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Chevron Response to RFI $_$ Maximum Gross Refining Margin and Penalty

Additional submitted attachment is included below.



May 3, 2024

California Energy Commission Docket Unit, MS-4 Docket No. 23-OIIP-01 715 P Street Sacramento, California 95814

RE: Chevron Response to Request for Information (RFI) on Maximum Gross Gasoline Refining Margin and Penalty [Docket #23-OIIP-01]

Thank you for the opportunity to respond to the California Energy Commission's (CEC) request for information regarding a maximum gross gasoline refining margin (maximum margin) and penalty. Chevron has been operating in California for more than 140 years, working to provide affordable, reliable, and ever-cleaner energy to millions of consumers and businesses. We are committed to engaging with you and other stakeholders in a constructive dialogue on advancing a lower-carbon future. At this time, as Californians are expecting gasoline prices to rise preceding with the summer travel surge, we value the opportunity to share our perspectives.¹

Chevron is concerned about the impact a margin cap could have on gasoline supply. An ill-defined and arbitrary maximum margin for refiners will not lower gasoline prices this summer. As we explained in our letter to the CEC in December², we do not believe this policy would lower the price of gasoline at any link in the supply chain. Rather, it would likely reduce gasoline supply and discourage refiner investment in California – resulting in higher prices, a decreased and less reliable fuel supply, and increased reliance on imports.

Instead, we encourage the CEC to leverage the abundance of available data to drive productive change. We ask you to address the real causes behind high gasoline prices. Any effective solution begins with understanding how we got where we are: decades of restrictive state policies that have caused investment dollars to flee California's refinery sector. Looking forward, the CEC faces a crossroads: it can continue with counterproductive and unsuccessful policies by implementing a price-control scheme, or it can partner with the industry and other stakeholders to make a meaningful positive impact on California's transportation markets. We hope it will take the second path. California's energy future depends on it.

[&]quot;As of Tuesday, the average cost of gas in California is nearly \$5.40 a gallon, compared to the national average of \$3.66, according to data from AAA. The average for a gallon has risen by around 30 cents for California since the start of April" California's gas tax to increase by 2 cents as prices rise (kcra.com)

CEC Docket Number 23-OIIP-01, Chevron Comment Letter, December 12, 2023 RE: Nov 28 Max Margin Penalty

How did we get here?

The answer, in a nutshell, is decades of state policies designed to restrict, rather than encourage, the production of affordable gasoline. California, with its large, active population and the fifth largest economy in the world³, should be a booming market for transportation fuels. But the refining sector is shrinking dramatically without scalable alternatives. Before a wave of shutdowns at the turn of the century, California had dozens more refineries than it has today. Furthermore, no new refineries have opened since the 1960s. In fact, according to CEC data, more than 60 percent of the refineries opened in California during the last 100 years are now closed or idle.⁴ If 60 percent of quick-service restaurants closed with a steady demand, an increase in the price of a quick hamburger would be expected.

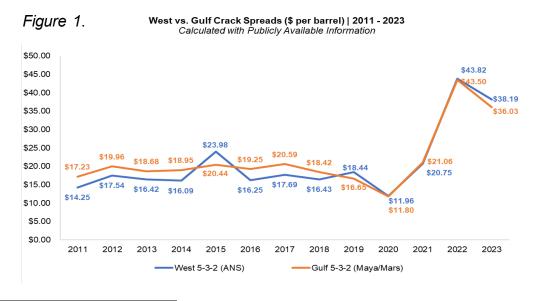
Compare the US West Coast to the US Gulf Coast

Table 1.

