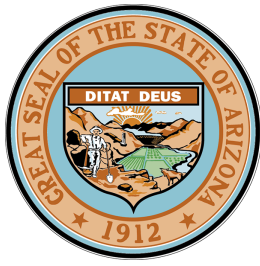


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Project Title:	SB X1-2 Implementation
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*Comment Received From: Western States Petroleum Association
Submitted On: 7/24/2026
Docket Number: 23-SB-02*

**WSPA Citations Part 2 on Draft SB 237 Assessment and Draft TFTP
23-SB-02**

Additional submitted attachment is included below.



September 10, 2024

Governor Gavin Newsom
1021 O Street, Suite 9000
Sacramento, CA 95814

Governor Newsom,

As neighboring governors, we write to you today to express our concerns over the regional implications of ABX2-1 and other legislation related to refinery inventory supplies, which we understand may be under further consideration in California's special legislative session.

Though we may have varying policy agendas as governors, we all share a sincere care for the concerns and well-being of our constituents. Undoubtedly, we too all share concerns about the high cost of fuel and its impact on communities across our states. However, we're concerned that mandating refinery inventory would directly raise the cost of fuel for all of our constituencies and create further economic instability in the region.

In their recent report, the California Energy Commission (CEC) explicitly states that SB-950, now introduced as ABX2-1, "may artificially create shortages in downstream markets," which would raise costs for consumers in Arizona and Nevada. This conclusion alone is deeply troubling and warrants bipartisan, regional communication on this legislation before proceeding.

Further amplifying our concerns, refiners have raised the alarm that refinery inventory mandates could result in supply shortages and potential refinery shutdowns, which would have grave impacts to our shared economies and transportation infrastructure across the West.

Despite ongoing conversations about the root causes of rising fuel costs, it is evident that increased regulatory burdens on refiners and forced supply shortages will result in higher costs for consumers in all of our states. With both of our states reliant on California pipelines for significant amounts of our fuel, these looming cost increases and supply shortages are of tremendous concern to Arizona and Nevada.

For the good of our neighboring constituencies, and for the greater good of consumers across the West, we ask that you reevaluate mandating refinery inventory and delay taking action on this type of legislation until thorough policy conversations are had with industry leaders and our state energy offices. Both the Arizona Governor's Office of Resiliency and the Nevada Governor's Office of Energy stand ready to assist in finding viable regional energy solutions that lead to lowered fuel costs.

Sincerely,

A handwritten signature in black ink, consisting of a stylized 'KH' followed by a long horizontal flourish.

Governor Katie Hobbs
State of Arizona

A handwritten signature in blue ink, featuring a large loop at the start followed by a series of connected strokes.

Governor Joe Lombardo
State of Nevada

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Office of the Governor

March 9, 2026

Governor Gavin Newsom
1021 O Street, Suite 9000
Sacramento, CA 95814

Governor Newsom:

In 2024, Governor Hobbs and I wrote to you to highlight serious concerns around the regional impacts of legislative and regulatory changes on gasoline supply into Nevada and Arizona. Since then, your office directed the California Energy Commission (CEC) to engage with both our states in very productive regional discussions. Those conversations have been and continue to be fruitful and appreciated.

I write to you now to express concerns regarding the California Air Resources Board's (CARB) draft Cap-and-Invest regulation and raise awareness around the significant implications it may have for fuel supply stability across the Western United States, particularly for Nevada, and to request your support encouraging CARB to weigh the regional implications of changes to the Cap-and-Invest regulations.

Nevada is structurally dependent on California's refining system. A significant portion of the gasoline, diesel, and jet fuel consumed in Nevada originates from California refineries. There is no readily available alternative supply network that can replace California's production at scale. As a result, policy decisions that materially affect refinery operations in your state directly and immediately impact fuel availability, pricing, and economic stability in Nevada.

I have been encouraged by your office's renewed focus on engaging with industry to improve certainty for refiners and the skilled labor that operates them. The draft Cap-and-Invest regulation as currently structured, though, introduces substantial new compliance costs and operational uncertainty for refiners already operating in one of the most tightly regulated environments in the country. At a time when several California refineries have closed or announced conversions away from petroleum refining, additional cost pressures may accelerate further capacity reductions. Even a single additional closure would have outsized effects on regional supply.

