in cost, where you can get inefficiencies as a result of price regulation.

But in instances here, where we're really talking about capping profits, I think a careful data-driven approach to that that doesn't disincentivize the long-run investments that are required to make sure that the industry operates effectively, but also doesn't necessarily allow a few players to exert market power, it seems like a balanced approach.

MR. ELKIND: Great. Thank you for that.

So I would like to give Jamie Court an opportunity to weigh in on this question. So Jamie, go ahead.

MR. COURT: Well, I think we got to remember why we're here doing this now, which is that this is not a normal market. It didn't work normally. And this is the restoration we need.

Just going to other examples of other markets where a profit cap has worked, you go to the electricity crisis in 2000, which was precipitated by free market reforms in '98, the price cap came in in 2001, and we went back to normal prices and normal operations. If you go to the insurance companies in California, they were way out of control in the 1980s. Prices were going up 11 percent a year, and we established what is effectively a profits gap. They only allowed a reasonable rate of return. And for the last 35 years, literally under the strong premium regulation that only allows for a reasonable rate of return, essentially a profit cap, the companies have done better than nationally, but our premiums have stayed relatively flat.

Go to the medical industry, the medical insurance complex. The Obamacare reforms put in a medical loss ratio. There is a 15 percent cap on costs and profits, and it has worked to hold down insurance rates. When things get out of control, it's up to government to step in and make sure that prices work.

Now why specifically will this one -- will this work? Because we know that the gross margins are way out of whack in California with what they are in other parts of the country. Just looking at the securities exchange reports, we know they're like 30 percent higher here. We know that the five refiners that control 98 percent of the market take advantage of the market in all sorts of ways that are unrelated to supply and demand.

And we know that the price is set on the spot market. The spot market is a very unnatural market. At the height of the crisis last year, Bob McCullough, an economist, found that the spot market price, which determines the retail price, was basically stocked for two weeks and didn't change for two weeks. No spot market transactions changed. That price was artificially inflated. It didn't have to do with supply and demand. It had to do with rigging this market.

So if we can take away the incentives for these price spikes, which are always corresponding to a profit spike, if you go back historically and align that refiner profit margin, gross margin chart, the last slide that Drew put up, put that together with the price spikes over the last ten years, I guess, you will see they align perfectly.

The price spikes align with the gross margin spikes. So if we can keep the top down, that will obviously save consumers money. And if we can keep the margins within the range of what they're making around the rest of the country, which is all we're really trying to do, to keep the margins within the range around the rest of the country and within the historical margins, then there is every incentive for these refiners to serve a market of 25 million drivers.

So I don’t -- you know, I think that the fact that we're here today dealing with this, you know, there's obviously a history. Last year, we saw extraordinary prices, prices that were $2.00 more than the rest of the country at one point. At that same time, we saw profit spikes, gross margins spiking at the same time. And the governor said, we've got to put a cap on that to keep those prices down.

So I just don't think we should be looking at this in a vacuum. We only got here because of the greed of this industry, not unakin to what happened with Enron being so greedy. And we're here to try to keep prices down for consumers who, when prices go up by $20.00 extra a gallon, that's a lot of money for a low-income worker.

So I see it as a question of the industry forcing us to be here. And if we can keep these margins within a range that is consistent with historical norms and with norms in other parts of the country, there's every reason for these companies to do business here and do business here on a reasonable basis, more reason places.

MR. ELKIND: Thank you, Jamie. And I know we've got others to weigh in here. But since you mentioned the reporting to the SEC, one of the questions that we had was, why is it that refineries reporting to the SEC in their 1322 forms are different than what they're reporting to the SEC? And this is even more evident when you look at companies that only have California refineries. So I'm wondering if anyone is in a position to answer that question.

And, Cathy, I might look to you to see if you have any knowledge there, or if anyone else on the panel does.

MS. REHEIS-BOYD: Again, thank you, Ethan. I don't have any knowledge of what companies have submitted on what form you're referring to.

I know something associated with this question was, if you're asking about whether, you know, diesel and jet fuel make a difference in the net margins, I could say that both of them are important to the bottom line. I mean, every barrel of crude oil, you make gasoline, diesel, and jet fuel in descending order; right? The diversity of the fuel products provide outlets for that refined oil barrel, that helps the reliability of supplying gasoline barrels. So it's all tied together.

But I don't have any knowledge of what's been submitted on 1322 form.

MR. COURT: I did a little research going back in the SEC. I pegged consistently that SEC margins are much lower than 1322 margins. SB 1322 is California gasoline only. Part of it, I think, has to do with -- so, obviously, part of it has to do with its western margins on the SEC forms, not just California margins, but two of the refineries, two of the refiners only have California margins, so that doesn't explain it.

But if you look at the gross margins, for instance, for the third quarter, the other thing is it's amortized over three months, and we're getting monthly margins for the -- under SB 1322. But the margins have been over a dollar under SB 1322.

So the CEC website has the aggregate data that goes behind the margins, and we can actually do the math on it. And we did some of the math. So we basically took the dealer tank wagon price, the branded-unbranded rack, you subtract it from the crude cost acquisition on the volume-weighted basis, and then you can subtract out the LCF and the cap at the rack, and that's the gross margin. And the gross margin comes out pretty close to what they're reporting, it's like $1.04 in August versus $1.29 in August, so it is relatively high.

And when you do the math, that is the most perfect number because it actually accounts for all of their costs, other than the operational costs of running a refinery, which we can peg at maybe $0.20, which is something that is in the SEC report. So the SB 1322 data is the most perfect data because it has a way of backtracking and doing the math so you can see where everything adds up.

We do have some concerns about how the refiners are including spot transactions and bulk transactions. And I think that's what's the difference between the $1.04 we came out with and the $1.29 is. But the point is we're getting great data now. SB 1322 opened up a whole new world of data, very specific to California margins. And so we are perfectly positioned to use that data to get the gross refining margin established at a reasonable level, because we know all the costs.

MR. ELKIND: Well, thank you, Jamie and Cathy for responding to that.

If others want to weigh in, let me know. Otherwise, I want to give Elena Krieger a chance to weigh in on the initial question that we kicked off this round with about the potential benefits to consumers outweighing the costs.

So, Elena, I'll pass it to you.

MS. KRIEGER: Great. Thank you. So, you know, as we saw this morning, as Drew presented, retail gasoline prices have occurred simultaneously with the highest refiner margins, which certainly suggests that capping profit margins should help reduce some of those price spikes.

And I wanted to follow up on something that Professor Zaragoza-Watkins mentioned, which is that there is limited competition in California, and there's likely going to be increasingly limited competition. We expect refinery production to go down and probably refinery retirements alongside the decline in gasoline demand as we go through the transition. And that means that the industry is going to increasingly look like the power sector or another natural monopoly that has decreased competition, which to me suggests that regulation that looks somewhat similar to something in the power sector, like regulated rates of return or other kinds of price regulations, might be a reasonable approach in order to protect consumers.