Operable Capacity (Barrels per Calendar Day)						
	CA	PADD 3 (Gulf Coast)				
2000	1,982,000	7,552,942				
2022	1,749,871	9,606,610				
% Δ	-12%	27%				

The US Gulf Coast has grown its refining capacity by 27% since 2000⁵. Gulf Coast refiners have chosen to invest in additional capacity, making their markets less prone to supply and demand

imbalances. If you look at West Coast and Gulf refining margins holistically, you start to learn why. While there are key differences between the West Coast and Gulf Coast in terms of supply and demand that would call into question the reliability of a comparison of prices between the two regions, it is worth noting that—as reflected in the Figure 1—over a 12-year period, there has almost never been a West Coast refiner margin



Cal. Gov. Office, California Remains the World's 5th Largest Economy | California Governor (2024)

Cal. Energy Commission, California Oil Refinery History (May 22, 2023)

⁵ CA Source: US Energy Information Administration California Operable Capacity updated in 2022. Retrieved April 2023; PADD 3 (Gulf Coast) Source US Energy Information Administration PADD 3 Operable Capacity updated in 2022

premium, as measured by the 5-3-2 crack spread. The crack spread measures the difference between the purchase price of regionally available crude oil and the selling price of principle refined products. Crack spreads are a metric widely used by energy market experts to help monitor a refiner's margin potential. The 5-3-2 crack spread measures the difference in prices for 5 barrels of crude oil to produce 3 barrels of gasoline and 2 barrels of heating oil. There was no West Coast margin premium during the initial 2022 gasoline price spike, and thus, no indication that refinery margins were the root cause of California price differentials when emergency legislation was drafted to blame refiners.

The key to understanding what is happening with gasoline prices is understanding why so many refineries have exited the market. There's no mystery. Instead of fostering innovation, state policies have actively sought to put refineries out of business. For decades, California has required refineries to make an especially expensive gasoline blend while restricting supply from in-state wells that refiners rely on for affordable crude oil—squeezing refiners at both ends. More recently, the state promulgated a rule that is set to phase out sales of new gasoline cars by 2035 in an attempt to limit gasoline demand. Add to these a host of other state and local regulations and taxes, and it is no surprise that there is less incentive to invest in California. As we have mentioned before, California's policies have made it a difficult place to invest so we have rejected capital projects in the state. Capital flight reflects the state's inadequate returns and adversarial business climate.

The effects of these policies have been far-reaching. For example, politicians and regulators have recently suggested refinery maintenance causes high gasoline prices by disrupting supply. ¹⁰ But supply disruptions can only lead to high prices because California has effectively forbidden the opening of new refineries or the expansion of existing ones, and as such, there are very few refineries able to make up the shortfall when supply is disrupted. In any case, this maintenance is critical to ensuring the safety and reliability of the state's refineries, and a refiner is not at liberty to forgo or postpone necessary maintenance.

These negative consequences of decades of regulation are exacerbated by geography—another factor no refiner can control. California is cut off from the rest of the United States by the Rocky Mountains, and as such oil and gasoline cannot arrive by pipeline. Meanwhile, fuel brought in from overseas takes weeks to get here and is

Crack Spread: A "Quick-and-Dirty" Indicator of Refining Profitability (stillwaterassociates.com)

US Energy Information Administration (EIA), Accessed April 2024 resource for Los Angeles Reformulated Blendstock for Oxygenate Blending ("RBOB"),: Los Angeles Ultra-Low Sulfur California Air Resources Board ("CARB") Diesel, Gulf Coast Conventional Gasoline Regular, Gulf Coast Ultra-Low Sulfur No. 2 Diesel spot price. Alaska North Slope ("ANS") crude oil price and Maya crude oil price (spot). Source: "Market Indicators" (sourced from third parties such as S&P Platts). Mars: Mars crude oil price (first purchase). Source: EIA

Inst. for Energy Res., California Policies Are Discouraging Investment in Oil Production and Refining in the State (Feb. 1, 2024).

Cal. Air Res. Bd., Advance Clean Car II,

Division of Petroleum Market Oversight (DPMO) Letter to the Governor, Jan 31, 2024

California Energy Commission Page 4 May 3, 2024

expensive to import.¹¹ That means that when gasoline prices go up because of a supply disruption, it takes a long time to resupply the state with our uniquely formulated finished gasoline.¹² Regulators should design around these problems, rather than blame refineries for them.