Nevada does not have the infrastructure to quickly replace lost California refining capacity. Increased reliance on marine imports would expose our state and residents to international supply disruptions, port congestion, weather events, and geopolitical instability. Such reliance would also increase costs and reduce supply predictability. The geographic isolation of the West Coast fuel market makes it uniquely vulnerable to shortages and price volatility when refining capacity tightens.

Affordable and reliable fuel is essential to our economy. In Nevada, residents routinely travel long distances for work, school, and essential services. Tourism—one of the primary economic engines of our state—depends on accessible travel by car and air. Las Vegas serves as major domestic and international travel hub, and relies on steady jet fuel supply from California refiners. Trucking corridors that move goods throughout the Southwest depend on diesel supply that cannot be easily substituted. Sudden price spikes or supply disruptions would reverberate immediately through food costs, construction, agriculture, manufacturing, and small businesses.

Beyond economic considerations, fuel security is a matter of public safety and national security. Nevada is home to critical military installations and training facilities that require dependable access to refined fuels. Emergency response operations, including wildfire suppression across the Southwest, depend on consistent fuel availability. Hospitals, law enforcement agencies, and disaster response teams cannot operate without reliable energy supply chains. Any policy that increases the likelihood of supply contraction in California therefore carries direct implications for regional readiness and resilience.

I am particularly concerned about the cumulative impact of regulatory layering which could potentially impact fuel viability. The Western fuel market has little to no excess capacity. When margins tighten and long-term investment signals deteriorate, companies make decisions that are often irreversible. Once refining capacity is shuttered, it is rarely restored. The loss is permanent, and the region absorbs the consequences in the form of tighter supply and sustained price volatility.

Nevada is not approaching these challenges passively. Recognizing the extent of our state's dependence on California's refining infrastructure, I have established the Nevada Fuel Resiliency Committee, to proactively identify vulnerabilities in our fuels delivery systems and develop strategies to strengthen supply chain reliability.

I respectfully urge your Administration to direct CARB to take a similar regional focus as the CEC, and carefully evaluate the regional consequences of the draft Cap-and-Invest regulation before final adoption. Specifically, I ask that you consider the risk of additional refinery closures, the absence of replacement infrastructure in neighboring states, and the strategic importance of maintaining adequate refining capacity in California for the broader Southwest.

Given the degree to which Nevada relies on California's refineries, I believe it is essential that our states engage in meaningful regional dialogue on policies that could materially affect our shared fuel system. A coordinated regional discussion would allow us to better assess risks, share data, and explore safeguards to prevent unintended supply disruptions.

My request is straightforward: any major policy change that could alter refinery economics in California must account for the real-world consequences to neighboring states that depend on that infrastructure. Fuel affordability and availability are foundational to economic stability, interstate commerce, and national security across the Southwest. Given additional tension in the Middle East, the situation is particularly pressing.

Again, we appreciate the discussions ongoing between the CEC and our office around creating certainty for our tied, regional fuel system. We look forward to continued engagement with you and your team in constructive dialogue to ensure that regional fuel reliability is preserved and that policy decisions are informed by their full interstate impact.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Joe Lombardo', with a stylized flourish extending from the end.

Joe Lombardo
Governor



The 2026-27 Budget:

California's Fiscal Outlook

LAO 

GABRIEL PETEK
LEGISLATIVE ANALYST
NOVEMBER 2025

Executive Summary

Not Safe to Bet Artificial Intelligence (AI) Fueled Exuberance Is Sustainable. Both the California and U.S. economies currently face significant headwinds. Borrowing costs, a key factor in business expansions and major consumer purchases, remain high. New tariffs on imports into the U.S. are creating cost pressures for businesses and consumers. Despite this, income tax collections have been strong in recent months, growing at double-digit rates. These strong income tax collections are being driven by enthusiasm around AI, which has pushed the stock market to record highs and boosted compensation among the state's tech workers. With so much exuberance surrounding AI, it now appears time to take seriously the notion that the stock market has become overheated. History suggests that the stock market is prone to overreact to major technological advances, even if the technology itself turns out to be revolutionary.

