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WSPA Comments on Transportation Fuels Assessment Report Workshop

Please see attached.

Additional submitted attachment is included below.

WSPA

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President and CEO

September 11, 2023

California Energy Commission
Docket Unit, MS-4
Docket No. 23-SB-02
715 P Street
Sacramento, California 95814

Submitted via email to docket@energy.ca.gov

RE: WSPA Comments Regarding SB X1-2 Transportation Fuels Assessment Workshop [Docket #23-SB-02]

Thank you for providing an opportunity to comment on the California Energy Commission's (CEC or Commission) August 17, 2023, workshop to inform implementation of the Senate Bill (SB) X1-2 (2023) Transportation Fuels Assessment report to the California State Legislature. The Western States Petroleum Association (WSPA) is a non-profit trade association representing companies that import and export, explore, produce, refine, transport and market petroleum, petroleum products, natural gas, renewable natural gas and renewable diesel, hydrogen, and other energy supplies for California.

WSPA offers comments on issues presented for, or discussed during, the workshop. Underpinning these are, ***first***, the need to recognize that California has evolved into a "fuel island" – the State is effectively disconnected from the national fuels market while continuing to adopt policies that compound the issues SB X1-2 seeks to address: ensuring the adequate, affordable, reliable, safe, and equitable supply of petroleum and alternative transportation fuel supplies for all Californians. What follows is a more detailed explanation of this situation and, ***second***, comments on market-related issues; ***third***, comments on the Lead Commissioner's opening remarks regarding the possible imposition of a gross margin cap and penalty; ***fourth***, comments on how best to frame the Transportation Fuels Assessment; and, ***finally***, preliminary responses to the workshop questions. Our responses to potential policy options represent an initial commentary on what we think these could mean for California's petroleum market based on the limited information presented by the CEC and should not be construed as an endorsement of any option. We look forward to providing additional information to the CEC as implementation of SB X1-2 moves forward.

I. CALIFORNIA IS AN ISOLATED FUELS MARKET

California is a "fuel island" due to decades of constraining land use and permitting decisions paired with policies explicitly intended to reduce the State's supply and consumption of fossil fuels (*e.g.*, in-State oil production bans, internal combustion engine bans) – even as these fuels remain in high demand. Policies such as requiring a specialized CARBOB gasoline formulation, federal Jones Act maritime requirements, and strict seasonal transition standards create even more operational complexity, creating an extremely challenging California fuels market for in-State, out-of-State, and international suppliers. When coupled with California's isolated infrastructure, there are strong *dis*incentives for companies to make the long-term investments necessary to maintain California's current level of refining capacity.

This was not always the case. California was once a domestic gasoline manufacturing hub with abundant local production capacity to affordably supply in-State demand, as well as the demand of adjacent states. The reduction of in-State refining capacity has happened while the State's own policies artificially constrain in-State production and refining to meet demand and *without* having the benefit of ready access to additional domestic supplies.

California is now unable to supply all its own gasoline to meet demand and is more dependent on the global market. The CEC's 2005 Independent Energy Policy Report (IEPR) – a report that is now nearly 20 years old – identified even then that, "California's petroleum infrastructure operates at near capacity. Breakdowns and outages at in-State refinery and pipeline facilities quickly tighten gasoline and diesel fuel supplies and create market volatility. Since California is not directly connected by pipeline to other domestic refining centers, in-State refiners cannot readily procure gasoline, diesel, and other blending components when outages do occur. This contributes to higher and more prolonged price spikes."

While there is a *domestic* gasoline manufacturing hub – specifically along the Gulf of Mexico – there are no economical means of transporting enough gasoline from the Gulf Coast to California. Nor is there a pipeline to move gasoline from that major refining hub to the West Coast. The other very expensive and inefficient alternative to move domestic product to California, via marine transportation, is constrained given limits with efficiently moving very large tankers through the Panama Canal. And it is normally economically prohibitive for new U.S. vessels to supply California from the Gulf Coast due to federal Jones Act and Panama Canal restrictions; California's seaborne trade must therefore be sourced from *foreign* refineries, typically in Asia, thousands of oceanic miles farther away than otherwise readily available domestic supplies.

It now takes West Coast suppliers, on average, 30-45 days (for imports from Asia) to import alternative fuel sources overseas following significant refinery outages. For example, global shipping markets (*e.g.*, availability and freight rates) continue to be dramatically disrupted because of the Russian invasion of Ukraine. Such an unforeseen global event – the largest European land war since World War II – has had a significant effect on the global crude oil commodity market; California consumers, due to the "fuel island" effect outlined here, were especially susceptible to the resulting supply disruptions and price swings.

California's challenging regulatory environment continues to send a strong signal to both refining and production companies that their future in the State is very limited. The overall expense of doing business in California – including operating, capital, and labor expenses – is far higher than in most other states. For example, the California Air Resources Board's (CARB) new "At-Berth" Regulation will further limit the number of calls and/or availability of tankers that can call on California's ports beginning in 2025 – the very same facilities that will need to absorb the delivery of increasing imports due to artificially constrained in-State production and refining policies. The growing costs of California's climate policies and programs are further compounded by multiple layers of federal, regional, and local regulations; that add costs and do impact a fragile, volatile, and constrained California fuels market. We are concerned, for instance, that SB X1-2 compliance obligations appear to be discouraging finished product and component imports into California because counterparties may be unwilling to complete the additional requirements to comply with California's unique new regulation – including to obtain information that could be used to potentially cap gross revenues. Consequently, supplying

California remains difficult, making the State further at risk of future market volatility that will only worsen as additional restrictive State policies take effect or are approved.

All of this contributes to making California an extremely difficult State in which to operate – and, therefore, invest. As some State agencies and legislators continue to champion the closure of refineries, companies that own and operate these refineries could become reluctant to make long-term investments required to operate these needed facilities because the State's own policies disincentivize doing so. It is therefore challenging for California's upstream and downstream assets to compete for investments. *Dis*incentivizing investments in California further constrains our fuels market.

A simple fix to California's supply and demand imbalance is highly unlikely as a series of actions would be needed to resolve California's "fuel island" effect. Because of the complex nature of these issues, we believe longer-term solutions will be challenging, but WSPA would like to work with you to evaluate options for reliably increasing the supply of affordable fuels to California.

II. NEED TO IMPROVE MARKET STABILITY AND ADDRESS MARKET VOLATILITY

The transportation fuels market is global and dynamic. And California's boutique fuels market, as described above, is fragile and more sensitive to market volatility. We agree with the CEC that price spikes are predominantly caused by California's geographic isolation, regulatory bottlenecks, and refinery outages – which are made more acute by regulations and policies that disincentivize capital investments. Indeed, the CEC had identified global supply issues, refinery outages, and taxes and regulations as the causes of price spikes during fall 2022.[1] That conclusion is consistent with the CEC's research dating back nearly 20 years.[2]

Multiple actions and collaborative efforts between policymakers and the industry are necessary to resolve California's long-standing "fuel island" effect. For each energy transition policy implemented, policymakers should ask if the action will encourage longer term investments in gasoline production, distribution, and retail services that Californians will still need for decades to come. If the answer is "No," the State should work with industry stakeholders to determine reasonable solutions to avoid unintended consequences. Because of the complex nature of these issues, we are willing to work with the CEC to evaluate options for increasing the supply of fuels to California, such as:

1) **Choosing policies that encourage investments in adequate, affordable, reliable, safe and equitable transportation liquid fuel supplies.** This would require clear and consistent policies that support resource development, streamline permitting processes for upstream and downstream facilities, support liquid fuel infrastructure development and protect in-State refining, distribution, and retail investments.
2) **Exploring what regulatory barriers can be mitigated during market volatility.** This could include utilizing waivers to allow for the early seasonal transition of CARBOB standards or working with the Federal government to lift Jones Act requirements during exceptional events (*e.g.*, weather, geopolitical, etc.). Please note these actions are

[1] California Energy Commission, *California Gas Prices*, Presentation at November 23, 2022 California Energy Commission Hearing, at 43.
[2] See generally California Energy Commission, 2005 Integrated Energy Policy Report.

levers that may help mitigate temporary supply constraints caused by such volatility, rather than prevent market volatility.

However, some actions can make California's gasoline market ***even more*** susceptible to market volatility, such as:

1) **Imposing a vague, arbitrary maximum gross gasoline refining margin and a subsequent penalty.** Doing so would likely have immediate harmful impacts on gasoline prices and economic activity throughout the State. It may likely lead to more severe gasoline shortages by disincentivizing California production (since refiners may choose not to sell finished product in California to avoid exceeding the cap), and likely create shortages of *other fuels* refiners produce – such as jet, diesel, and other transportation fuels – as these fuels are produced as part of the same refining process as gasoline. Because refiners cannot feasibly reduce the amount of CARBOB gasoline produced without *also* reducing the production of these other fuels, a cap could reduce those fuel supplies too. This could likely mean less available refined transportation fuel and more market volatility for California consumers. Moreover, with less capital on hand to maintain and modernize California's refining infrastructure, including requirements to meet emission reduction projects – we are concerned that this could lead to less reliable operations and potentially reduced refinery capacity, thus exacerbating the supply situation. In addition, if the gross gasoline refining margin is calculated, the amount must be evaluated on an annualized average basis to account for market volatility and periods when margins turn negative.