In short, California's policies and geography—and *not* supposed greed by refiners—are responsible for price spikes. Because refiner profits are not the problem, a penalty on profits will not help. It can only hurt.

A fork in the road

California is finding itself at a crossroads before gasoline prices potentially increase to meet summer demand, and the CEC's choices will determine which path it pursues. It can choose *more counterproductive policies* that will only reduce gasoline supply, increase prices for consumers, and disrupt the transportation fuels market and California's economy. Or it can choose *cooperation, innovation, and investment*—working with stakeholders to design a more affordable energy future.

More counterproductive policies

On the one hand, the state can choose to continue implementing policies that restrict refineries' ability to operate in California. That is what the maximum margin and penalty are—policies that make it harder to refine gasoline in California. If you regulate something, you typically get less of it. And that is where this path gets us: less gasoline, at higher prices for Californians.

These kinds of price controls have been tried many times, always with the same results. Many still remember the fuel shortages of the 1970s, which were caused in large part by misconceived price controls. More recently, Hawaii implemented a policy with goals similar to the one the CEC is proposing—and abandoned it after it turned out to be impossible to administer, bad for consumers, and detrimental to the state's energy supplies. In fact, in 2003, Stillwater Associates told Hawaii not to pass the profit cap because it would backfire; the same firm told the CEC in April that its proposed penalty could raise average prices for Californians. That forecast was correct in 2003, and it is correct again today. In fact, even the CEC's own economist has acknowledged that a penalty would "potentially increase price at the retail end of the market."

CEC Draft Transportation Fuels Assessment, published on April 12, 2024 Page ES-6

California Reformulate Blendstock for Oxygenate Blending (CARBOB)

Matthew H. Brown et al., Nat'l Conf. of State Leg., Findings on Hawaii Gasoline Prices and Policies (Apr. 2003)

Stillwater Assocs., Study of Fuel Prices and Legislative Initiatives for the State of Hawaii (Aug. 5, 2003),

April 11, 2024, CEC Workshop on SB X1-2 Maximum Gross Gasoline Refining Margin and Penalty Structure Stillwater Dave Hackett presentation

April 11, 2024, CEC Workshop on SB X1-2 Maximum Gross Gasoline Refining Margin and Penalty Structure DPMO Chief Economist Dr. Moreno presentation

Concerns with Margin Penalty Structure

Californians should be especially concerned about this particular penalty, because it is poorly designed and fundamentally misunderstands, in several critical ways, the way refineries work.

Table 2. Volume-Weighted Gasoline Refining Margin

Gross gasoline refining margin (\$/gal) = Wholesale price of gasoline (\$/gal) – Crude oil cost

Net gasoline refining margin (\$/gal) = Gross gasoline refining margin (\$/gal) - Operational costs (\$/gal)

Year	Month	Gross Margin (\$/gallon)	Net Margin (\$/gallon)
2023	Jan	\$0.66	N/A
2023	Feb	\$1.03	N/A
2023	Mar	\$1.03	N/A
2023	Apr	\$1.01	N/A
2023	May	\$1.09	N/A
2023	Jun	\$1.18	\$0.18
2023	Jul	\$1.14	\$0.14
2023	Aug	\$1.29	\$0.24
2023	Sept	\$1.49	\$0.38
2023	Oct	\$0.79	-\$0.10
2023	Nov	\$0.76	-\$0.16
2023	Dec	\$0.64	-\$0.31
2024	Jan	\$0.56	-\$0.38
2024	Feb	\$0.72	-\$0.14

It ignores operating costs.

The gross gasoline refining margin is the difference between wholesale gasoline price and acquisition costs plus certain regulatory costs. Missing from this picture is everything a refiner does to turn crude into gasoline, such as paying thousands of workers to maintain and run a refinery. The Legislature and the CEC understand this—that is why they implemented a *net* margin reporting figure that, although still flawed, at least accounts for operational costs. But the CEC has not explained how it will use the net margin data collected from refiners since June 2023. Instead. it continues to focus on the misleading gross margin metric. Furthermore, a maximum margin that ignores operational costs directly discourages investment, including in co-processing

renewable fuels, which is precisely what California needs to fix longstanding supply issues. Even the data on the CEC website doesn't support policy of this nature: it shows refiners posting a loss on gasoline sales since October of 2023. ¹⁷ It is particularly concerning that this data was not presented in recent media interviews with the Department of Petroleum Market Oversight (DPMO) and in recent CEC workshops.