Our Revenue Outlook Builds in Some Insurance Against a Stock Market Downturn. Reflecting concerns about the potential effects of tariffs, the budget act enacted in June assumed revenues would decline in 2025-26 and grow modestly in 2026-27. Looking primarily at strong trends in income tax collections since June would suggest a significant upgrade to budget act revenues is warranted. However, our *Fiscal Outlook* revenue forecast reflects a smaller, temporary upgrade which reverses beginning in 2026-27. This is because our forecast incorporates the strong risk that recent income tax gains are tied to an unsustainable stock market. This does not mean our forecast assumes a stock market downturn will definitely happen. Instead, our forecast includes income tax collections that are somewhat weaker than suggested by cash trends, but still tens of billions of dollars above where they would be if stocks actually drop significantly. This middle-ground approach offers the state some insurance against revenue declines, resulting in smaller budget corrections should a market downturn actually occur.

2026-27 Budget Problem Now Larger Than Anticipated. Under our revenue and spending estimates, the Legislature faces an almost \$18 billion budget problem in 2026-27. This is about \$5 billion larger than the budget problem anticipated by the administration in June, despite improvements in revenue. This is because constitutional spending requirements under Proposition 98 (1988) and Proposition 2 (2014) almost entirely offset revenue gains. Moreover, we estimate costs in other programs to be about \$6 billion higher than anticipated. Starting in 2027-28, we estimate structural deficits to grow to about \$35 billion annually due to spending growth continuing to outstrip revenue growth.

Budget Position Is Weak. We advise the Legislature to address the budget problem through a combination of ongoing solutions—namely, achievable spending reductions and/or revenue increases. There are three reasons these actions are now critical. First, the budget problem is now larger than anticipated, despite improvements in revenue, and the structural deficits are significant and growing. Second, while our revenue estimates hedge against a market downturn, they do not reflect the revenue declines the state would experience in a recession. Third, the state has used most of its budget resiliency tools to address prior deficits. If our estimates hold, the Legislature will face a fourth consecutive year of budget problems—all during a period of overall revenue *growth*. As it stands—with larger forecasted deficits and many fewer tools available to address them—California's budget is undeniably less prepared for downturns.

INTRODUCTION

Each year, our office publishes the *Fiscal Outlook* in anticipation of the upcoming budget season. This report gives the Legislature our independent estimates and analysis of the state's General Fund budget condition with the goal of helping lawmakers prepare for the 2026-27 budget process. As always, our *Fiscal Outlook* evaluates the budget's condition based on current law and policy both at the state and federal level. This means we are assessing the state's spending and revenues assuming no

new laws or policies are enacted. This is not a prediction of what will happen—state and federal laws and policies will change in the coming years—but rather serves as a baseline to help the Legislature understand its starting place. This year, for example, our outlook reflects our best estimates of the effects of H.R. 1: One Big Beautiful Bill Act on the state budget but does not make assumptions about future federal policy changes.

AI ENTHUSIASM BOOSTING REVENUES, BUT FOR HOW LONG?

Middling Corporation and Sales Tax Collections in Line With Generally Weak Economic Conditions. Both the California and U.S. economies currently face significant headwinds. Borrowing costs, a key factor in business expansions and major consumer purchases, remain high. New tariffs on imports into the U.S. are creating cost pressures for businesses and consumers. And uncertainty with the federal government appears to be contributing to a general anxiety about the economy. Amid these conditions, California businesses have pared back hiring, resulting in no payroll job growth in the state so far this year. California consumers similarly are limiting spending, with sales of taxable goods flat over the last year. Consumers also continue to report historically low optimism about the economy's future. Consistent with these trends, collections from the sales tax and corporation tax (adjusted for recent policy changes) have posted below-average growth in recent months.

Income Tax, Fueled by Exuberance Over Artificial Intelligence (AI), Remains Lone Bright Spot. In stark contrast, income tax collections have been strong in recent months, growing at double-digit rates. These strong income tax collections are being driven by enthusiasm around AI, which has pushed the stock market to record highs and boosted compensation among the state's

tech workers. The stock market (S&P 500) has risen 50 percent in the last two years. Most of these gains come from the meteoric rise in the value of a handful of tech companies that investors believe will be major beneficiaries of recent advances in AI. These companies have made big bets on AI, spending hundreds of billions of dollars on data centers and offering extraordinary pay packages to recruit AI researchers. This spending, coupled with sizable gains to investors and tech company employees via stock options, is boosting state income tax receipts.