2) **Increasing California's susceptibility to market volatility.** The State is especially sensitive to market disruptions because of its isolated infrastructure and unique fuel blend. As CEC has recognized, temporary changes in fuel costs result from the forces of supply and demand – not market manipulation or price gouging. But, as we have historically seen, the market corrects itself; as higher prices attract more fuel supply into the State, costs naturally drop. However, a margin cap could tend to decrease the amount of gasoline sold in California and prevent this natural correction, and thus could increase the frequency and length of cost increases due to supply disruptions. This is historically because price spikes tend to reduce demand and subsequently increase supply (from imports). Eliminating the market's natural ability to restore equilibrium could result in widespread supply outages (which have been avoided to this point).

3) **Further increasing reliance on gasoline imports.** SB X1-2 would encourage increased reliance on imported gasoline. Although California's marine terminal infrastructure is already near capacity today, and the ability to import additional product into the State will likely be further reduced if refinery capacity diminishes. Furthermore, not all marine facilities are connected to the pipeline distribution systems; gasoline imports into California would come from overseas, not from the United States, due to the lack of Jones Act vessels and Panama Canal constraints. Relying on overseas imports, if they are available in sufficient quantity and quality, would likely result in higher transportation costs and increase the length of supply shortages due to transit times. In addition, importers will need to cover the cost of crude refining, transportation and throughput expenses likely resulting in higher – rather than lower – costs to Californians.

4) **Not accounting for the cyclical nature of the refining industry.** On average, returns on capital employed in the refining industry are lower than the returns in many other industries. In 2020 and 2021, California's refiners lost billions of dollars as prices plummeted due to the COVID pandemic. In contrast, periods with higher margin allow refiners to make necessary maintenance and regulatory-driven investments to operate refineries safely and reliably, to reduce emissions, and to improve efficiency. These activities can cost hundreds of millions of dollars annually for a single refinery. However, SB X1-2 threatens to impose a penalty on *gross*, rather than *net* margins – thereby undercounting the cost of these investments and potentially reducing the amount of capital available for maintenance and improvements. If that capital decreases, refineries may not be able to operate reliably.

5) **Not accounting for product availability and jobs impacts.** These are other important ramifications to consider. Refineries are not designed to make a single product from each barrel of oil. To be efficient and functional, refineries produce a variety of different products demanded by the market, which are determined by each crude's content. While a margin cap on gasoline could mean that refineries would produce less gasoline for California to avoid penalties, this would also necessarily mean a reduction in production of the jet and diesel fuels needed in California. Furthermore, most jobs at most California refineries are union labor, and there are typically hundreds of additional contract workers onsite helping to maintain a given refinery. To the extent a margin cap discourages refining production and investment in California, it also threatens the long-term job security of thousands of Californians.

6) **Not accounting for impacts in other states.** California is the main hub for oil and gas flowing to Arizona and Nevada. Decreasing the incentive to invest in California's oil and gas infrastructure through a margin cap could increase long-term prices in California, as well as in Arizona and Nevada. SB X1-2 directs the State to defray these increased costs for *California* consumers, but consumers in Arizona and Nevada would be left to bear the full cost of the policy.

III. WSPA RESPONSE TO CEC VICE CHAIR SIVA GUNDA'S COMMENTS REGARDING SETTING A MAXIMUM GROSS GASOLINE REFINING MARGIN

The CEC has been directed to investigate if there is a need for a maximum gross gasoline margin and penalty. Based on years of refining experience, and decades of real-world evidence of how California's transportation fuels market has consistently reacted to fuel supply constraints, WSPA believes a cap on gross margin will likely further decrease California's gasoline supply and increase gasoline costs due to an even tighter market. This could place an even larger burden on Californians – especially upon those least able to afford increased costs.

WSPA is concerned that the imposition of a gross refining margin cap and penalty would likely reduce the supply of transportation fuels for Californians as refiners could seek to stay below knowingly incurring (and publicly reporting) a State-imposed penalty. This should be avoided given the already constrained state of California's fuels market. With the substantial new market data now being collected by the CEC, we encourage the Commission to carefully consider how a margin cap would impact the availability of an adequate, affordable, equitable, reliable, and safe supply of needed transportation fuels for Californians as directed by SB X1-2.

Neither the CEC nor California consumers are served by an incomplete or inaccurate picture of the State's petroleum market. Unfortunately, in the absence of any guiding rulemaking on the subject to date, the collection of information so far under SBX1-2 has resulted in an inconsistent and incomplete patchwork of information. Some information the State requested from the industry to date is easily open to disparate interpretation, reflects data not directly relevant to the market or consumer prices, presents an unreliable representation of industry revenue, or fails to capture the true costs of supplying the California market. We continue to strongly encourage the CEC to conduct the formal rulemaking necessary to solicit clarifications on what information should be collected to best inform its decisions not only about the wisdom of a margin cap, but also about how best to ensure equitable and affordable transportation fuel supplies for all Californians.

Without a rulemaking to resolve data consistency issues, setting an arbitrary – and potentially too low – maximum gross refining margin could *decrease* the availability of refined gasoline for California consumption to the detriment of all Californians. Contrary to some policymakers' belief that refiners can adjust prices to manage a margin cap, there is no straightforward formula for how to adjust ***daily*** prices to keep them within a ***monthly*** profit cap. A SB X1-2 margin cap regime would be extremely difficult to comply with, with refiners potentially penalized for factors beyond their control. In addition, levers available to manage margins may be to reduce not *price* but rather *supply*; as a result, retailers could be forced to either increase prices or run the risk of running out of gasoline. It is also possible that, as a result of a penalty, refiners may end up producing gasoline at a loss in some months.

It is therefore critical that CEC evaluate the potential impacts and unintended consequences of adopting such a cap and assess whether the actual market evidence indicates that such a cap will do anything to help California consumers. The lesson of the past 30 years in California is that lasting consumer relief can only be achieved by addressing the underlying fundamental market variables. Even third-party and the State's *own* experts have concluded that a cap on refinery margins has the potential to *harm consumers and drive prices up* by aggravating California's increasingly structural supply constraint issues – leading to the extreme gasoline price spikes the CEC is tasked with preventing and mitigating. The CEC's own Petroleum Market Advisory Committee, in 2016, had dedicated meetings to supply issues facing the California market and how supply constraints appeared to be getting worse. The Committee also discussed the need to be careful with State regulations to *not* unnecessarily decrease refining capacity, as well as a concern more generally to minimize unintended consequences of any new policy mechanism.[3,4]

To the extent that the Commission is considering a maximum gross gasoline refining margin and penalty under California Public Resources Code (PRC) section 25355.5, WSPA believes that it either does not have adequate information to assess a cap's impact on Californians or may be relying on incomplete, inconsistent, and therefore likely inaccurate information. Despite industry's best efforts to comply, CEC's information requests to date have been ad hoc, do not explain how to interpret new terms introduced by SB X1-2, and have not been informed by the CEC's institutional experience in defining and administering specific reporting obligations. For example, under PRC section 25355, the "[g]ross gasoline refining margin" does not accurately

[3] February 8, 2016 Petroleum Market Advisory Committee (PMAC) meeting transcript (page 203) https://www.energy.ca.gov/data-reports/planning-and-forecasting/petroleum-market-advisory-committee.
[4] PMAC Final Report, November 2014 to November 2016

reflect real-world refinery costs and profit margins, and any penalty based on it would be poorly targeted and could have unintended consequences. These issues necessarily limit how useful CEC's information requests can be. WSPA has advised the CEC that rulemaking is required to provide guidance to industry on the types of information required; to ensure the data the agency receives is consistent, reliable, and useful in shaping California's energy future; and to properly inform the Commission on the potential consequences of a maximum gross gasoline refining margin.

SB X1-2 did not resolve the ambiguities that existed in section 25355, but rather added additional ambiguous terms to a statute that already contained novel and open-ended reporting requirements and terms. For example, SB X1-2 added the term "Net gasoline refining margin" as a separate figure required to be reported, defined as "gross gasoline refining margin minus the refinery's operational costs.[5]" The statute includes a nonexclusive list of "operational costs," but does not suggest what other categories of costs may or may not fit the definition of or indicate how to allocate these "operational costs" among different categories of finished product.[6] Refiners make several products with the same feedstocks and crude oil – such as jet fuel, diesel, heating oils, and the different grades and blends of gasoline (including gasoline that meets California's standards). Many "operational costs" – such as the costs of refinery maintenance, employee salaries, and marketing costs – cannot be easily allocated among those products, and the statute does not provide a consistent, accurate method for doing so. As WSPA has previously stated, those original terms can be reasonably interpreted in multiple ways and thus will likely not produce consistent results across refiners.