• It ignores how refineries work. Refineries do not turn one barrel of crude oil into one barrel of gasoline. They make a whole slate of products from oil, including diesel, heating oil, and jet fuel. Each of these products has its own market value and production costs, which contribute to a refiner's overall

[&]quot;California Oil Refinery Cost Disclosure Act Monthly Report

margin. A gross margin for gasoline overlooks the multifaceted nature of refining operations and the market dynamics that impact actual refiner margins—namely, the fact that capping the price of one product will likely reduce the supply and increase the price of others.

• It ignores how gasoline is sold. The maximum margin separates gasoline sales into simplistic categories that do not capture complex differences between refiners. For example, unlike other refiners, Chevron incurs enormous distribution costs to support and supply a large network of retailers—costs that this scheme simply ignores. To make matters worse, the margin on which refiners would be penalized assumes that all gasoline is sold for the "rack" price—that is, the price charged when gasoline is loaded onto trucks at terminals—even though refiners sell gasoline in a number of different ways, such as by pipeline or marine delivery. For these reasons, as one expert recently told the CEC, the penalty would result in an "unfair situation" for refiners by treating different barrels of gasoline as if they were the same. 18

Given these problems with the proposed penalty, the CEC should not charge forward with complex regulations based on a flawed legislative framework that cannot be reconciled with hard facts and economics. After all, the law that tasked the CEC with evaluating this new policy says that it "shall not set a maximum gross gasoline refining margin or accompanying penalty . . . unless it finds the likely benefits to consumers outweigh the potential costs." And the facts and economics do not support a finding that consumers could possibly benefit from this policy.

Margin Penalty Impacts on Prices and Consumers

Chevron encourages the CEC to take into account how a penalty is likely to impact retail gas prices, neighboring states, and other businesses.

• Prices at the pump. Any maximum margin would further disincentivize investment in California. As a result, it would reduce investment in California's refinery infrastructure, which in turn would lead to less supply and higher prices at the pump. Low-income and marginalized communities who spend a higher share of their income on gasoline would be the most impacted. Some have suggested that gasoline imports might moderate any rise in prices, but that is not the case. Out-of-state refiners with the know-how and desire to produce California-grade gasoline are few and far between, and the gas they refine must be shipped over oceans to get here, making it quite expensive. And even if imports were affordable, they still would not be a good answer to supply shocks (given the substantial shipping distances). Moreover, they would be worse for the environment, both because of the

April 11, 2024, CEC Workshop on SB X1-2 Maximum Gross Gasoline Refining Margin and Penalty Structure Tom O'Connor ICF presentation

additional greenhouse gas impact from shipping and because imports would come from countries with less stringent environmental standards with less transparency in carbon accounting practices and accountability for following our standards. These factors are all additional to the geopolitical risks in the Middle East and Eastern Europe that could increase the price of crude oil this summer.

- Neighboring states. Refineries in California supply transportation fuels to Arizona, Nevada, and other western states. By supplying these states, Chevron is able to optimize operations for a broader slate of products, which improves supply reliability for Californians—a win-win solution for Californians and these neighboring states. But the penalty scheme assumes that refiners turn one barrel of crude oil into one barrel of California gasoline, thus preventing refiners from allocating their costs in a way that fully reflects this reality. The result is a burdensome policy based on flawed assumptions that will impact all the products that refiners make—meaning higher gasoline prices across western states. A maximum margin would not just hurt Californians—it would also make us a bad neighbor to other states that rely on us.
- Other market sectors. Gasoline will not be the only fuel impacted, since the same refining process that makes gasoline also creates other products like diesel and jet fuel. Air travel prices would be impacted if jet fuel becomes more expensive due to new supply constraints, with follow-on effects on trade, tourism, and jobs. Reduced diesel supplies would impact the cost of shipping, agriculture, and construction. Even national security could be impacted by supply imbalances in a state that is home to critical military infrastructure.