This Time Might Be Different, but It Is Not Safe to Bet on It. With so much enthusiasm surrounding AI, it now appears time to take seriously the notion that the stock market has become overheated. History suggests that the stock market is prone to overreact to major technological advances, even if the technology itself turns out to be revolutionary. For California, the dot-com era—when stocks rose and then fell precipitously in response to widespread adoption of the internet—offers the most salient example. The internet has proven to be a transformative technology and, yet, the stock market's initial reaction was clearly overly exuberant. As shown in **Figure 1**, many signs of an overly exuberant stock market are present today: measures of whether stocks are “expensive” are at historically high levels,

Figure 1

Signs the Stock Market May Be Due for a Downturn

Below, we compare stock market metrics from **right now** to **prior overheated markets that ended in crashes** and show that current conditions look a lot like prior overheated stock markets. The data is quarterly and covers 1952 to present. Growth in borrowing and stock ownership are changes from two years prior.

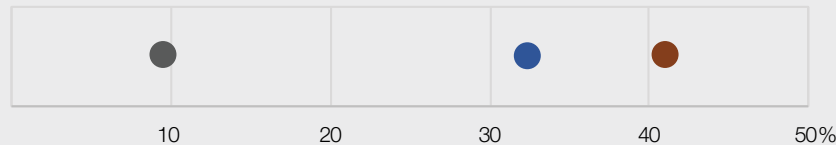
What Returns Are Investors Accepting to Hold Stocks?

When likely returns are low, it could mean investors are paying too much for stocks.



How Much Has Investor Borrowing to Buy Stocks Grown?

When borrowing grows quickly, it could mean prices are being propped up by debt.



How Much Have Households Increased Their Holdings of Stocks?

When households are highly invested in stocks, it could signal overoptimism.



LAO

investors are borrowing more to buy stocks, and households are more invested in the stock market than they have been in at least 70 years. In the past, these patterns have been a sign that a stock market downturn will occur in the next couple of years. There certainly is some chance that this time is different and such a downturn is not forthcoming. Nonetheless, the risk appears strong enough—and the potential consequences for the state budget dire enough—that we think it should be incorporated in the state's revenue outlook.

Our Revenue Outlook Builds in Some Insurance Against a Stock Market Downturn.

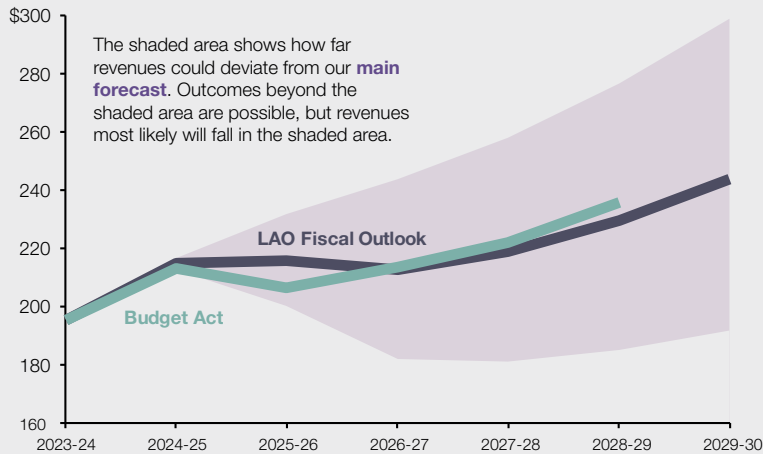
Reflecting concerns about the potential effects of tariffs, the budget act enacted in June assumed

revenues would decline in 2025-26 and grow modestly in 2026-27. Looking primarily at strong trends in income tax collections since June would suggest a significant upgrade to budget act revenues is warranted. However, our *Fiscal Outlook* revenue forecast, shown in **Figure 2** on the next page, reflects a smaller, temporary upgrade which reverses beginning in 2026-27—resulting in 2026-27 revenues being in line with budget act estimates. This is because our forecast incorporates the strong risk that recent income tax gains are tied to an unsustainable stock market. This does not mean our forecast assumes a stock market downturn will definitely happen. Instead, because a market downturn is only a risk but not a certainty, our

Figure 2

LAO Revenue Outlook

Total Revenues (In Billions)



forecast includes income tax collections that are somewhat weaker than suggested by cash trends, but still tens of billions of dollars above where they would be if stocks actually drop significantly. This middle-ground approach offers the state some insurance against revenue declines, resulting in smaller budget corrections should a market downturn actually occur. On the other hand, if a market downturn does not occur, revenues very likely will beat our forecast. Should this occur, we advise the Legislature to treat these extra revenues as temporary for the time being.