There are other issues with the statute that should be addressed before considering the imposition of a margin cap. Even though the "net gasoline refining margin" is a better (albeit still misleading) estimate of refinery profits, section 25355.5(b) instructs the Commission to consider a cap based on the "gross gasoline refining margin." In other words, while the statute reflects legislative recognition that the "gross gasoline refining margin" is flawed and can be improved by accounting for operational costs, it still authorizes punishment of refiners based on this less accurate number. Any process by the Commission to determine whether to penalize refiners under section 25355.5 must account for this discrepancy. Too low of a cap for refiners on the "gross gasoline refining margin" could effectively mandate that a refiner take a loss to avoid a penalty, and/or result in the penalty dipping into operational costs – or worse, determining that these draconian market restrictions do not justify continued operation in California.

Additionally, SB X1-2 does not account for the critical differences in configuration, production, operations, distribution, and marketing between refiners. For example, the statute treats refiners differently based on their distribution models; i.e., refiners that sell wholesale gas to affiliated stations may see a higher "volume-weighted average price of wholesale gasoline" than other refiners, and thus, higher gross and net margins for reporting purposes – all simply by virtue of their distribution model. But differences between distribution models do not accurately reflect real-world differences in profitability of refinery operations, and it makes little sense to unfairly penalize (or reward) refiners for distribution models formed decades before, in a statutory regime supposedly aimed at addressing excessive profits from refining, not from distribution. Indeed, refiners' profits and losses shift over time and are based on a multitude of factors, many of which are not fairly captured or mentioned in the statutory definitions.

[5] PRC § 25355(a)(2), (b)(9)
[6] *Id*. § 25355(a)(3)

In the absence of CEC guidance, refiners are likely to employ different methods, resulting in inconsistent reporting. Moreover, looking at data for an isolated period can provide an unrepresentative and inaccurate view of refinery profitability. The Commission, in collaboration with the industry and other stakeholders, should create a single accounting process that addresses the full slate of products refiners make and the costs related to producing that slate. And it should not rule on the propriety of a profit cap until it clarifies this critical informational input.

The CEC should not move forward with any margin cap before it can fully analyze and account for these discrepancies. The Commission will otherwise not receive fairly comparable information necessary to fulfill its statutory mandate to determine whether a margin cap can benefit California consumers. So far, the Commission has not determined conclusively how to navigate these issues. WSPA asked the Commission to initiate a rulemaking regarding the statute, as amended, because "key terms lack clarity, are contradictory, and/or may have multiple interpretations, which could thereby render reporting inaccurate, inconsistent, and open to misinterpretation."[7] Other industry groups joined in asking the Commission for guidance too.[8] The Commission did not provide clarity, and instead instructed industry participants to refer to other regulatory definitions and "language otherwise commonly understood in the industry."[9] The Commission also denied the requests for rulemaking on June 1, claiming that SB X1-2's "terms . . . are clear as written, and, accordingly, may be implemented without delay."[10] For all the reasons stated above, this is not the case.

IV. INPUT ON THE TRANSPORTATION FUELS ASSESSMENT REPORT

WSPA appreciates the opportunity to inform development of the first triennial Fuels Assessment Report. The statute is clear in requiring the CEC to identify methods to ensure a reliable supply of affordable and safe transportation fuels while evaluating costs, supply and employment conditions, and potential refinery closure impacts, as well as costs and cost-effectiveness. As a basis for the report, we recommend that the CEC use the following set of guiding questions to frame and guide this report:

- How will California ensure the production and delivery of reliable *and affordable* transportation fuels for all Californians that need them?
- How does California plan to address the serious and continuing structural supply constraints for crude oil and gasoline in the world's third largest fuels market?
- How will California continue to meet demand if refining capacity diminishes, given that few out-of-State refineries can produce fuels that meet California's strict specifications (and those that can generally require more than a 30-day waterborne transit time to reach marine terminals that are already at capacity)?
- How is California going to encourage ongoing capital and operational investments to keep our existing transportation fuels system working as the proposed energy transition evolves?

[7] Catherine H. Reheis-Boyd, Western States Petroleum Association, Petition for Formal Rulemaking—Implementation of SBX1-2 & SB 1322 at 2, 8–9 (May 11, 2023)
[8] See Elizabeth Graham & Alessandra Magnasco, California Fuels & Convenience Alliance, Petition for Formal Rulemaking—Implementation of SB X1-2 (May 18, 2023); Michelle Orrock, bp America Inc., Petition for Formal Rulemaking—Implementation of SB X 1-2 (May 30, 2023).
[9] Letter from Drew Bohan, Executive Director, California Energy Commission, to Petroleum Industry Representatives (May 30, 2023).
[10] Order 23-0531-11, California Energy Commission (June 1, 2023)

- How will the State reconcile artificially constrained in-State crude oil production (due to State policies) that outstrips CARB's assumed crude oil production decline rate in the 2022 Scoping Plan Update?[11]
- How do California's policies impact fuel costs to all segments of the population under each scenario?

WSPA recommends that – before evaluating new policies to layer on top of existing ones – the CEC first quantify the relative impact of current regulations on California's fuel supply. This includes identifying infrastructure bottlenecks in our ports, pipeline systems, and elsewhere within the supply chain to determine where there are capacity constraints. By first evaluating these systemic issues, the CEC may then be able to identify important fixes and any unintended consequences of policies intended to reduce the State's fossil fuel consumption. These are strong *dis*incentives to make the required investments needed to maintain California's remaining refining capacity, which should be evaluated to assess their potential drawbacks on the fuels market.

The CEC should also include multiple fuel demand and cost scenarios that incorporate low-, medium-, and high-demand scenarios for ongoing fuel consumption, under multiple time horizons, given the known transportation electrification uncertainties already identified by CARB in the 2022 Scoping Plan Update's uncertainty analysis.[12] This will help ensure the CEC begins with a strong base of knowledge to build from as it works through developing solutions to address California's daily fuel constraint.

Next, we recommend that serious attention be given to the negative impacts the imposition of a maximum gross gasoline refining margin and a subsequent penalty could have on the market. The prior section offered a more detailed explanation of the potential impacts and unintended consequences of adopting such a cap and whether the actual market evidence indicates that such a cap will do anything to help California consumers.

Equity and fuel affordability also must be a central part of the CEC's analysis. As CARB and the CEC itself has recognized, millions of internal combustion engine vehicles (including hybrid vehicles) – and therefore, petroleum-based fuels – will be used and needed by Californians for decades to come. Predicting the market is impossible, but regardless of where actual market demand ultimately settles, there should be little disagreement that California needs to ensure adequate fuel supply for those citizens who will continue to rely on internal combustion engine vehicles. Not doing so could force economic harm on some of California's most vulnerable citizens, those who cannot afford advanced electric vehicles, and for whom gas price increases or supply shortages can have a devastating effect. WSPA urges the CEC to not be bound only by scenarios that "must meet" ambitious climate policies while failing to plan for scenarios that do not anticipate material factors in California's transportation market (e.g., lower than expected Zero Emission Vehicle (ZEV) adoption rates, pressing affordability issues that worsen inequity issues, energy infrastructure constraints, delays or failures, and critical mineral and other supply chain shortages).

During the workshop, CEC staff presented multiple policy concepts for mitigating volatility in California's fuels market. Because California requires a boutique blend of fuel, along with

[11] https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents
[12] https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-j-uncertainty-analysis.pdf

meeting a multitude of regulatory requirements while navigating infrastructure constraints, the State has an extraordinarily constrained market. We therefore recommend that, before evaluating any new policies, CEC first conduct an analysis to quantify the relative impact of current regulations on California's fuel supply. This should further include identifying infrastructure bottlenecks (e.g., in ports and pipeline systems) to determine capacity constraints. By first evaluating these systemic issues, CEC may be able to identify important fixes and any unintended consequences of policies that impact the fuels market. By first conducting analysis of existing issues, CEC will start with a strong base of knowledge to build from as the state works its way through the development of solutions to this long-standing problem.

We appreciate that the CEC seeks policy options towards ensuring "a reliable supply of affordable and safe transportation fuels in California." WSPA believes that California policymakers must ensure that the transportation fuels sector avoids a "Diablo Canyon moment," as we have seen in the electricity sector. There, the State has had to make significant policy reversals to ensure the reliable operation of California's electric grid, following multiple years of rolling blackouts. We have an opportunity here to avoid repeating that mistake.