Cooperation, innovation, and investment

Regressive and costly policies are one path. The other is a careful and cooperative approach to policies that can reduce prices for Californians. The CEC should take stock, get a handle on the data, and work with industry, consumer groups, and its partners in the legislature to craft policies that increase investment and pave the way to more reliable, more affordable gasoline markets.

Look for Root Causes

First and foremost, we need to tackle the *root causes* behind gasoline price spikes. In fact, the CEC itself has acknowledged that "refinery greed" is not the cause of high gas price. In September 2022—a time of especially high prices at the pump—the CEC found that, of the then-average gallon price of \$5.06, \$1.19 came from taxes and regulatory costs as opposed to just \$0.64 from refinery costs and profit.²¹ If the CEC

CEC Draft Transportation Fuels Assessment, published on April 12, 2024

CEC. What Drives California's Gasoline Prices? Published September 2022

wants to take a chunk out of gasoline prices, refinery profits are hardly the right place to look.

Look at Policy Costs

Instead, CEC should focus on easing decades of regulations that have driven refineries out of business to choke back supply. It should also help prevent new policies that will make supply issues worse. Every agency in California should assess the expenses related to revised policies.

We previously informed you that CEC data for 2022 indicated a cost of \$0.49 per gallon for "environmental fees" which is a mix of Oil Price Information Service (OPIS) Low Carbon Fuel Standard (LCFS) and Cap-and-Trade costs²². Unfortunately, the worst is yet to come. The California Air Resources Board (CARB) is currently proposing to increase the LCFS reduction target from 20% to 30% by 2030, and to increase the Cap-and-Trade GHG reduction target from 40% to 48% below 1990 levels by 2030. Policymakers are progressing these stringent policies, which are expected to *add* at least \$0.88 per gallon of gasoline by 2026 and \$1.01 by 2031, see Table 3. If the Cap-and-Trade Price Allowances hit the cost containment ceiling, this would add \$1.46 to each gallon of gasoline.²³ Compare that cost to the negative profit refiners are making, -\$0.02 per gallon of gasoline sold, when averaging the CEC's monthly refiners *net margin* from June 2023 to February 2024. We urge CEC to take these costs into account when making recommendations to manage gasoline prices.

Year	Assumed C&T Price Allowance	С	&T ²⁴	L	CFS ²⁵	C&	T + LCFS
	Price per Ton	Price per Gallon of Gasoline					
2022	-		-		-	\$	0.49 ²⁶
2023	-	-		-		\$	0.50^{26}
2024	-	-		-		\$	0.53^{26}
2026	\$ 40.00 ²⁷	\$	0.36	\$	0.52	\$	0.88
2031	\$ 60.00 ²⁸	\$	0.54	\$	0.47	\$	1.01
2031	\$ 110.00 ²⁹	\$	0.99	\$	0.47	\$	1.46

CEC Definition of Environmental Fees, Published March 2023. Petroleum Watch (ca.gov) Accessed April 2024

US Davis and CARB assume price allowance will continue to increase. CARB Joint Cap-and-Trade Workshop Nov 16 2023 pg. 34

CARB's Standardized Regulatory Impact Assessment (SRIA) for 2024 Cap-and-Trade (C&T) amendments does not specify the expected cost increase for fuel consumers. However, the 2018 amendments' SRIA estimated that for every \$10.00 increase in C&T Price Allowance, gasoline prices would rise by approximately \$0.09 per gallon. CARB Cap-and-Trade 2018 Amendments SRIA (ca.gov) Published Sept 2018, Accessed April 2024

CARB Low Carbon Fuel Standard 2023 Amendments SRIA, Published September 2023, Access April 2024

CEC Estimated Gasoline Price Breakdown and Margins Data last updated April 2024. Retrieved April 15, 2024