But, you know, high stocks are hard to handle; right? I think this is important. Lower-income households, particularly those who have long commutes and may not be able to afford electric vehicles, might not have access to public transit, are particularly high -- very vulnerable to high and variable gas prices. These same low-income households are at increased risk during that coming transportation transition as they face barriers to efficient and electric vehicle adoption and cannot necessarily afford to live near where they work, and also have limited savings to draw upon to provide resilience to price spikes.

We've discussed many times the potential risk of reduced energy security and gasoline price volatility during this transition as oil supplies are phased out alongside electrification efforts. A cap on refinery margins may help limit the exposure of those lowest-income households to price volatility and price spikes.

I'm also curious, given some of the data that Drew showed earlier today, showing that distribution margins directly follow those refiner margins, like increases, whether or not a cap on refiner margins could have a ripple effect and limit that second price spike. I don't know if that's true, but that seems like something that would be worth potentially looking into and looking at both of those potential margin impacts on price spikes.

And finally, I just want to note that this can't be the only set of measures to protect low-income households from high gasoline prices and price volatility. But the data that we collect throughout this whole process may be very valuable, and particularly trying to look at where we see both high prices and high price spikes in order to help us develop targeted interventions that would enable us to support such things as electric vehicle financing to enable lowest-income households to transition away from fossil fuels.

Thank you.

MR. ELKIND: All right. Thank you, Elena.

So now, Connie Cho, I'll pass it over to you.

MS. CHO: Hello. Good morning, everyone, and thank you for having me here. I am from the Asian Pacific Environmental Network. I believe you've heard from my colleagues Faraz and Amee before. And while not completely new to this conversation, it is my first time meeting some of you here in person, so I just wanted to say hello and thank all of the CEC staff for the incredible amount of work that they've been doing to start this rulemaking process and take on what is really a completely unprecedented adventure for the oil refining sector.

At APEN, we organize with and work with refinery communities, as you must know. And so when I answer this question about benefits and costs, I think about benefits and costs, of course, for whom?

And just to back up for a second, I want to start with benefits of what are we really talking about. And it's not -- and you know, I think up until more data comes out, it will be this abstract notion of a penalty or a cap. And while we want to streamline our work, I want to make sure that this conversation doesn't happen in a vacuum.

And I do appreciate how the session today has started with the broader context of a historic energy transition to meet the climate crisis. It is this context in which in-state California demand for oil is necessarily decreasing. And that I've been seeing that California refiners have become net exporters of refined oil.

One other important piece of context is that the state's own Office of Environmental Health Hazards reports have documented an increase in greenhouse gas emissions, an increase in particulate matter and PM2.5 from refineries in California communities. So I would urge the public and the CEC to consider who will be served by a narrative of artificial scarcity around the supply of oil, because we've been seeing these emissions from refineries increasing, and so refinery pollution, at least, is quite abundant in our communities.

You know, the EPA data shows that in Richmond, people living next to a refinery experience anywhere from

500,000 to a million pounds of toxic chemicals into the air each year. And every few months, there's flaring at the refinery. Last night, multiple flares had to flare through the afternoon and late into the evening because of a power outage on site, releasing greenhouse gases and concentrated pollution into the air. Those who came over from the Bay this morning or were around last night may have seen this giant black plume over the Bay. It was visible from San Francisco. It was visible from Marin County.

And I know we have many questions ahead, so I just want to state that keeping oil companies honest is going to be key to this energy transition. So to be able to secure the avoided social cost benefits, the positive health benefits from improved air and water quality, the positive economic benefits of what our climate change planning processes have told us we need, and thoughtful, responsible regulation and holistic comprehensive planning is going to be necessary in this energy transition to plan for and plan around an industry that is already and will necessarily be in decline despite desperate attempts to keep a stranglehold on us.

So for benefits to whom, I would ask that, you know, decision makers really consider the long arc of structural environmental racism in this country. Poor and working class communities of colors that live next to refineries, oil wells, areas where there's fracking have seen their neighborhoods become environmental sacrifice zones. And that's why our communities have been leading the fight against polluters to stabilize our climate for decades.

In our work, we have found that these are not innocent actors. There is a long trail of regulatory noncompliance and violations in their history. It is an open secret that refiners pay to pollute and pay to violate laws in our communities. So while I appreciate that this is another penalty being added or there's a consideration of another penalty being added to the books, that the conversation around oversight cannot be lost from the discussion of this penalty as well.

MS. REHEIS-BOYD: Ethan, is there any opportunity to weigh in or --

MR. ELKIND: Sure. Yeah, Cathy, go ahead. And then I want to give Mike a chance to have the last say here. So go ahead.

MS. REHEIS-BOYD: Okay. Great.

Elena, thank you for your comments. One reasonable approach that I think all of us can hopefully continue to discuss is to not lose another refinery. Because I have been doing this 40 years, and I can guarantee there was a boatload more than there are now.

And that's not a situation that we created, it's a situation that was created because if you became uneconomic, we had ExxonMobil leave, we've Shell leave, we have BP leaving -- left. So this is a -- you know, when it becomes uneconomic, you either sell, you look for other opportunities, and that's what occurs when you have a market that is what we have today.

I would also say that there are -- I just can't agree, I'm sorry, Connie, with the assertions about our refineries and our members pay to pollute, because I don't agree with that in any form. If that were true, and the emissions in our local communities were going up, I think you would fire 34 air districts whose job is to make sure that doesn't happen.

We just put in the South Coast, $4 to $6 billion dollars on the issue of (indiscernible) in 1109.1. The amount is similar and equal to the Bay Area, similar and equal to the San Joaquin Valley. So the investments made to reduce emissions in the state of California, if you talk to any air district, there would be a good story, they're not a bad one. So we support that. We continue to work on that.

And, again, I just think, you know, there were a lot more refiners in this state, and I hope we don't take actions that reduce the few we have left.

MR. ELKIND: And Connie, I want to let you have an opportunity to respond, but Cathy, this is a follow-up on there. So is the idea that if a max margin and penalty is established, I mean, you talked about refineries closing, but would it be a situation that either the costs would be passed on to the consumer, or would retail stations close? What would you anticipate?

MS. REHEIS-BOYD: I don't really have a lens on what I would anticipate there, nor do I have the experience to answer that question.

I do know when things are uneconomic, decisions are made for any business in the state of California, certainly just not refiners. So, you know, we will have less gasoline supply at the end of this year because of certain actions to convert to renewable diesel instead of traditional refineries. That will, I'm sure, be taken into effect by the Energy Commission as you look at the ramifications from that.

And, again, the idea that you can just simply have ships bring in the net is a very complicated conversation, because one, it takes time, and two, you've got to have ports that are willing to take them. And as we've seen, we have a lot of people who are willing to take them. And as we've seen, we have congested ports. We have other regulations, certainly meritorious, but CARB's at

Berth Reg is going to limit vessels, not increase them.

So as the Energy Commission puts this whole picture together, again, I hope we really spend, and I know we will, additional time on what it takes to invest in our current structure, our current fuel supply, and what it also takes on infrastructure, and also what it takes to invest on going to a lower-carbon economy, which our members are doing in every space that we're talking about. So we have to look at both of those. We have to look at pace and scale and time to match those up so that California can go where it wants to go. And we are a part of that.