As part of this assessment, the CEC should include multiple demand and cost scenarios for ongoing fuel requirements, given the uncertainties outlined above. In WSPA's comment letters[13,14] to CARB in developing the 2022 Scoping Plan Update, WSPA repeatedly expressed concerns with CARB's reliance on a ZEV-only approach in pursuing California's greenhouse gas and air quality goals within the transportation sector because it failed to evaluate more cost-effective air quality and emissions reduction benefits that other technology options, such as near-zero emissions vehicles and low-carbon and renewable fuels, could deliver. For example, Ramboll's case studies of the heavy-heavy duty truck fleet[15] and the light duty automobile fleet[16] demonstrate that there are alternate pathways using renewable and other low carbon fuels that can dramatically reduce transportation sector carbon emissions without ZEV mandates. We request the CEC undertake this analysis and consider the benefits of utilizing these technologies for improving air quality while providing more affordable and technically feasible transportation fuel options – options that the State acknowledges will be needed for decades to come.

Stillwater Associates has also studied projected fuel demand based on CARB's work on the Mobile Source Strategy.[17] That analysis showed that, if California's fleet changes as projected, "the fuel projections developed by CARB show gasoline demand to be reduced by 66% and 92% below recent levels by 2035 and 2050, respectively and liquid diesel demand to be reduced by 24% and 60% below recent levels by 2035 and 2050, respectively. By contrast, the fuel projections developed in Stillwater's Scenario show gasoline demand to be reduced by 17% and 24% below recent levels by 2035 and 2050, respectively and liquid diesel demand to

[13] WSPA. 2022. Comments on the Draft 2022 Scoping Plan Update. June 24. Available at: https://www.arb.ca.gov/lists/com-attach/4416-scopingplan2022-BnEAdVQIBTdRCAZn.pdf. Accessed: June 2023.
[14] WSPA. 2022. Comments on the Final 2022 Scoping Plan Update and Appendices. December 15.
[15] The Ramboll HHDT study is available here: https://www.arb.ca.gov/lists/com-attach/78-sp22-kickoffws-B2oFdgBtUnUAbwAt.pdf.
[16] Ramboll. 2022. Multi-Technology Pathways To Achieve California's Greenhouse Gas Goals: Light-Duty Auto Case Study. Available as Attachment D at: https://www.arb.ca.gov/lists/comattach/477-accii2022-AHcAdQBxBDZSeVc2.pdf.
[17] "Possible Market Implications of California's Efforts to Ban Internal Combustion Engines (ICE)," Stillwater Associates LLC, December 31, 2021

increase by 15% and 28% above recent levels by 2035 and 2050, respectively. The gasoline demand reduction is about four times greater for CARB's [Internal Combustion Engine] Ban Case than Stillwater's Case. The diesel demand decrease for CARB's [Internal Combustion Engine] Ban Case is about double the increase projected by Stillwater's Case. These starkly different results have dramatically different impacts on California's fuel value chain and fuel costs over the next thirty years, which are discussed in the rest of this section." The CEC should evaluate options for meeting that fuels demand scenario as part of this assessment.

The CEC must also analyze the current state of California's existing oil and gas infrastructure that is substantially supporting the State's existing energy economy. This analysis must be inclusive of the entire supply chain – upstream, midstream, downstream, and retail/marketing – and should include an analysis of the root causes of infrastructure challenges and related supply issues. WSPA recommends that the CEC utilize CalGEM production data to assess the differential in what CARB has assumed (approximately 3% annual production decline in the 2022 Scoping Plan[18]) versus what CalGEM data has shown (approximately 10-15% decline depending on the data set used).[19] We also recommend the CEC evaluate regulatory barriers preventing needed oil and gas facility maintenance activities, policies and processes that create long-term uncertainties in California's oil and gas industry. It continues to be a critical issue for California gasoline supply that most refineries outside of California cannot produce fuels that meet California's strict specifications.

California produces and refines hydrocarbons available under the strictest environmental policies in the world. Thus, any artificial constraint that reduces in-State supply and production will require that crude oil, intermediates and gasoline be procured from refineries out-of-State and around the world – all facilities outside the jurisdiction of California's strict environmental policies.

We are committed to working constructively and collaboratively to try to identify the factors driving California's high energy costs and how this industry, and our people, can help drive down energy costs for Californians. We must disrupt entrenched beliefs, encourage investment in state-of-the-art lower carbon crude oil production, enhance in-State refinery capacity and critical supply infrastructure, eliminate unnecessary burdens on businesses and, most importantly, create a foundation of mutual respect and collaboration that allows us to work together to help all Californians figure out what needs to be done to ensure that this critically important – and complex – transportation fuels system works for every Californian.

V. WSPA RESPONSES TO INDUSTRY PANEL WORKSHOP QUESTIONS

"What is the leading contributor to price spike risk for transportation fuels in the State?"

As the CEC explained, price spikes are caused predominantly by California's geographical isolation, regulatory bottlenecks, and refinery maintenance issues – which are made more acute by regulations and policies that disincentivize new infrastructure investments. For example, the CEC identified global supply issues, refinery outages, and taxes and regulations as the causes

[18] CARB. 2022 Scoping Plan for Achieving Carbon Neutrality, Page 103. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf. Accessed: August 2023.
[19] California Department of Conservation, WellSTAR monthly production data reports, 2018-2023, https://www.conservation.ca.gov/calgem/Online_Data/Pages/WellSTAR-Data-Dashboard.aspx

of price spikes during fall 2022.[20] That conclusion is consistent with the CEC's research going back nearly 20 years, which shows that California's geographic isolation and aging infrastructure are the primary contributors to price spikes.[21]

The markets are still stretched, years later. This means that resupplying California remains difficult, leaving the State further at risk of future price spikes that will likely only worsen as more new restrictive State policies take effect or are pending approvals. For example, CARB's new At-Berth regulation will limit the number of calls and/or the availability of tankers that can call on California's ports beginning in 2025 – the very same facilities that will need to absorb the delivery of increasing imports due to artificially constrained in-State production and refining policies. The growing costs of California's climate policies and programs are only compounded by multiple layers of federal, regional, and local regulations.

Due to these factors, and the relative inelasticity of Californians' demand for gasoline, even relatively small disruptions in supply can have large impacts on fuel costs. As economist R. Preston McAfee explained to the United States Senate, "A 10% shortfall in quantity, which might arise due to a fire in a refinery or a pipeline break, might require a 40% increase in price to clear the market – because consumers continue to drive almost as much, and the refineries cannot produce much more gasoline than they already do. The inelasticity of demand implies that large price swings are normal – small supply disruptions create large price swings. The oil companies do not create such price changes – they are primarily a consequence of factors outside the control of the industry."[22] Similarly, the CEC concluded in 2019 that "refinery outages have an impact on prices" but that apart from "outage-driven spikes, there has been little to no growth in the difference between the United States and California refinery margin."[23]

Compounding these challenges is the overall expense of doing business in California; operating, capital, and labor expenses are much more expensive in California than in most other states.

This contributes to make California an extremely difficult State in which to operate – and, therefore, invest. As some State agencies and legislators continue to champion the closure of refineries, companies that own and operate those same refineries could become reluctant to make long-term investments required to operate these needed facilities because the State's own policies disincentivize doing so.

WSPA reiterates here that nearly three decades of real-world experience, expert analyses, agency inquiries and various court proceedings have yielded no evidence that California's refiners engage in price-gouging, or that price-gouging is the cause of market volatility. Analyzing gas price spikes during the summer of 2022, the CEC concluded that "Refinery Cost & Profit" added up to only 64 cents each gallon – a number that accounted for the *entire* cost of

[20] California Energy Commission, *California Gas Prices*, Presentation at November 23, 2022 California Energy Commission Hearing, at 43.
[21] See generally California Energy Commission, 2005 Integrated Energy Policy Report.
[22] Congressional testimony of R. Preston McAfee, Murray S. Johnson Professor of Economics and former Chair of the Department of Economics at the University of Texas at Austin. May 2, 2002.
[23] California Energy Commission, *Additional Analysis on Gasoline Prices in California* 1–2 (Oct. 21, 2019), https://www.energy.ca.gov/sites/default/files/2019-11/Gas_Price_Report.pdf

the refining process and margins for refiners, meaning *profits* alone were much less than that.[24] Purported market manipulation by refiners has been studied and investigated repeatedly by multiple California Attorneys General, and the result has been that there is simply no evidence that refiners manipulate the supply of fuel to cause price spikes. In 2019, the CEC categorically concluded that alleged "market manipulation" by refiners was not the reason for California's high gas prices.[25] In addition, a federal court recently rejected a class action lawsuit alleging manipulation of the fuel supply market.[26]

"How do you view the various policy options presented to help mitigate price spike risk? Which do you see as more effective, and why? Are there other options that should be considered?"