WHY DO BUDGET PROBLEMS GROW?

\$18 Billion Budget Problem in 2026-27

2025-26 Budget Act Anticipated Deficits Through the Multiyear. The Legislature has needed to address budget problems for three years in a row. The state solved a \$27 billion deficit in 2023-24, a \$55 billion deficit in 2024-25, and a \$15 billion deficit in 2025-26 (in addition to roughly \$28 billion in proactive budget-balancing actions taken the year before). At the time of the 2025-26 *Budget Act*, the administration anticipated the state would face an almost \$13 billion budget problem in 2026-27. In addition, the administration estimated the state would continue to face structural deficits between \$15 billion and \$25 billion through 2028-29.

2026-27 Budget Problem Now Larger Than Anticipated. Under our revenue and spending estimates, the Legislature faces an almost \$18 billion budget problem in 2026-27. This is about \$5 billion larger than the budget

problem anticipated by the administration in June.

Figure 3 provides our estimates of the General Fund condition, including our estimate of the budget problem. The budget's bottom line is the accumulated change in General Fund revenues and spending across the three fiscal years in the budget window—2024-25, 2025-26, and 2026-27—and reflected in the ending balance in the Special Fund for Economic Uncertainties in 2026-27.

Figure 3

General Fund Condition Under *Fiscal Outlook*

(In Millions)

	2024-25	2025-26	2026-27
Prior-year balance	\$41,978	\$33,386	\$23,833
Revenues and transfers	228,694	222,639	212,400
Total expenditures	237,286	232,193	235,931
Ending fund balance	\$33,386	\$23,833	\$302
Encumbrances	\$18,001	\$18,001	\$18,001
SFEU balance	\$15,385	\$5,832	-\$17,699
Reserves			
BSA balance	18,351	14,023	14,023

SFEU = Special Fund for Economic Uncertainties and BSA = Budget Stabilization Account.

Revenue Improvement Almost Entirely Offset by Constitutional Requirements. Across 2024-25 to 2026-27, our revenue estimates are up \$11 billion compared to the budget act. These revenue improvements do not, on net, improve the budget's bottom line, however. This is because of the requirements of Proposition 98 (1988), which governs school and community college funding, and Proposition 2 (2014), which specifies reserve deposits and debt payments, as seen in **Figure 4**. Together, due to higher revenue estimates, these requirements increase by over \$10 billion—representing nearly all of the revenue gain. The share of revenues going to these requirements is more than typical. Specifically, over 60 percent of the revenue improvement—\$7 billion—goes to schools and community colleges. Of this increase, \$5.1 billion reflects formula-driven increases in the Proposition 98 requirement resulting from our higher revenue estimates. (A portion of this increase is due to “maintenance factor”—a formula requiring the state to accelerate funding in 2024-25 to compensate for the suspension of the minimum requirement in the previous year.) The remaining \$1.9 billion is related to paying a preexisting “settle-up” obligation from the June 2025 budget. (More information about funding for schools and community colleges under our outlook can be found in the box on the next page.) In addition, while we assume Proposition 2 reserve deposits for 2026-27 are suspended—due to the anticipated budget problem—revenue improvements in 2024-25 and 2025-26 require the state to make \$2.8 billion in “true up” reserve deposits. Under our revenue estimates, the state also is required to make roughly \$600 million more in debt payments in 2026-27 compared to budget act assumptions. If the state did not choose to suspend the BSA deposit for

2026-27, constitutional requirements would actually exceed the state's revenue gains under our outlook.

All Other Costs Increase Budget Problem by Almost \$6 Billion. Across all other programs, total spending increases about \$6 billion compared to budget act estimates. These changes are described below and summarized in **Figure 5** on page 9.