Assume C&T price allowance doesn't change significantly over next two years

Assume Table 50 proposed scenario of \$60 from <u>CARB Cap and Trade 2024 Amendments SRIA</u>, Published April 2024, Accessed April 2024

Assume near price ceiling \$110.00 by 2031 a scenario model by UC Davis for <u>CARB Modeling by UC Davis, presented to CARB and Quebec MELCCFP November 16, 2023 pg. 34</u>, Accessed April 2024 <u>CARB Cap-and-Trade 2024 Amendments SRIA, Published March 2024</u>, Figure 4

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On top of the LCFS and Cap-and-Trade costs, CARB has implemented the Ocean-Going Vessels At Berth Regulation, also known as the At-Berth rule. The proposed technologies have not been demonstrated on tankers, present a safety risk to tanker and terminal operations, and are not cost-effective. Unlike other vessels, tankers have unique safety hazards and measures, which may be affected by these control technologies. Assuming the control options were feasible, safe, and cost-effective today, compliance with the January 1, 2025, deadline has potential to further bottleneck supply.

Californians will also bear the costs of the fast-approaching ban on new gasoline cars that force consumers to build new infrastructure and abandon the prevailing liquid fuel infrastructure. Electric vehicles should be part of the solution, but so should lower-carbon fuels, such as renewable gasoline, ethanol, renewable diesel, biodiesel, and renewable natural gas. These lower-carbon fuel options can be used in vehicles on the road today to help achieve the state's greenhouse gas and air-quality targets while diversifying energy risks and keeping costs down In light of the concerns regarding gasoline fuel supply, it is crucial to note that the CEC's analysis may not have fully accounted for the complexities of jet fuel market dynamics. The potential oversight in evaluating the impact of margin caps on jet fuel supply could lead to unintended consequences, disrupting not only the aviation industry but also the broader energy market.

In summary

Now more than ever, the CEC must conduct a thorough analysis of what drives the total cost of fuel at the pump before taking any steps toward a margin cap. Implementing any margin cap and penalty would be a mistake, but rushing to implement a penalty before understanding the huge amounts of data the CEC has received from refiners would be irresponsible. The same law that tasked the CEC with studying a profit penalty also required it to conduct a transportation fuels assessment by January 1, 2024. This document is supposed to guide the agency's next steps, but it remains in draft form. Meanwhile, the CEC appears to have barely scratched the surface of the massive amounts of data it has collected from refiners. In short, the CEC should analyze the data, study the real causes of gasoline price spikes, and work with industry to address those root causes.

We urge you to consider the implications of adopting a margin penalty for California's consumers, businesses, and the environment. We believe that the best way to achieve a lower carbon and affordable future for transportation fuels is to work together to remove burdensome supply restrictions, encourage innovation, and create a foundation of mutual respect and cooperation. We hope that you will use the data that we and other industry members have provided to conduct a thorough and objective analysis of

CARB's Advanced Clean Cars II, which would implement a ban on new gasoline cars, requires a waiver from the United States Environmental Protection Agency (EPA) under the Clean Air Act. CARB's request for this waiver remains pending with the EPA.

Western States Petroleum Association (WSPA) Comments on Advanced Clean Fleets (ACF) Regulation 15-Day Rulemaking Package April 7, 2023 and WSPA Comments on Advanced Clean Cars II Regulation Initial Statement of Reasons (ISOR) Documents May 31, 2022

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our state's transportation fuels market, and to engage with us and other stakeholders in a constructive dialogue on how to address the challenges and opportunities ahead. We also urge our consumers to reach out to their political representatives and ask them about the costs associated with any new or amended policy. Each Californian deserves to know how much government policies will increase costs and impact their pocketbooks. This is particularly true for the lower-income and marginalized communities who spend a higher share of their income on gasoline. Thank you once again for the opportunity to offer comments at this crucial moment for California's transportation future.

If you have any questions regarding our comments, please contact Henry Perea at (Henry.Perea@Chevron.com), or Jennifer Reed (Jennifer.Reed@chevron.com).

Sincerely,

A.B. L.