And it just seems like we spend a lot of time trying to have this industry, who is best posed to help the state of California get where it wants to go, we spend so much time trying to kick us out. And so I just hope we can all, including the environmental justice representatives here, I'm very involved in the 617 program with the Air Resources Board on the blueprint, and all of that is very, very important in the conversation, but we must continue to talk about where we are, where we want to go.

And I do not believe, nor have I seen any evidence in the comprehensive review we submitted to indicate any kind of a cap on profit margins will do anything beneficial in this area at all. There's a lot of other things we can be doing, but that, in my opinion, is not going to be helpful.

MR. ELKIND: Okay, let me give Connie just an opportunity to respond if you'd like to what Cathy just said.

And then, Elena, it looks like you'd like to respond, as well, and then I will give the floor over to Mike for last word on this question.

So go ahead, Connie, if you'd like.

MS. CHO: Only because it supports the benefits conversation and only to that end.

It's lovely to hear about 1109 at the South Coast. I was formerly actually a staff attorney with Communities for a Better Environment, which worked very hard to pass that rule on heaters and boilers. CBE has a long history of working on establishing some of the best pollution controls across the country in the Bay Area Air District. We helped establish Rule 65 on cat crackers. And unfortunately, at every turn, refineries did, tooth and nail, but are pleased to hear that they will be implementing these rules.

The large reductions in pollution that come from these equipment-by-equipment rules that communities organize around really come from the fact that despite these pollution controls, they continue to be the largest industrial polluters, the largest stationary source polluters. And in many cases, depending on where you're cutting the lines geographically, even in major highway transportation corridors, where there are diesel trucks running through and ports nearby, refineries remain the largest sources of pollution.

MR. ELKIND: All right.

And then Alaina, any follow-up thoughts on this? And then we'll go to forward to Mike.

MS. KRIEGER: Yeah, I just wanted to respond to that comment from Catherine, which is gasoline supply should go down. In-state demand has decreased 20 percent in the last five years. And at the end of the day, we need to transition entirely away from the fossil fuel system to support our climate goals, which includes transitioning entirely away from refineries. It's unrealistic to think that all of California's refineries will or should stay open. And so we have to think instead about managed decline and orderly retirement alongside that ongoing reduction in demand.

The key is going to be able to do this while maintaining affordability and also supporting goals such as reducing air pollutant emissions in some of our most overburdened communities.

MR. ELKIND: And we'll definitely delve into some of those issues if we have time on this panel.

Mike, thank you for your patience. You get the last word on this question, so go ahead.

MR. SMITH: Thank you. So I'm the Chair of the National Oil Bargaining Program for the Steelworkers. We represent about 30,000 oil, gas, chemical workers in the U.S., including about 4,000 to 4,500 here in the state of California, which used to be much higher. We've seen a trend, not just in California, as the other panelists mentioned, the shutdowns of the Marathon in the P66 refinery in central California recently. But we've seen that throughout the United States. We've seen a couple in Louisiana, Pennsylvania. A couple even in Texas have announced shutdowns. So we're seeing that trend nationally.

When I read the question -- let me step back.

We, also, we understand, I think as a union, what the future looks like and we're trying to be a responsible partner in that. We bargain with the industry nationally and set kind of a pattern. We brought a partnership proposal on decarbonizing -- helping decarbonize the industry, at least to try to figure out our role in that. So we are a union, we think, that are looking forward.

Now the cost to this, the benefits versus the cost, like it was said, I don't know what decisions the employers are going to make. I know day to day we battle to help improve safety in our facilities, invest in safety, anything that adds to that or adds to the difficulty or gives another reason why they wouldn't do that is obviously concerning to the workers.

We also would like to see them invest in low-carbon solutions in our facilities. And I think anything that would add volatility to that, or at least be -- I don't want to say add or be an excuse or add volatility to that, is a concern for the workers. We know the trends. We see the charts.

We also are concerned with anything that accelerates that decline or that accelerates the closing of our facilities, especially since the state -- I mean, while there is a displaced oil worker and gas fund, how minimal that is, we don't really have a plan how to deal with the workers, the communities in the surrounding areas and the amount of family-sustaining jobs that our members have enjoyed and fought for, you know, 80, 90 years, specifically here in California.

So it's a tough one. This is. It's kind of a -- you know, our members are consumers as well. We pay high prices here in California as well. But it also, you know, going forward as this discussion happens, it's got to be responsible. There's so many different factors as workers in this lane that have to be taken into account to prevent. Now all this is based on assumptions of how the industry or each individual refiner will react to this, so --

MR. ELKIND: All right, great. Thank you, Mike, for that.

So I want to go into some specific questions here for the panelists. And the first one is that we know that we've got just a few entities here in the market. We've got five companies producing more than 90 percent of the supply. And so how can we ensure that price fixing is not occurring? What kinds of reforms should the state put in place, if any, to ensure that we aren't seeing manipulation?

And, Cathy, I wanted to direct that question to you to start. And also, Cathy, I know you had said that you were not being able to access confidential information from your members. And that, of course, makes sense.

I would just note that the CEC did invite a refiner to attend. And the refiner declined, stating that they were deferring to you as a trade association. So, you know, we've got a little bit of a challenge of getting information if they're deferring to you and you're saying we can't get information from them. So I guess that's a two-parter. So I apologize for that.

But I guess first question then, maybe you could address that issue about how we can get accurate information on these questions, and the second one, what do we do to ensure that we're not seeing any sort of price manipulation given the control of these five companies over 90 percent of the market?

MS. REHEIS-BOYD: Now, well, thank you, Ethan. And on the first one, as you know, I'm going to use a really technical term, we are submitting boatloads of data to the CEC. We did petition the Energy Commission three times for a rulemaking. We feel that that would have provided an opportunity to have the kinds of conversations that one needs to have in this kind of a complicated conversation. We were denied three times for that. We still think that is an appropriate approach to get to some of the questions that are being raised in a proper rulemaking process.

Relative to the issue -- and you only -- why you only invited one refiner, I have no idea. I only got my letters, so that's all I know.

But how can we ensure price fixing is not occurring? It's really simple. It's illegal. We don't, our members don't participate in illegal activities, especially in the area of antitrust, which is the most critical sensitive area that one could possibly be discussing. So there are numerous attorney general investigations that have all concluded there is not any engagement of this industry in price fixing.

So I do believe the real question is how do we keep the refiners that we have here so that we can supply a reliable, affordable market while we look at, we call it the energy evolution or the energy expansion, I don't believe in the word transition because I don't think we are transitioning from one to the other, it's everything, all of the above, and it's going to take it all.

And I would like to say that our members are investing. I am extremely proud of the investments, to your point, Elena, in all of the issues you've raised, biofuels, renewable natural gas, renewable diesel, hydrogen. We haven't even having touched carbon capture sequestration because that's a whole-day discussion. That has to happen to meet carbon neutrality goals in this state. And we are -- we have a foot in every one of them, including electricity.