- **Statewide Expenditures Higher by \$2.4 Billion.** Statewide expenditures include items like retiree health care, pension payments, and statewide administrative costs, as well as set-asides for major state costs or savings that are not easily reflected in departments' budgets. At the time of the budget act, the administration assumed savings in statewide expenditures that are not reflected in our outlook.
- **H.R. 1 Increases Costs by \$1.3 Billion Across Medi-Cal and CalFresh.** H.R. 1 made a number of changes to Medicaid, known as Medi-Cal in California, and the Supplemental Nutrition Assistance Program, known as CalFresh in California. Generally, these changes will result in fewer program beneficiaries and increased state costs. In 2026-27, we anticipate state costs for Medi-Cal and CalFresh to increase about by \$1 billion and \$300 million, respectively, due to H.R. 1. Importantly, our estimate assumes the state can continue levying provider taxes at their existing levels. (Shortly before we released this report, federal administrators issued preliminary guidance suggesting that the state would need to start adjusting certain provider taxes beginning July 2026. Our estimates do not reflect this recent guidance.)
- **Corrections Costs Higher by About \$850 Million.** Our estimates for corrections costs are higher across the budget window by a total of about \$850 million compared to the administration's estimates. Fundamentally, these higher cost estimates reflect an imbalance between the California Department of Corrections and Rehabilitation costs and the amount provided in its budget. The imbalance includes two components: (1) the partial continuation of a gap between its budget and its ongoing costs that were identified in 2024-25 but that have not been

Figure 4

Revenue Improvement More Than Offset by Higher Costs

(In Billions)

Anticipated Deficit at 2025-26 Budget Act	-\$12.6
Revenues higher	\$11.1
Proposition 98 higher	-7.0
Proposition 2 higher	-3.4
All other spending higher	-5.7
Anticipated Deficit at LAO Fiscal Outlook	-\$17.7

School and Community College Funding

Proposition 98 Requirement Controlled by Formulas. Proposition 98 (1988) establishes a minimum annual funding level for schools and community colleges. The state calculates this requirement each year using formulas in the State Constitution that account for changes in General Fund revenue, per capita personal income, student attendance, and other inputs. The state meets the requirement through General Fund spending and local property tax revenue. For any given budget, the state has new estimates for the previous, current, and upcoming years.

Formula-Driven Requirements Increase General Fund Spending by \$5.1 Billion.

We estimate the Proposition 98 formulas require a \$5.1 billion increase in General Fund spending across the 2024-25 through 2026-27 period (relative to the June 2025 estimates). This increase mainly reflects our higher revenue estimates in 2024-25 and 2025-26. Specifically, the formulas automatically direct nearly 40 percent of the additional revenue to schools and community colleges, and they also require the state to make a larger “maintenance factor” payment. Maintenance factor accelerates the required funding increase in 2024-25 to compensate for the suspension of the minimum requirement in 2023-24.

Preexisting “Settle-Up” Obligation Increases Spending by \$1.9 Billion. The June 2025 budget approved school and community funding at a level \$1.9 billion below the estimated requirement for 2024-25. This gap created a one-time obligation commonly known as settle up. We assume the state pays this obligation in the upcoming budget, consistent with its practice since 2018-19. Trailer legislation specifies that the state will use the payment to support existing education programs, eliminate payment deferrals, and/or avoid future deferrals.

Large One-Time Windfall and Modest Ongoing Increase for School and Community College Programs. Accounting for the formula-driven increases and the settle-up payment, total General Fund spending is up nearly \$7 billion from the June 2025 estimates (see “Proposition 98 Funding Changes for Schools and Community Colleges” in the appendix). We estimate this higher spending—combined with growth in local property tax revenue and several smaller adjustments—makes \$7.4 billion in one-time funds available for school and community college purposes in the upcoming budget. Regarding ongoing funds, we estimate the state could cover a 2.51 percent statutory cost-of-living adjustment for existing programs, but no other ongoing increases.