It is too soon to opine on the potential effectiveness of the various policy options presented – some of which lack detail or are not readily understood – to mitigate the risks of price spikes. But one recommendation is clear. WSPA urges State policymakers to evaluate ways to incentivize infrastructure investments to maintain a safe, reliable, and affordable California transportation fuels system that will be needed for decades to come. This could be done by modifying policies and regulations that make doing business in California increasingly more difficult – including the permitting process, the Low Carbon Fuel Standard (LCFS), and the Cap-and-Trade program – and instead encourage and expedite projects needed to produce, refine and deliver to market the fuels Californians demand while reducing emissions. Currently, some California policymakers are sending a clear signal that refiners are simply not wanted in the world's third largest fuels market – even as Californians continue to rely heavily on the products, fuels expertise, and extensive infrastructure that the petroleum industry provides. We encourage the CEC to reject this invitation to remake California's fuels market into a more emissive, more carbon intensive, and less reliable import-only market.

Below are more detailed responses, where applicable, to the short- and long-term policy options presented at the workshop. We would appreciate the opportunity to work with CEC staff to better assess the policy options being considered prior to presentation of the draft Transportation Fuels Assessment report.

Potential Short-term Policy Options

- *RVP specifications* – This could be done, when conditions warrant, as has been done in the recent past; while this will not prevent or "fix" all market volatility – and it does come with an emissions impact – the early change could be helpful to alleviate short gasoline supply challenges. When the State sees "risk" to supply in heavy shutdown periods that coincide with low Petroleum Administration for Defense Districts (PADD) inventory levels, policymakers could look to partner with refiners to look for potential temporary regulatory waivers or RVP waivers when applicable.
    - If this is intended to mean some type of cost pressure relief valve, to allow Federal Reformulated Gasoline or conventional gasoline to be sold (presumably with an

[24] California Energy Commission, *What Drives California's Gasoline Prices* (September 2022), https://www.energy.ca.gov/data-reports/energy-insights/what-drives-californias-gasoline-prices#:~:text=Gasoline%20price%20changes%20in%20California,and%20significant%20unplanned%20refinery%20outages
[25] Additional Analysis on Gasoline Prices in California, CEC, October 2019 https://www.energy.ca.gov/sites/default/files/2019-11/Gas_Price_Report.pdf
[26] Persian Gulf Inc., v. BP West Coast Products, et al.

emissions offset mechanism), we encourage the CEC to examine how these gasoline supplies could be quickly delivered to the isolated California market and what challenges may be presented by introducing non-CARB compliant gasoline into the fuels distribution system. The CEC would also need to evaluate how this would affect the integrity of the CARBOB gasoline system.

- *Insurance policies for imports* – WSPA is unclear what this policy option means.
  - If this is intended to mean that importers of gasoline and blending components (e.g., alkylate) would be provided a guaranteed landed price weeks after they depart Asia to remove any potential risk of spot gasoline prices collapsing by the time the cargo arrives, this would presumably incur a significant cost for the State.
  - Further, this concept could result in importers sending cargoes whenever the local spot prices were sufficiently high enough to cover their costs, resulting in even more imports that would potentially create an oversupply of gasoline.
  - The State would also have to ensure that there would be marine infrastructure and on-shore tankage sufficient to handle the influx; WSPA questions the feasibility and availability of such import capacity given existing conditions and forthcoming regulations, including the recently adopted At-Berth Regulation, which currently does not provide a viable long-term compliance path for tanker vessels calling on California ports and terminals.
  - This concept may not prevent market volatility from occurring.
  - If this proposal is intended to mean that the State would "forward purchase" gasoline to reduce import risks, a concept that had previously been presented in August 2016 to the Petroleum Market Advisory Committee,[27] the CEC would need to re-evaluate how this gasoline would be sourced, transported, and delivered. This concept had also been studied for the CEC in April 2003 and found that it would be "unlikely to transform the market" and, "[y]et more problematic, all the state's procedures for procurement and inventory control exemplify the rigidity opposite to the flexibility needed for sophisticated trading in forward markets."[28]
  - U.C. Davis academics Jeffrey Williams and Jennifer Thompson previously studied price spikes and California's forward market for the CEC, concluding that "the forward market for wholesale gasoline in California proves to be sufficiently sensible to attract imports during local refinery outages. California prices spike principally because of the time needed to ship California-grade gasoline, about one month, which, not coincidentally, is the time frame in the forward market." The study revealed that "no quick fix is possible because the state itself cannot provide a fix, and more fundamentally, because the forward market is not broken...Our study of gasoline forward markets further revealed a false premise behind this concern over price spikes. Many point to periods when the price of gasoline was much higher in California than elsewhere, much higher than the known costs of transportation, and imagined that such violations of arbitrage indicate a failure on the part of the marketing system. The comparison of spot spatial prices rests on the false premise that gasoline can move from far away to California within a day. The forward market's prices, which allow for the necessary time for shipments, have

[27] "Market-based Policy Concepts Overview & Issues" CEC staff presentation to the Petroleum Market Advisory Committee, August 16, 2016.
[28] "Price Spikes and Forward Markets for Gasoline," Jeffrey Williams and Jennifer Thompson, U.C. Davis

accorded with arbitrage: The marketing system has been mitigating prices spikes by attracting imports into California."[29]

- *Export coordination* – WSPA is also unclear what this policy option means.
  - If the CEC is implying an option to cease deliveries to Nevada and Arizona in response to market volatility, it should be noted that gasoline exported to those states is not the same quality as California's Reformulated Gasoline. Because the California refineries cannot feasibly make 100% CARB gasoline, any non-CARB gasoline would have to be exported, or refiners would have to reduce crude oil processing – which would also reduce jet and diesel supplies as well. California refiners produce enough CARB gasoline to meet their contractual commitments (local demand) and produce the less capital-intensive products for Arizona and Nevada. Even in times of market volatility, gasoline would still need to be imported to Arizona and Nevada and would still likely have to come through a California port and then be transported through the same pipelines. The State should also examine whether a policy requiring gasoline to be preferentially delivered in California rather than in other states would violate the Interstate Commerce Clause of the U.S. Constitution, and what harms would occur in our neighboring states (including increasing fuel costs).
  - Feedstocks are purchased based on forecasted demands. If these export outlets are closed off, the feedstocks are not procured and there is no quick handle to help in the event of market volatility (e.g., backing exports into the local market quickly by sourcing them from other out-of-State producers). There are also "demand constraints" on industry producing more gasoline – like limitations on the ability to manage oil outside California's jurisdiction. If industry does not have an outlet, this could result in constraints for the oil within California's demand.
  - Private industry is incentivized to be efficient and to minimize potential air emission sources. This results in little capacity to produce or maintain excess fuel supplies. Because of California's administrative processes and approvals to obtain a permit and build a tank, export outlets are critical to help manage the refineries reliability as demands change for fuel.

- *Short-term demand-side management* – WSPA does not believe "flex alerts" would work as intended in the fuels market, versus how they have worked in the electricity sector (i.e., temporary voluntary reductions in consumer demand to ease strain on the electric grid during periods of anticipated electricity shortage). From past real-world experience,[30] we know that consumers' belief that a fuel shortage is coming (even when incorrect) often results in "panic buying" – both to purchase *and store* gasoline – only exacerbating a problem this policy option intends to solve while potentially creating or furthering supply/demand imbalances in an already tight fuels market.
  - The concept of "transit support" is also unclear and potentially could be very expensive. It also would not prevent a price spike.
  - Reducing Vehicle Miles Travelled (VMT) and increasing ZEV penetration, while certainly longer-term policies being pursued by other State agencies, will likely do little to prevent short-term acute periods of market volatility. In considering such policy options, WSPA encourages the CEC to evaluate associated cost shifts; reducing VMTs by shifting

[29] "Price Spikes and Forward Markets for Gasoline," by Jeffrey Williams and Jennifer Thompson, U.C. Davis Giannini Foundation of Agricultural Economics, CEC Publication Number 2003-04-21_600-03-007D
[30] https://www.npr.org/2021/05/11/996044288/panic-drives-gas-shortages-after-colonial-pipeline-ransomware-attack

consumers from internal combustion engine vehicles to public transit is a policy the State already pursues but that necessitates the mass availability of affordable and safe transit options that conveniently meet consumer expectations. Despite the aggressive VMT reduction targets in the 2022 Scoping Plan Update, CARB's most recent SB 150 (2017) Progress Report has clearly indicated that VMT in California is not declining.[31] Reducing VMT is by no means a practical short-term measure on fuel demand management, due to the various planning and infrastructure challenges identified by the SB 150 Report. Dramatically increasing the fleet of new ZEVs on California roadways necessitates a prohibitively massive investment by the State to rapidly incentivize and deploy affordable ZEV options, and to conduct an extensive buildout of new charging/refueling infrastructure statewide – all while also maintaining affordable electric rates. Even CARB has acknowledged that the State does not currently have the electric generation capacity to supply a massive influx of ZEVs, and will need significant buildout and upgrade of California's statewide electrical generation, transmission and distribution infrastructure over the next decade to meet such electricity demand. Moreover, the State already struggles with some of the highest electricity prices in the nation. According to the most recent July 2023 data[32] from the U.S. Bureau of Labor Statistics, Los Angeles households paid 65.7% more for electricity (28 cents per kilowatt hour (kWh)) than the nationwide average (16.9 cents/kWh). For the past five years, Los Angeles area consumers paid 36.5% more for electricity than the U.S. average in the month of July. In the Bay Area, households paid 106.5% more for electricity (34.9 cents/kWh) than the national average – and 58.6% more for electricity in the past five years than the national average for the month of July.[33] A widespread shift to electric vehicles, as envisioned by California's policy leaders, would simultaneously require the delivery of a significant amount of new affordable and reliable electricity service – something California clearly lacks the capacity to do today. Indeed, the California State Auditor recently reported that California's electricity rates have increased by more than 50% during the last seven years according to data from the California Public Utilities Commission.[34]