And let's not all pretend that any energy source doesn't have issues associated with it. Electric vehicles have issues. Batteries have issues. Rare minerals, where are we going to get them, have issues. Everything has issues. Traditional oil and gas has issues. They all have things to be solved. So it's not just this industry versus everything else. It's how do you look at the lifecycle analysis and make the right choices so that you can get from here to there.

So that's -- I know it's a long answer to your question, Ethan, but the basic one is we're not participating in that, and it's illegal to do so and we never will.

MR. ELKIND: All right, thank you, Cathy.

Jamie Court, I wanted to let you answer that question around assurance that we're not seeing any sort of price manipulation given the concentration.

MR. COURT: Well, price fixing and antitrust issues, I mean, to prove an antitrust violation, you have to show that there is a tacit agreement among refiners and they're working on that tacitly to control the price or to restrict the supply. And there's a lot of circumstantial evidence. A lot of it's on the record in the case in San Diego that was recently dismissed. It's a very high hurdle to get to show refiners that don't operate particularly transparently have met in a smoky back room and decided that they're going to fix the supply.

But the way the market works, there is ability because of the shared information, and there's a tremendous amount of shared information. I know they're not sharing with Cathy, but they share a lot of information, an unbelievable amount of information about their supplies, about the storage facilities. They have trade agreements. They work in concert, there's no question. Is it a tacit agreement? No one's been able to prove that.

But that's why we created this price gouging penalty to create an opportunity to say that when something's gone off kilter with the market and prices are out of whack with national prices, profits are out of whack with national profits or historical profits, that that would be a disincentive for these companies to do what they're doing, which is, I believe, limiting supply in order to drive up price.

You know, we talked about the refiners being driven out of California. There's another story to this, and we're going to put some of this on the record when we file our written comments. There was a memo, a very famous Exxon memo, where Exxon talked to another big refiner about keeping out a small refiner from opening because they wanted to control the market. There is a lot of evidence that these refiners have consolidated the market, kept out competition, and they do it all the time in terms of the apparatus they have for distribution.

After the Exxon Torrance refinery went down in 2015, there was a great need to bring in supplies of gasoline. There were ships available, there were supplies available, and it took forever to get a shipment of gasoline here, and that's because the companies work together to keep the market running so that there'd be no gas lines, but so that the price was $1.50 higher than the U.S. gas price, and it stayed like that for a long time.

There is all sorts of anti-competitive actions in this industry that we can point to, but does it rise to the level of an anti-trust violation? That is a very, very high threshold, so I don't think we should be looking at it through that lens. We should be looking at the impact on the consumer when companies don't work to compete, but instead cheat by working together.

MR. ELKIND: Thank you, Jamie.

and Dr. Zaragoza-Watkins, I wanted to direct that question to you, as well, about how we can ensure that we're not seeing price manipulation given the concentration of market power in a few companies.

DR. ZARAGOZA-WATKINS: Well, I agree with Cathy, and I agree with Jamie.

MS. REHEIS-BOYD: Well, you're a professor.

DR. ZARAGOZA-WATKINS: That’s right. It's illegal to collude, right, and the bar for identifying what collusive activity is, is very high. But it's not illegal to exercise market power; right? It's not illegal to make lots of money when you're a monopoly. But that doesn't necessarily mean it's desirable either, right, or that it's the only solution to organize production.

I think really what we're here talking about is, does it appear as though the consolidation of the industry driven by, you know, maybe the organization of that industry as well as external factors and the transition to alternative sources of transportation fuel, let's say, whether that's created a situation where firms have an opportunity to exercise market power, which is currently entirely within their purview in a way that's undesirable; right?

And, you know, to that end, I think that we need to collect data, which we're already doing, that identifies the costs that those firms face to identify how those costs are passed on to consumers in the form of reformulated gasoline, right, and whether the differences between the costs that they pay and the prices that they earn, the revenue they take in, is significant, significantly different maybe from what you would expect to see in a competitive industry, significantly different from what you'd expect to see in the current concentrated industry that we have; right?

And for what it's worth, if it turns out that those profits are excessively different from what we'd expect to see in the existing market structure, well, then that may be a source of additional concern, right, because a monopoly is going to earn more profits than an oligopoly. And that's one of those circumstantial leases of evidence that might suggest more is going on than just imperfect competition; right?

And once you have a sense of whether what you have going on is just imperfect competition and firms exercising market power, and you understand what the investments that those firms have had to make and what investments you hope that they'll continue to make down the line, you know, then you can have a very sober and thoughtful discussion about what the gross margin should be in order to get the sort of transition that you want. But again, that requires information about costs and revenues and understanding how those costs are passed through all along the supply chain, right, in the transmission network, in the spot market, at the jobbers, at the retail point.

And for what it's worth, also understanding the incidents; right? Because I'm sure, Michael, you'd like to know when profits rise at these refineries, how does that change wages? Surely, it's not one-to-one. So, you know, what's the story there?

Anyway, thanks.

MR. ELKIND: All right. Thank you for that.

Unless there's any other thoughts on this question, I wanted to pivot to a question around the affected communities. Industry talks about how this transition is going to bring volatility to the market. So the question is: How do we protect affected communities from the downsides and the risks of this volatility and the transition as a whole?

So, Connie, I wanted to let you take the first crack at that question.

MS. CHO: Thank you. Yes, our communities are refinery communities, and they are also the low-income customers who are stuck right now on gas-guzzling cars, driving those to soccer games where all the kids have asthma, driving to church and temple where we're praying for those with autoimmune disease, respiratory illnesses, cancer, disproportionate amounts to three times higher than their white neighbors in a county or a neighborhood further away from the Richmond refinery. We're driving our aunties to hospital visits in these gas-guzzling cars, also to funerals where we're burying people too young, too early, and too often.

So we care about the cost of gas. And EJ communities have been having these conversations about what we do about these price shocks in this transition. But that's why we're fighting for 100 percent zero emission transportation and decarbonized mass transit for equitable electrification and alternatives. That's why we engage on the demand side. That's why we are building out local and distributed 100 percent renewables to clean up our grid and to clean up the power supply.

You know, Professor Emily Grubert, who used to be at DOE, calls this period the mid-transition, where we're still on gasoline and struggling to make sure that we can clean up our systems as fast as possible, and really predicts that there will be price shocks along the way. And so all we can do is have these types of processes where we are building in consumer protections while making the transition as fast as possible and equitably as possible.

To that end, you know, the conversation on supply and demand and the margins here, the details are incredibly important, so I'm not trying to minimize them, but I will say, you know, I want to make sure that conversation is going to happen, or the details will be determined with the understanding that there is an entire world of demand-side transition that is happening at the same time.

And also the legislation in this mid-transition period, the legislation also calls for, and we'll get to it later next year, the CEC will, you know, help lead on this, the key component of that transition is the multi-stakeholder, multi-agency collaboration workgroup to identify how California will responsibly plan for this transition, so that communities and workers will be leading voices, that we're going to look at refineries, refinery by refinery, you know, who are the different -- like how many workers are at each of these refineries? What are the throughputs at these refineries? What are the make-ups at these refineries? What are the products that are coming in and out?

And, also, the CEC data that's being gathered here will hopefully help shape that conversation and help communities and workers understand. Especially the import, export, crude, and refined source destination data, I think, is particularly helpful for us to understand where to prioritize localized planning. And as we do regional and state planning as well, there are processes at the county levels or regional levels through the High Road Transition Partnership, the Community Economic Resilience Fund.

So this particular penalty conversation does not have to solve all of the problems related to supply and demand of oil, just ones related to protecting consumers.

MR. ELKIND: Thank you.

And, Mike, same question to you around protecting affected communities, given your membership.

MR. SMITH: Well, I think during the last, I think, the last time I was here around the table, we talked about, you know, what we see, you know, whether it's a transition and evolution, the new energy world. We can go based on experience from us. I mean, we've -- when we get, you know, a refinery shut down, it's not a smooth, you know, like the graph chart that goes down, you're going to see between 150,000 or 250,000 barrels a day go off the market. That shutdown, I mean, you saw, as the example earlier, with Torrance in 2015, a spike in prices for a while. You saw it with Chevron in 2012. When you have a refinery that size go offline just for a period of months, it's a huge impact, so I would anticipate, you would probably see similar to that.

You know, as far as our workers, we've seen the devastation of what that looks like to our working community, as well as the communities around the facilities, with, you know, loss of jobs. Even in a transition world, where we've seen the investments towards renewable diesels or total renewable facilities in the state, we've seen a pretty significant job loss in those transitions.

So as far as affected community, as far as how we look at it, and I'd go back to what I said earlier, there still really isn't a plan on what to do with the workers, the sustaining jobs, I mean, the legislation, and there's plenty of legislation out there that is impacting the industry, but we haven't seen kind of what that plan is going forward. We think that investing in the facilities, working on low-carbon solutions, carbon capture, air direct, air capture, some of those ideas are important for our facilities for the long run. I think they become viable into the future for much longer, and we'd like to see a lot more of those investments here in the state of California, especially given the climate.

But as far as the transition, how it can be done without having a negative impact on specifically the communities in which I think are the concern is going to be really tough, just from the examples we've seen in the in the small examples of taking a large amount of barrels offline here in the state. I mean, it would be real tough, and I think it's going to have to be thoughtful. I think it's going to have to be an investment into the future, into the current facilities, to make sure that the production is both ways. It can't be we're just -- you can't turn off the lights in one room and turn them on in the other. I don't think that's a good plan.

But we're also, you know, looking to partner with employers and partner with them as far as what the future of the energy world looks like in our current facilities with our current jobs, stuff like that.

MR. ELKIND: Thank you, Mike.

And we're just about out of time here for this panel before we hand it back over to the dais. But, Elena, I want to let you have the last word on what we can do to protect affected communities from the downsides of the transition.

MS. KRIEGER: Great, thank you. So as I mentioned earlier, I think we do have an opportunity in this proceeding and in this data collection effort to track high gas prices, fluctuations, and combine this with affordability data, with income data, and with things like average commute distance in order to develop a couple of policies, like Connie mentioned, because we're not going to solve everything with a cap right now, and design targeted intervention for some of the most vulnerable populations, and that might be public transit, that might be housing strategy, and things like electric vehicle infrastructure.

You know, one thing that I do want to highlight, though, is that there are a lot, you know, there are a lot of barriers for low-income households to transition. We've talked about this before. And even when there's a lot of incentives, a lot of those are hard to access as well. A lot of them come from different agencies, they're in different kinds of places.

So I want to put on the table that we should really think about sort of stacked incentives that are available to people. So maybe we identify those targeted communities with the data collection we just talked about now and we figure out how to do a buyback program if they have low income, if they have inefficient cars. We provide financing for them to get an electric vehicle, and then we support them getting a charger either at their apartment building or at their house; right? And instead of having all of these different possible barriers, let's try to think about some kind of wraparound policies that will enable them to, you know, transition all at once.

And finally, the last thing that I wanted to note is, again, this is part of a really broad transition conversation. And there are a lot of different things with electric vehicles. There's a lot of other things that Catherine, for example, just mentioned on the table as part of this transition. And I want to make sure that we think about the risks of any of the technologies that might be considered. I'm concerned about methane leakage associated with biogas. I'm concerned about on-road emissions associated with biodiesel. I'm concerned about how we define green hydrogen and what opportunity costs are of producing and using green hydrogen in various applications compared to other pathway options.

So again, none of this exists in a vacuum. And so I think we need to think about all of these things really wholistically, how it aligns with our other sort of agencies' efforts and things like that across the board in order to both, you know, improve energy affordability, rapidly transition away from fossil fuels, and reduce emissions in some of our most overburdened communities, and support work with these transitions as well.

MR. ELKIND: Great. Well --

MS. REHEIS-BOYD: Ethan, the only thing I would add from our perspective in this topic is it's nice to end on something that I think we all agree on, which is how important all the voices at this table are, because everybody's bringing a unique perspective, and especially from our friends in the unions and the trades, a unique perspective, even you, Jamie.

But I would say for the lessons I've learned in 617 and that process of the community steering committees and what they've brought to the table has been very impactful. And so I think one of the things we can continue here is just, you know, continue to bring the stakeholders together in a process. I hope we ever get our advisory committee together under SB X1-2 that's in the statute, but I think that's where we'll have some really beneficial learnings from everybody on what this is going to take and how complicated it is. It's just not, as you said, it's not a turn off here and start here.

So I'm encouraged at least on the topic we're ending on.

MR. ELKIND: Well, I want to thank all of you for this discussion. I appreciate your standard and insights. It's not over yet. I'm going to hand it over now to the dais for some further comments and questions, but this will conclude our formally facilitated part of the roundtable.

So over to you, I believe, Vice Chair Gunda, who will take it from here, but I'll leave it to the dais. Thank you.

VICE CHAIR GUNDA: Thank you. First of all, thank you, Ethan, for moderating that and being a really good facilitator on a conversation that's oftentimes really difficult. So thank you for facilitating that.

I think, you know, there's a few kind of comments I want to just share. I just want to thank each and everybody who agreed to be on the panel and share your perspectives. I think it's extremely important for a state agency to be able to have credibility to hear all perspectives and honor those perspectives and see what's the truth, what's the shape, and then figure out how to move forward with the work we do.

You know, I think I wanted to -- I know we're running out of time, but so I at least wanted to have one question on the table from each one of you. And I think it goes directly to the role of the state agency and making sure that we do as good of a job as we can do; right?

So I want to just, you know, uplift the staff that are here who work tirelessly to do the right thing for the State of California, but we don't do everything right, you know, and we oftentimes miss pieces, not because we want to, but because of resources, because of, you know, our own limitations in terms of ability to process information.