- *Temporary pause on taxes and fees*
  - WSPA encourages the State to consider how potential amendments to the Cap-and-Trade program and LCFS regulations to dramatically *increase* their stringency may impact gasoline costs in California. WSPA is concerned that proposed amendments to both policies could further compromise the supply reliability and affordability of critical transportation fuels.
  - Temporarily waiving taxes and/or fees may reduce consumer costs but is not likely to reduce consumer demand, which remains highly price-inelastic in California. It also does nothing to alleviate periods of limited fuel supply, nor does it serve to provide the funding necessary to pay for roadway maintenance and improvements. Fiscal policy should include fair and equitable policies that do not disadvantage specific industries or categories of taxpayers.

[31] CARB (2023). 2022 Progress Report on California's Sustainable Communities and Climate Protection Act. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-05/2022-SB150-MainReport-FINAL-ADA.pdf. Accessed: August 2023.
[32] https://www.bls.gov/regions/west/news-release/averageenergyprices_losangeles.htm
[33] https://www.bls.gov/regions/west/news-release/averageenergyprices_sanfrancisco.htm
[34] "Electricity and Natural Gas Rates: The California Public Utilities Commission and Cal Advocates Can Better Ensure That Rate Increases are Necessary," August 2023 http://auditor.ca.gov/pdfs/reports/2022-115.pdf

- Conversely, a new penalty/tax on margins would only reduce the potential capital available to California refineries over time and make it more difficult to recover significant capital expenditures in a reasonable amount of time to make the investment worthwhile. Less investment may impact the ability to produce quality fuels over time, which could further exacerbate existing supply challenges. WSPA further urges the CEC to consider the market implications (including to supply) for a publicly-traded company to knowingly violate a State-imposed margin cap.

Potential Long-term Policy Options

- *State-run storage* – The industry currently operates an extensive storage system; WSPA recognizes that the State would likely face several challenges with implementing and utilizing any State-run storage system in an effort to address complex inventory scenarios. The CEC previously evaluated the feasibility of this concept in 2003 and determined that State leaders should ***not*** proceed with a Strategic Fuel Reserve concept due to several unintended consequences that "could limit its effectiveness as a tool to moderate gasoline price spikes and could reduce the total supply of gasoline in the state" (e.g., displace private inventories, thereby transferring much of the costs of maintaining private inventories to the State without significantly dampening price volatility).[35]
  - The CEC separately focused its attention on the complexity of the tank permitting process. A consultant's report noted, "The possible concerns range from overly complex regulations, to open-ended time frames, to overlapping jurisdictions, and to barriers raised by citizens (known as NIMBY). All of this translates into additional costs that ultimately get passed on to the consumer."[36] That report concluded that, "The permitting process in California is in general detailed and complex. The permitting process for petroleum product storage facilities is particularly challenging for permit applicants and permit writers. The potential benefits of streamlining the permitting process for petroleum product storage facilities include an increase in petroleum storage capacity, which would improve fuel supply reliability throughout the State." They made numerous recommendations, including: additional training and technical assistance services (including for the California Environmental Quality Act), timelines and milestones, independent reviews, and inter- and intra-agency coordination.
  - California would also need to assume pricing risks (just as the Federal government does for the U.S. Strategic Petroleum Reserve); decisions would need to be made of when to buy and when to sell. The challenges will remain in obtaining permits for tanks and maintaining product quality, emission factors, and product stability over time (as fuel cannot simply be left in tanks for years).
  - How California would establish such a program and how it could potentially reduce private storage are key issues that would also need to be reexamined before rendering judgment on whether this could help limit the height and duration of price spikes. Such a program may only have a temporary effect, especially if it serves to reduce or eliminate private storage.
  - If this proposal is intended to mean minimum inventory levels, whereby the State would require each seller to hold a certain amount of inventory, WSPA would be concerned that this could reduce the amount of gasoline available to market participants to address periodic supply imbalances. Minimum inventory levels may also have major drawbacks.

[35] "Feasibility of a Strategic Fuel Reserve in California," Commission Report, CEC July 2003 P600-03-013CR
[36] "Permit Streamlining for Petroleum Product Storage," Draft Consultation Report, April 2003 P600-03-006D

As the CEC previously identified,[37] limiting the draw-down level for current in-service storage tanks will decrease working storage capacity, impeding the operational capability of refiners and marketers. It may also reduce strategic inventories by traders and non-refiners – a consequence of which should be evaluated by the CEC. Minimum inventory holdings may warrant the construction of new storage tanks, though doing so is already a difficult regulatory endeavor. Further, since reformulated gasoline tends to be more difficult to inventory, firms will tend to avoid inventories of it and could obfuscate the market from running storage efficiently. This may actually serve to increase market volatility. In addition, "Boutique fuels increase the problem of storage by eliminating pooling. By proliferating fuel types, the amount of storage needed to prevent significant price spikes rises. Storage works like insurance: it reduces costs to be large. By dividing the nation into many smaller, separate fuel types, we increase the costs of storage and reduce its effectiveness."[38] It would likely also not prevent market volatility.

- *Increase ethanol blend requirement* – WSPA understands that CARB is still in the process of reviewing the required multimedia analysis. Amongst the factors to consider with this potential option are that:
  - While this proposed policy option could enable an expanded supply of lower-carbon gasoline provided any issues with a "blend wall" can be addressed; once available, it would not prevent market volatility.
  - Ethanol blending supports market-based mechanisms that promote lowering the carbon intensity (CI) of fuels. Feedstock availability is critical to growing the supply of lower-CI biofuels and policies should support the co-processing of traditional and biofeedstocks; any artificial constraint – such as instituting an arbitrary cap on biofuel-based feedstocks in the LCFS program – would also limit ethanol blending in addition to constraining the supply of products like renewable diesel.
  - Increased ethanol blending requirements could also result in compatibility issues at retail sites, such as for piping connections, which should be considered.

- *Regional blends* – WSPA is not sure if this means requiring the sale of CARB reformulated gasoline in Arizona and Nevada, or something entirely different. The different fuel specifications in Arizona and Nevada likely do not create market volatility, as the gasoline delivered here is not the same California reformulated blend sold in California. In any event, we see no evidence that Arizona and Nevada consumers would agree to pay much more for a different gasoline specification that is otherwise not required for air quality compliance in those states, or that those states would allow such a strategy in the first place.

- *Non CARBOB blends* – WSPA is also not sure what this means. If it means that non-CARBOB gasoline should be allowed to be imported into California during market volatility, it fails to address the insufficient capacity in the Pacific Northwest to surge imports into California in the initial days of a market disruption. Further, there is no spare barge or Jones Act vessel capable of moving large quantities of incremental barrels that were not previously planned as part of another supply obligation. This proposed option would likely not prevent or significantly mitigate market volatility. If it implies that non-CARBOB blends would be allowed, WSPA is concerned with how this could impact the integrity of California's gasoline

[37] "Market-based Policy Concepts Overview & Issues" staff presentation to Petroleum Market Advisory Committee, August 16, 2016
[38] Congressional testimony of R. Preston McAfee, May 2, 2002.

system; preventing contamination of tanks, valves and pipelines could be both costly and time consuming.