But putting that aside for a second, I kind of come to you in this good-faith ask of, you know, how do you see -- this is going to be a very difficult conversation. This is not a straightforward conversation. Each one of you offered a large perspective that's wholistic, but not necessarily narrow enough to straight out solve this problem tomorrow; right? I mean, because you understand and recognize how big this is, except. And I think Jamie, who has a very clear kind of interest in this area, you know, you all, the rest of you come with like a larger perspective of the transition.

So I just wanted to ask you, how does CEC create a venue for you to not only extend your perspectives, but also get information from us and create venues to be able to have discussions that allows you to meaningfully participate in this? So your perspectives are well informed. You know what the data we are seeing.

Obviously, we have to balance between the anonymity and protection of data. So one thing we don't want to be in trouble with, around Elena's, you put out too much data, so now we're going to sue you for putting the data out. But we want to maximize putting the data out; right?

So we would really want to welcome you to like, how do we create a venue to move past any discomfort we might have with each other's perspective, but really solve this issue? Like, you know, and I would start with, you know, Professor, with you, if you want to start, and then we'll just go down the line.

DR. ZARAGOZA-WATKINS: Yeah, absolutely. So I mean, my bias is going to be to put out as much data as you can in as granular detail as possible. And, you know, it is an interesting question. Data is fine, but you have to have the frameworks in place to interpret those data, to understand, you know, what they mean. And for a lot of people, you know, a lot of data can be really overwhelming.

And so you know, again, in a self-serving sort of way, I would say that it's important to partner with other state agencies and institutions that have the capacity to digest and interpret those data and continue to produce, you know, products that allow people to broadly consume it so that they can weigh it in an informed way.

VICE CHAIR GUNDA: Thanks.

MS. KRIEGER: I think I'll say something very similar in terms of the need for partnership, but also to share that data, because CARB is collecting a lot of data; right? And, you know, there are researchers looking at health outcomes associated with the refineries. And there are all sorts of other ways that we can, I think, couple data across agencies. That would -- right now, every time I go look for it, I have to look for one thing here and one thing here and one thing here. And so whatever role would be possible to pull those together to help tell a story, I think, would be really powerful.

MR. COURT: Yeah, I agree, data transparency is what you really need to do. And we've talked about this, but I won't want it on the record, you know, the SB 1322 says within 45 days, all data shall be posted. It doesn't say it shall be unposted. But we have only, for instance, the aggregate data for August, because it replaced the aggregate data for July. I'd really like to see this agency get all the data for the past six months that was on the site, back up on the site, and more.

I was reading SB X1-2, I got my copy here, and it does say, you know, that the agency can do its own analysis on net refining margin and gross refining margin based on the data it receives. So I'd like to see it do that, too. I know you've got a lot you're dealing with. I'm not saying you're not working hard, but I do think investing in that data transparency, investing in analysts who can put out, your double checking the math on gross refining margin and net refining margin would be very, very helpful, and certainly restoring the data that's been taken down as soon as possible.

MR. SMITH: I'll keep it simple. I agree. I was going to say data transparency. And as we approached, just like we did with health and safety here in the state a few years ago, with, I mean, we pushed for more transparency and involvement in the process, kind of take down the curtains on how safety and health decisions were made in the industry. I think that transparency will help show where things are. I think that's the one. I mean, we've heard the statement that, you know, they just don't do it, and hopefully they provide that data, and it's not there.

I think transparency is important, and as much data as possible, I think, is great, but it has to also be brought in with clarity, with telling the story, with being able to put it all together and kind of all speak the same language to start before we can kind of move forward.

MS. CHO: Well, I'll say that my earlier comments were more closing comments, and just so that my organizers and comms and the other staff at APIN don't get upset with me for being really granular right now, but you know, the air districts, we've been having battles over CBI for a long time there, and I think they might have a lot of experience to share.

I think that aggregating this data is really important, and I just want to give credit to the humility of this question, and to hopefully continue that trend in just asking for what you need in partnership on designing formats for further discussion and convenings and timelines of this work. We understand your building and infrastructure to be able to manage this unprecedented mid-transition period, so really appreciate the work here.

MS. REHEIS-BOYD: Thank you, Connie, because I think you summarized that really, really well. I like how it was framed in figuring out how to continue collaborative opportunities, collaborative process, I'll give some thought to what that could look like, but so that we can continue to weigh in in an informed way.

And I can say, I mean, I would take a page out of -- we don't have the time that 617 provides, but that kind of a forum of participants that relationships are built over time, trust is built over time, information is shared, you get to the best possible solutions you can. And it's not easy. It's a lot of work, and you got to show up, and you got to keep talking and learning.

And I've learned a lot through that process, and

I think the members of the 617 Steering Committees have, as well, because we started out by, you know, probably the environmental justice community not caring as much about jobs, and us not caring much about the communities, and we ended up now in a place where we equally care about what the other is saying, and that's the only process that's going to get us through this.

And so I would just encourage us to think about, what does that look like, and how do we keep it going? and I think one of them would be, I'll say it again, a rulemaking. But the other one is the advisory committee that is in SB X1-2. We should get that going. We should establish it, get it going, get people on it, build relationships, build trust, and solve a multitude of problems that were brought up today.

DIRECTOR MILDER: I would just join the Vice Chair in thanking the panelists, and also thanking Ethan for moderating so well.

A closing thought from me would be what I've gleaned from this group, I think, adds to sort of perspective that the goal of any penalty, if there is one, should be to incentivize responsible market activity and deter or sanction irresponsible market activity. From what I've heard today, the Energy Commission will benefit from getting more accurate data and using that, as well as industry expertise to guide that decision.

I think it's important for the Energy Commission to have this tool in the toolbox, because these price spikes have, unfortunately, become common. And so I'm looking forward to the further work that the Commission does, and I appreciate this group's time. Thank you.

VICE CHAIR GUNDA: Thank you so much, Director Milder.

I think one, you know, just appeal, I think, you know, this is kind of a question to you, but I just want to add one thing to your point, I really think Connie summarized it when she was saying, you know, whatever we do with the penalty, you know, build in consumer protection in this mid-transition, I think that's kind of the essence of the discussion today.

I think I have a question, Cathy, to you, and Professor, to you. You know, when we talk about -- and then Jamie and others, please, weigh in if you would like to. So I think you kind of discussed the idea of we are not in a competitive market anymore, right, and we are not really a monopoly, but we're in this middle where there is an exertion of market power potential. And then you also mentioned that exerting market power is not necessarily illegal; right? And now we're trying to take that context and saying we want to provide welfare and we want to protect consumers in that through some level of regulatory, you know, design, including a penalty.

So could you kind of comment on, you know, maybe the boundaries of how you think about this; right? I mean, I think I really would like to have a little bit more, as we move into these workshops, I think more and more workshops would be very focused on the frameworks and such. If you could just set the stage for how to frame this discussion would be really helpful.

And, Cathy, it's probably for you. The reason I ask of you is like, you know, I understand the industry's, right, when the, you know, prices are high at the pump. You know, we discussed the points that you raised. You know, we're an island. You know, we have all these other constraints, tax and fees.

I think I would really request we move away from the discussion; right? Because part of that is, you know, if we were to trust the democratic process in California and the legislative process, those legislations that put in the fees and taxes are what the public want, right, for the betterment of the public. So I want to move away from the discussion and really think through, you know, those are what the public want. And now we are moving towards there are refinery margins, there are retail margins, what can we do; right? I mean, what's the solution that you would offer within the context of where we are? And I think litigating or moving away from that doesn't necessarily help us solve this.

And I'm asking this in good faith and welcoming both of your input on how does this regulatory paradigm evolve from zero towards something else? I really would like to get your context, and Jamie, weigh in if want to.

Go ahead.

DR. ZARAGOZA-WATKINS: Sure, absolutely. So, I mean, I think you framed it exactly as I would, which is right now we're in a situation with imperfect competition and the opportunity to exercise market power and some very suggestive evidence that that's happening, potentially also along with volatility that's the result of other factors that are outside of the control of refiners, right, including other actors within the sort of petroleum and refining value chain.

It's straightforward to think about how we would move towards a situation where we had a regulated natural monopoly or a regulated set of actors where we're collecting information on what their costs are, making decisions, you know, as a democratic society about the level of compensation or reward that we want to provide those market participants, you know, in exchange for continuing to participate in the market. As we've said, that's a very data-intensive process, but one that certainly could be done within the structure of SB X1-2.

And so I would encourage you to collect those data to try and follow the will of the people and understand what's necessary in order to maintain the level of output and drive the transition to a more diversified energy portfolio. You know, and to the extent that that penalty is also revenue-raising, certainly there are opportunities there to intertwine this discussion with means of spending that the revenues from that penalty that are going to provide for a more sort of equitable and just transition. Certainly, that can be part of the conversation as well.

MS. REHEIS-BOYD: Thank you, Commissioner, and appreciate the honesty with which your question is asked, so thank you for that.

And as you noted in my response, the last thing I mentioned was the $1.32, $1.30 that goes into taxes fees, cap and trade low-carbon fuel standard, underground storage tanks fees, it's just a fact. It's not the issue, it's a fact. They're all meritorious. Well, the decisions were made by California to do it for very good reasons. But it is a fact, and it does go into the price of gasoline, and it does matter relative to comparing what we pay here to the rest of the nation who doesn't do those things. So it will continue to be on the table just as a fact and a point of data.

But the other things I noticed had nothing to do with that, that I noted; right? It's all about how do you increase supply and how do you incentivize increasing supply in a constrained market on infrastructure; right? We have aging infrastructure. And all those places I mentioned have nothing to do with the $1.32. If we want to get to the core problem of minimizing impacts to the consumer, we've got to dig into every one of those. They're all part of the picture.

So we're doing a lot of work there. And we're going to continue to bring that forward to you because I am quite concerned, again, on the aging infrastructure with the existing system, and I'm equally concerned on the infrastructure investment that is needed to connect the dot to a lower-carbon economy. Both of those I'm concerned about, and we've got to match them up.

And that's hard conversations, difficult ones, it's going to take some time, but we're doing a lot of analysis to bring forward to get those on the table and say, here's what you need to do to fix both of these equations so we can continue to provide adequate affordable fuels now and we can continue to look to how we're going to do a lower-carbon economy in the future. We've got to do it.

MR. COURT: I just have to take issue because it's a false fact. California does not add $1.32. It doesn't add $1.12. It adds $0.70 more if you look at the difference between other state tax and our state tax. You subtract out the federal taxes.

MS. REHEIS-BOYD: I agree with you. You should subtract out the federal.

MR. COURT: Subtract the federal --

MS. REHEIS-BOYD: It's about $1.08.

MR. COURT: -- that everybody pays. And what's the average cost in other states? It adds $0.70. And yet you guys have done, or groups affiliated with you have done mailers that blame Sacramento politicians for adding $1.12 to a gallon. It's $0.70. We can do the math. So if you want to talk about it, talk about it at $0.70.

I think one of the things that I think would improve this debate, and I don't mean this in a negative way, if your five refiners would agree to come to the table and discuss what their actual costs are, it would matter. And you know and I know that there is an exemption for antitrust for public policy development. We're talking about a public policy matter. There is no antitrust law that prevents them from coming and talking with us and with the Commission about what a reasonable gross refining margin is, what the history of gross refining margin is, what the gross refining margins are around the other country.

There is no antitrust exemption. They don't want to participate in this debate. If they come out and they talk, I guarantee you it's going to be a better result than doing this in a vacuum without them talking or because every time you come you say I don't know and I can't answer those questions. We need to get to the specificity from their point of view of what they think is reasonable and what's outside the reasonableness. That's all we're asking.

MS. REHEIS-BOYD: Well, and I understand that point, and that's why we petitioned for a rulemaking, so let's do one.

VICE CHAIR GUNDA: So, Cathy, I do want to just mention that rulemakings have been opened; right? So we have that. I just want to make sure that we don't walk away with the narrative that we haven't. I recognize, you know, your accuracy in petitioning to the Commission to open the rulemaking. We denied it based on the reason that it's still an active process in the legislation. We wanted to wait until we got some data. So totally recognize the truth of your statement that we denied it, but there's bigger story that now we started it, we had some reason.

So I think, again, this is kind of welcoming that how do we move away from the potential rhetoric, the potential rhetoric where we might lose each other in a good faith discussion? And I just want to welcome to coming back to the point.

And, Jamie, thanks for kind of clarifying the $0.70. And I think that's a fair point to just kind of -- when we start putting this information out. And I think that's why my first question was not only just for the Energy Commission, which is how do we create a venue for, you know, creating the trusted information, but how do we all show up in an accountable fashion that we are really looking at the Californians at the end, right, to make sure we protect them? So I welcome you all in that good faith.

And again, there's a lot of passion. And I, you know, want to acknowledge, you know, Cathy, you know, to your point, I drive a gas car. I do not have the money to buy an EV yet. I would love to move to an EV as quickly as I can. So in summer, I'm hit -- I mean, I'm also a consumer. When I put in $70.00 or $80.00 of gas in my car, that I couldn’t take my kids out to something, I struggle. You know, I would love to have those gas prices down. But I also acknowledge that, where I am in the mid transition, as Connie pointed out, in my own journey.

So I think, you know, the points that you bring in, in terms of the industry has been kind of an economic driver for California, it has created jobs, that's not in debate, you know?

What we're also not debating is what, you know, Elena and Connie mentioned, which is we have a very clear California policy directive that we're moving towards a decarbonized transportation system that would inevitably destroy the demand for fossil, you know, gas, fossil petroleum in the state.

And to Michael, to your point, I empathize with you, if I'm told that something can replace my job tomorrow, I mean, you know, I would love to have like a little bit more times I can prepare, you know, for something else. And so I recognize that too.

So I think what I'm asking for is respect and kind of staying away from those inadvertent data points that are not completely true, and kind of welcome the discussion on how do we solve this for California, and again, completely embracing the idea that we might be illiquid (phonetic) at this moment, and we'll continue with your support to get there. So that's why I would welcome all of you to be part of.