- *Large-scale shift to a public utility model* – If this potentially means California would take over in-State refineries, this would almost certainly constitute a substantial taking requiring just compensation.
  - Electric and natural gas utilities are natural monopolies that compel a single operator to avoid the deployment of multiple transmission and distribution systems into a single home or business. The transportation fuel market is not a natural monopoly as it allows for separately operated product distribution systems.
  - This would be anti-competitive and signal the State's deliberate acceptance of market monopolies. This is not allowed under existing State statutes and has been proposed (and failed) in the past.
  - California taxpayers may not be amenable to purchasing refineries and taking on all associated liability.
  - Perhaps most significantly, even this radical step would likely not prevent market volatility. A State monopoly on petroleum refining and supply would not address the supply and infrastructure challenges inherent to the California system, nor would it prevent unplanned equipment failures that lead to temporary supply disruptions, nor would it address continued demand by California consumers for petroleum fuel supply for the decades to come. It should also be noted that price controls implemented in other regions have failed to provide lower costs and needed energy investments.[39]
  - Additionally, California's insurance market may provide a cautionary tale regarding price controls. California law requires insurers to have their proposed rates approved by the Insurance Commissioner before they can charge policyholders. Because of rising costs, insurers have applied to charge substantially higher rates and have generally been denied. As a result, some larger insurers recently stated that they would stop insuring new policyholders in California. A cost-controlled model could similarly challenge the viability of the gasoline-refining industry in the State.

- *More imports* – if this potentially means adding more marine terminals, WSPA questions whether this would be achievable given known regulatory constraints and anticipated local opposition. As discussed above, CARB's recent At-Berth Regulation still provides no permanent path to compliance for petroleum tankers, and only incentivizes fewer port visits, not more.
  - If this potentially means more rail shipments, we question whether there is sufficient rail capacity and availability to absorb the additional supplies into California. The CEC's 2009 IEPR recognized the constraints additional imports would place on California's transportation fuels system: "Reliance on foreign oil imports increasingly puts the state's fuel supply at risk, not only because of security and reliability concerns, but also because the marine ports are not expanding to meet expected growth in demand...The Energy Commission forecasts that crude oil imports will continue to increase, requiring expansion of the existing crude oil import infrastructure. This infrastructure is critical in ensuring a continued supply of feedstocks to enable refiners to operate their facilities and maintain a reliable supply of fuel for California and neighboring states." The report continued by focusing on Southern California constraints, noting "To add further strain,

[39] https://www.nbcnews.com/id/wbna12690142

especially in Southern California, staff expects the increased imports of crude oil to result in a greater number of marine vessels arriving in California ports, with 46 to 272 additional arrivals per year by 2030. Additional storage tank capacity beyond that already identified as part of the Berth 408 project must be constructed to handle the incremental imports, and it is unclear where these can be located given the competition for land in and around the ports."

- Whether we are describing imports from other states or overseas – or crude oil, intermediates or finished gasoline components – California would need significant upgrades to infrastructure and outlet logistics to manage the flexibility. This includes increasing options for exports, more pipelines, and adding storage capacity. Pipeline infrastructure is already at-risk given the known permitting, investment, and construction challenges.
- As it works on the SB X1-2 Transportation Fuels Transition Plan, we urge the CEC to consider these infrastructure limitations and how the introduction of renewables places strain on the California supply chain. This supply chain has had decades to optimize the supply of fossil fuels and is now being expected to react at record pace to facilitate the introduction of renewables. Moving too quickly without the infrastructure to support new fuel products, or lacking a reliable supply of existing fuel products, could leave California at risk of more frequent transportation fuel supply shortages.
- *Export pipeline modifications* – WSPA is also unsure what this means. If it means reversing the flow of pipelines to Arizona and Nevada, this would be infeasible.
- *Rail* – If this is intended to capture the development of rail transloading sites in California by the State to enable shorter duration resupply options to refiners and marketers, it may enable market volatility to be alleviated more rapidly compared to resupply from foreign sources via marine vessels. This would also be beneficial to the State for emergency planning purposes in the aftermath of a catastrophic event (e.g., an earthquake that shuts down in-State refining capacity in either Northern or Southern California). However, rail transport would likely require a vapor disruption unit to be able to move the product from one tank to another, which would be quite laborious and resource intensive.
- *Jones Act* – If this concept is suggesting an elimination of the Jones Act, then domestic marine movement costs could be reduced. However, the federal Jones Act is not the cause of California gasoline costs, nor is it within the State's jurisdiction to repeal or amend.
- *Some State-managed imports* – If this concept infers that the Department of General Services starts purchasing fuel from foreign producers to sell to California consumers, WSPA urges that the State consider where that fuel could be off-loaded, into whose storage tanks, and how the fuel would get to retail locations. Again, regardless of whether some fuel imports are managed by the State, we would not expect this step to have any effect on the ongoing fuel supply infrastructure issues discussed above.

Other Policy Options That Should Be Considered

Permit streamlining – Additional transfer, storage and related infrastructure would be needed to accommodate the anticipated growth of imported fuel supplies – particularly if California continues to disincentivize and/or artificially constrain in-State production and refining – as a replacement resource. This would include modifications to, and additions of, marine terminal infrastructure and, potentially, rail infrastructure (for additional renewable fuels and associated feedstocks) for gasoline and jet fuel. We would suggest that the CEC consider supporting

streamlining and/or consolidation of the permit processes needed to get the necessary fuel supply infrastructure in place.

The 2005 IEPR called for "improving and expanding petroleum infrastructure to meet California's needs in the next 20 years." It found that "regulatory and permitting coordination among a potpourri of local, state, and federal agencies presented a barrier to infrastructure expansion" and recommended "initiating an effort to identify and develop permitting guidelines for petroleum infrastructure projects, with no reduction in environmental standards." The 2005 IEPR further recognized that regulatory challenges at the State, regional, and local government levels delayed permitting of transportation fuel facilities. However, "[m]ost of the problems can be addressed by 1) clearly and accurately defining the issues and 2) balancing competing interests when designing/maintaining environmentally and technologically robust and safe infrastructure. There is industry and agency acknowledgement that better coordination and information transfer will facilitate permitting."

There is industry and agency acknowledgement that better coordination and information transfer will facilitate permitting. Amongst the recommendations to address permitting challenges from the 2005 IEPR were: 1) identifying key responsible trustee, and cooperating agencies; 2) providing timely CEQA/NEPA documentation consultations and comments to facilitate lead agency decision-making that may expedite the issuance of permits; 3) partnering by agencies and private actors during preparation of environmental documents and project permitting processes; 4) coordinating agency review of projects and/or environmental documents to avoid duplication of effort and expedite decisions; 5) establishing an interagency workgroup group to inform agency staff on the policy implications of particular projects or activities; 6) establishing, coordinating, and adhering to project timelines and milestones; 7) considering expedited agency reviews or permit applications when appropriate and feasible; 8) considering approval and use of master plans, rather than per-improvement requirements; 9) ensuring adequately trained staff (including those trained with energy facility siting experience); 10) clearly identifying a "chain of command;" and 11) creating and using clear criteria for regulatory decisions, amongst others.

Incentives for use of California-produced crude – California policies that push for setbacks and other crude producing restrictions will limit options for local crude and result in the same adverse impacts associated with increased importation of foreign crude and/or refined products. For this reason, we would also recommend that the CEC consider supporting incentives for local crude production here in California. Local production would not only avoid the emissions associated with transport of oil and finished products, but would also continue to support good paying blue-collar jobs in the State.

In conclusion, any proposed intervention that entails an increased regulatory burden on refiners, importers, or other market participants will likely raise barriers to local production and refining here in California, disincentivize investment in needed additional supply infrastructure, discourage additional production and long-term commitment to the California markets, increase reliance on foreign imports and the greater emissions they would cause, fail to address Californians' continuing demand for refined petroleum products over the next several decades, and only worsen the existing negative constraints on transportation fuel supply that will ultimately drive gasoline prices *up*, not down. This has historically been true for the LCFS and gasoline taxes, and it would certainly be the case for any proposed penalty on gasoline margins.

The CEC should partner with the industry to reduce regulatory barriers that keep gasoline prices high and exacerbate natural factors that cause price spikes.

"Have other costs been particularly problematic for stable prices for retailers or producers of fuels?"

First, it is important to note that transportation fuel prices are never "stable" in an openly competitive market. Prices in the California transportation fuels market are influenced by a multitude of global factors beyond the control or influence of any one business, industry, State agency or governmental body. These factors include the global prices of crude oil, levels of crude oil exploration and extraction, international shipping rates, the availability of international fuel supply for importation to California, the number and intensity of competing buyers for the same crude oil supplies and/or refined products, available refining and storage capacity in different regions, global demand for passenger and light/heavy-duty vehicles, the costs of refining or importing fuels meeting the California reformulated gasoline standards, pipeline capacity, weather impacts, and foreign events/conflicts that disrupt commodity supply. Similarly, transportation fuel costs are never "stable" due to numerous local and regional factors, including the availability and prices of marine/rail and pipeline transport, costs of meeting applicable regulatory requirements, applicable taxes and fees, costs and availability of labor, the capacity and durability of fuel supply infrastructure, the degree of isolation of a market from out-of-State markets and their capacity to quickly resupply during local supply disruptions, and individual pricing decisions made by thousands of wholesalers and retailers on a day-to-day basis.