So I would just invite you all to provide any closing before you step down.

Michael, it looks like you want to start.

Connie? Connie, anything you want to close off?

MS. REHEIS-BOYD: No, let's just continue the conversation because I think we put on the table some really critical issues that have nothing to do with some of the things you just noted. And we cannot forget the infrastructure and investment concerns on both sides of this equation. That cannot fall off the table.

VICE CHAIR GUNDA: Absolutely.

Jamie?

MR. COURT: No, I just, I do want to say to Mike, I feel like with a reasonable gross refining margin, there's going to be plenty of work in those refineries, in those remaining refineries. But the just transition is absolutely a part of this. And this is the moment where we have to leverage the state to get that just transition policies in. So we're 100 percent with you on all of this. And for the communities too.

VICE CHAIR GUNDA: Anything you want to add before --

MS. KRIEGER: Thanks for the chance to participate and I look forward to seeing all of the data.

VICE CHAIR GUNDA: I know you will.

MR. COURT: There's one thing I wanted to add on the cost aspect of this, we haven't talked about social costs and the benefit on the terms of social costs. We talked about economic costs but there is a big social cost, social benefit, social value in putting a gross refining margin in for the community. And I think that in your exploration of this and the record you're creating you should actually explore the value in terms of social costs for the gross refining margin being capped.

VICE CHAIR GUNDA: Thank you.

Anything from you?

DR. ZARAGOZA-WATKINS: Just to say thank you for the opportunity to participate. This has been a really lively and I think informative debate. So I appreciate all of you as well. And it seems like you're putting together a very thoughtful set of proceedings in partnership with the California Air Resources Board, which I think is obviously going to be an important partner. You know, as you emphasize, there is a strong policy direction towards decarbonization of the transportation sector. And so both agencies have an important role to play and it's great to see that cooperation.

VICE CHAIR GUNDA: Thank you all so much.

So with that, I'll pass it to Ryan here.

MR. EGGERS: Thank you, everyone. My name is Ryan Eggers. We're going to move on to public comment.

Thank you, moderators. You may take a seat.

Thank you, Ethan, for moderating our panel.

So to move on to public comment, we're going to take any public comment in the room, first and foremost. If you would like to make a comment, please approach the podium here in the middle of the room. You do have three minutes to provide your comments.

Okay, I'm not seeing anybody in the room who's prepared to give comments at this time, so we will move to Zoom. And if you're on Zoom, please raise your hand. We do see one person with a raised hand. It's star nine to raise your hand and star six to unmute. Greg would like to make a comment.

Greg, are you prepared to make your comment?

MR. KARRAS: Yes, I am. Can you hear me?

MR. EGGERS: We can, Greg. Thank you. Could you please give your full name before providing comment?

MR. KARRAS: Greg Karras, Community Energy reSource. I'll be brief.

I thought this was fascinating and really appreciate it. I especially appreciate, Commissioner Gunda, your question about how to -- what are the boundaries of how to think about this. And in that respect, I want to push back on what I think is a potentially false and dangerous assumption, so the idea that the specter of the only way that this transition is going to work is it will include big, sudden refinery closures all at once.

You know, the thing is, humans have never phased out petroleum before, so why assume it has to be one refinery at a time and huge losses of big chunks of jobs and fuel supply all of a sudden? That's not what happened in COVID.

Take jet fuel. Jet fuel use tanked for months during COVID and there was nowhere to export it to either. The only refinery that we saw close in California, Marathon-Tesoro Martinez, according to CEC staff, didn't make jet fuel. What you heard from Julia May from CBE in an earlier workshop was that what actually happened is we saw the extent and the limits of flexibility of refineries to use their existing infrastructure to phase down. And I added earlier that it takes just about as many workers to run a refinery half full as full.

So there's a way to think about possibly having less supply shock, less jobs loss, less local tax-based shock, less price shock if we think about how to transition in a way that's smooth and what's the government's role in that.

That's a discussion that we only have if we're willing to point out that the assumption that we have to let refineries decide to get bigger and export to try to make up for the fuel losses and consolidate to fewer refineries that are all bigger, which has been gone for 50 years in the U.S. and California, we don't have to do that. We can decide to have a transition that actually maximizes benefits to the greatest number of people and minimizes costs if we do it smoothly. But we got to think about how to do that transition. And that's going to also be a part, I hope, of this part of the proceeding where you're thinking about how to structure your price penalty.

Thanks.

MR. EGGERS: Thank you, Greg.

Is there anybody else on Zoom who would like to raise their hand to make a public comment?

We're seeing none, so back to you, Vice Chair, for closing comments.

VICE CHAIR GUNDA: Thank you. Again, I just want to say thanks to the staff for pulling this together, Drew, for setting the context at the top, Ryan, Andrea, and the CCO, Aleecia, everybody, thank you so much for all the work you're doing.

So one piece I also want to just say is to the public who are attending these, I see 100 people listening in, it's really important that, you know, we hear your voices. So please, to the extent that you're able to submit comments, we would love to get your thoughts and records so we can move forward.

I also want to thank the panelists. Thank you so much for taking the time and for the thoughtful discussion. I think it was really helpful for me. Every day, you know, I hear perspectives.

You know, Connie, thank you for facilitating some of the tours, you know, down in Long Beach for the communities, the fence-line communities. It, really, it impresses upon you very strongly when you're down there kind of talking to, you know, colleagues down there and, you know, families living on the fence line, so I really appreciate that.

And, Matt, thanks for jumping in in the last moment to set up the conversation. Really hope you will continue to work on this topic and we seek your insights.

Jamie, as usual, thank you for bringing your passion for consumer protection. Appreciate yours.

Cathy, you know, you've been an industry insider for so long, you understand this inside out. Thanks for, you know, being here and representing. And I think I would continue to advocate what Jamie said about, I think it will be really good for the industry to be able to sit at the table. Maybe it's a different table, but we need to have that in a way that we can have those conversations and understand the antitrust and those issues and how do we get past that would be a helpful discussion to have.

And, Elena, as usual, thank you. And also thank you for serving on the DACAG and being an important voice in all of our discussions.

So thanks to all of you.

And I want to just give a big shout out to our Director here, Director Milder, for taking up this appointment with California and working on consumer protection and market monitoring.

So I would invite you, if you want to say anything, before we jump off?

DIRECTOR MILDER: No, I would also just add Connie in the list of appreciations there, all the panelists today. I feel like I learned something from each and every one of you. So thank you.

VICE CHAIR GUNDA: Thank you all. With that, adjourned.

(The workshop adjourned at 11:42 a.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 13th day of December, 2023.

Martha L. Nelson

MARTHA L. NELSON, CERT**367

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I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were transcribed by me, a certified transcriber 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.

I certify that the foregoing is a correct transcript, to the best of my ability, from the electronic sound recording of the proceedings in the above-entitled matter.

Martha L. Nelson

MARTHA L. NELSON, CERT**367

December 13, 2023