Wholesale fuel cost escalation typically occurs in the aftermath of significant unplanned outages, a reflection of increased supply scarcity, providing a necessary incentive to attract incremental supplies of costlier imports to enable the alleviation of any temporary supply tightness. If fuel prices were set to fixed or artificially capped levels, fuel providers outside the State may have little or no incentive to periodically send transportation fuel to California to take advantage of favorable market prices. Under the free market model, supply and demand result in encouraging investments for more supply and/or reduce demand by lowering consumption. California must recognize that, if policies are implemented to simply eliminate fossil fuels in the State as quickly as possible, *investments are thereby discouraged at all levels of the conventional fuels supply chain.* We are already seeing these policies implemented by multiple local jurisdictions across California that are adopting local ordinances[40,41,42,43,44,45,46] or moratoriums,[47] or considering similar motions,[48] prohibiting the development of new gas stations. Such measures likely only serve to force investment out of the State, thereby artificially reducing competition.

[40] https://petaluma.granicus.com/MetaViewer.php?view_id=31&clip_id=3218&meta_id=483708
[41] https://napavalleyregister.com/community/calistogan/news/city-of-calistoga-approves-gas-station-ban/article_105c83fd-3b37-51b0-a886-06248936a3d0.html#tncms-source=signup
[42] https://legistarweb-production.s3.amazonaws.com/uploads/attachment/pdf/1292848/6L_Ordinance_Gas_Ban.pdf
[43] https://www.jurupavalley.org/AgendaCenter/ViewFile/Agenda/_08032022-520
[44] http://santa-rosa.legistar.com/gateway.aspx?M=F&ID=c127403c-d5c1-428d-9d38-04b715fff38a.docx
[45] https://legistarweb-production.s3.amazonaws.com/uploads/attachment/pdf/1619091/ord731_Gas_Station_Prohibition.pdf
[46] https://www.marinij.com/2022/11/22/fairfax-bans-new-and-expanded-gas-stations/
[47] https://www.cityofamericancanyon.org/home/showpublisheddocument?id=18832
[48] https://clkrep.lacity.org/onlinedocs/2021/21-0533_mot_05-18-21.pdf

In addition, other costs have increased too. In July 2023, consumers paid 27.2% more for natural gas in the Los Angeles area[49] and 29.7% more in the Bay Area[50] than the national average. The industry has been impacted by a multitude of costs to operate a refinery, supply racks, and stations with long lead times for materials, higher employee costs, higher constructions costs, etc. With the Consumer Price Index for the West consistently experiencing double digit differences between the average for U.S. cities, these costs impact all manufacturing as well as refiners.[51]

"Are refineries expecting any new or exacerbated distribution bottlenecks for logistics outside the refinery gates?"

- Shipping constraints at marine terminals, through the Panama Canal, and the general availability (or unavailability) of specialized ships create logistical bottlenecks as described above. Freight costs have also skyrocketed, creating another barrier for imports (and resulting in high costs on the West Coast for gasoline shipped in from overseas).
- Also, as discussed above, CARB's recent amendments to its At-Berth Regulation provide no permanent compliance path for petroleum tankers in California due to its requirement that tankers install emissions control equipment not yet demonstrated in practice for tankers. As such, many petroleum tankers may be forced to limit their visits to California ports and terminals in an attempt to comply with the amended Regulation as soon as 2025. We are concerned that, until and unless the Regulation is further amended to provide a clear compliance path for tankers that does not artificially limit vessel visits, it will continue to be a barrier to marine imports of crude oil, refined transportation fuels, and renewable fuels into California.
- Finally, as discussed above, we believe the CEC should consider measures to encourage increased domestic production and refining, as this local and lower-cost product competes more effectively and avoids the increased emissions associated with importing crude oil and/or refined product.

"How do local air pollution district rules influence site operations and how are they interacting with other state programs?"

Local air pollution control regulations can yield marginal emissions reductions at facilities, but can also come with exorbitant cost requirements for impacted refiners, and can disincentivize or even punish increased fuel supply into the market. These regulations can directly influence business decisions regarding potential refinery consolidation or relocation outside California, activities that are both counter to the State's statutory charge to ensure "adequate and affordable fuel supplies for California motorists and businesses."

As noted above, refineries compete for internal capital with other refineries that a company owns throughout the country. When an air regulation mandates a rigorous new emission standard, even if it only produces a very tiny reduction in ambient emissions, the investment required to bring facilities into compliance can range into the hundreds of millions of dollars for that marginal reduction. Companies must make internal decisions on whether such massive investments are economically feasible for their California facilities. Further, if the State expects

[49] https://www.bls.gov/regions/west/news-release/averageenergyprices_losangeles.htm
[50] https://www.bls.gov/regions/west/news-release/averageenergyprices_sanfrancisco.htm
[51] Consumer Price Indexes Pacific Cities and U.S. City Average - July 2023 (bls.gov)

to rely on more marine imports, doing so could be extremely difficult in Southern California if the South Coast Air Quality Management District's Indirect Source Rule is approved at year-end. That rule could potentially limit the import (and export) of goods from the ports of Los Angeles and Long Beach in an effort to address mobile source emissions – despite the fact that all port operations-related emissions sources are currently regulated by international treaties, federal law, State regulations, port policies, tariffs and leases.

Permitting delays at local air districts can have a negative impact for improvement projects, and the associated emission reductions, at various facilities as well. The resulting regulatory uncertainty can lead to reduced investments in critical infrastructure projects, hurting progress on achieving air quality goals. This is a significant issue the State should help address.

Local air district rules also affect in-State production. Kern County's drilling permit program includes the highest air quality mitigation fees for drilling a new well (because mitigation requires zero emissions). The San Joaquin Valley Air Pollution Control District's air quality fees for continuous operations and operational equipment also contribute to one of the highest expenses for companies to comply with. This is in addition to the federal Environmental Protection Agency's Title V permit program requirements.

"Alkylate has been brought up as a primary blending component for gasoline production. Please describe the supply chain for obtaining this material and why has it become more valuable in recent years. Are other blending components similarly situated?"

When refineries have unplanned downtime that impacts octane balances, Alkylate can sometimes facilitate additional blending of components into finished CARB fuels that would otherwise need to be exported (i.e., Alkylate can quickly swell the production of gasoline).

Alkylate is a type of gasoline blending component with more desirable properties (such as low sulfur and high octane) that enable refiners to meet stricter CARB reformulated gasoline standards and produce sufficient volumes of premium gasoline to meet consumer demand. Alkylate has increased in value in recent years due to such factors as: growing demand for premium gasoline to meet increased sales of higher-performance vehicles, implementation of the Tier 3 regulations requiring refiners to reduce gasoline sulfur content that has a tradeoff of lower octane values for some blending components, and inadequate U.S. refining capacity to upgrade lower-octane blending components.

Most California refiners operate alkylation units to meet most of their needs to achieve CARB gasoline standards and produce sufficient volumes of premium gasoline. Alkylate is the predominant type of gasoline blending component imported into the State due to its versatility and availability in southeast Asia and India.

The "supply chain" for obtaining imports of blending components, renewable fuels, and refinery feedstocks usually involves marine movements, except for ethanol imports via rail tank car. Consequently, this type of chain is vulnerable to: shipping availability and rates, international competition for more desirable components (such as alkylate), and impediments to California marine infrastructure lease renewals and local opposition for industry attempts to expand said infrastructure to meet changing market needs.

SUMMARY

The comments described above are certainly not an exhaustive list of every issue WSPA members have relating to the SB X1-2 Transportation Fuels Assessment Workshop, or regarding the implementation of SB X1-2 generally. WSPA reserves its right to supplement these comments as additional or different issues arise in the course of implementing SB X1-2 and in the CEC's further consideration of whether a refining margin cap would benefit California consumers or the California transportation fuels market. We would also reserve the right to submit additional comments in the context of any formal rulemaking process CEC decides to conduct as part of its consideration, and we would continue to strongly encourage a formal rulemaking for the benefit of CEC, the stakeholder, and California consumers.

We would like to work with the State to identify ways to encourage investment in state-of-the-art lower carbon crude oil production, enhance in-State refinery capacity and critical supply infrastructure, eliminate unnecessary burdens on businesses and, most importantly, create a foundation of mutual respect and collaboration that allows us to work together to help all Californians figure out what needs to be done to ensure that this critically important and complex transportation fuels system works for every Californian.

Thank you for considering our comments. We look forward to working with the CEC to provide ongoing input. Please do not hesitate to contact me at (916) 835-0450 or creheis@wspa.org with any questions, or Tanya DeRivi on my staff, who can be reached at (916) 325-3088 or at tderivi@wspa.org.

Sincerely,

Catherine H. Reheis-Boyd
President and CEO

cc: The Honorable David Hochschild, California Energy Commission, Chair
The Honorable Siva Gunda, California Energy Commission, Vice Chair
Drew Bohan, California Energy Commission, Executive Director
Shant Apekian, WSPA