State Has Options to Help Protect Ongoing Programs. If state revenues decline, the funding set aside under Proposition 98 would decrease by about 40 cents for each \$1 in lower revenue. Moreover, our outlook projects a zero balance in the state’s school reserve by the end of 2026-27. The Legislature could use the one-time funding to build a buffer that would protect school and community college programs. Specifically, it could (1) eliminate the payment deferrals included in the June budget, (2) provide schools and community colleges with an advance payment toward their future funding allocations, and (3) expedite the restoration of a block grant that it previously reduced. We explain these options in *The 2026-27 Budget: Fiscal Outlook for Schools and Community Colleges*.

Figure 5

Other Spending Up by About \$6 Billion

(In Billions)

Other Spending Changes	
Statewide expenditures	\$2.4
H.R. 1	1.3
Corrections	0.9
Solutions erosion	0.8
Other	0.3
Total	\$5.7

addressed fully and (2) additional efficiencies assumed as part of the 2025-26 budget that we estimate will yield less savings than anticipated.

- **All Other Costs Up by \$1.1 Billion.** We reflect a solutions erosion of close to \$800 million related to employee compensation changes adopted as part of the budget package. In addition, all other costs, mostly in health and human services programs, are up close to \$300 million.

Out-Year Budget Problems of About \$35 Billion Each Year

While Some Recent Solutions Tempered Spending Growth... In our November 2024 outlook, we highlighted that both the difference in the *level/s* of revenue and spending as well as the

difference between revenue and spending *growth rates* were driving structural deficits. In addressing the budget problem, the Legislature enacted some ongoing spending solutions that reduced spending by an estimated \$2.5 billion in 2025-26, which at the time were expected to grow to over \$10 billion by 2028-29. These ongoing solutions largely were focused in Medi-Cal, which prior to the budget act had been expected to grow over 7 percent on average annually. While the costs of H.R. 1 increase Medi-Cal spending, which we describe in the nearby box, we now anticipate Medi-Cal growth to be 4.1 percent on average from 2025-26 through 2029-30.

...Spending Growth Remains Elevated.

Despite these solutions, the gap between spending and revenues widens by over \$10 billion in 2027-28. This widening gap is due to both faster spending growth in 2027-28 as well as below-average revenue growth in that year. Faster spending growth is driven by a few factors, including: (1) the costs of H.R. 1 ramping up, (2) the expiration of certain one-time solutions, namely furloughs, (3) the planned repayment of budgetary borrowing (like the Proposition 98 and Medi-Cal maneuvers), and (4) the planned expansion of certain programs, like child care slots and foster care rate reform. After 2027-28, although forecasted spending and revenue growth rates roughly even out, the gap between their respective levels remains, causing structural deficits to persist.

Estimated Fiscal Effects of H.R. 1 on Medi-Cal and CalFresh

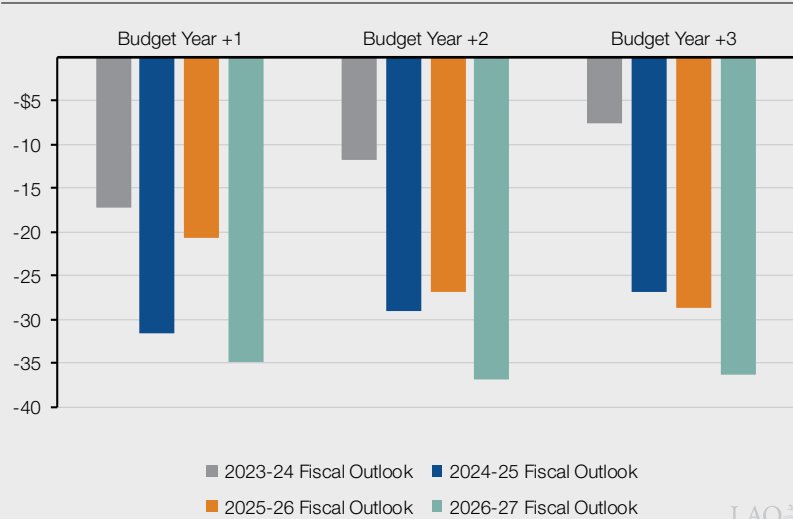
In total, we estimate H.R. 1 will increase state costs by about \$5 billion by 2029-30. Specifically, we estimate Medi-Cal costs will increase on net by \$3 billion and CalFresh costs will increase by almost \$2 billion. The largest drivers of the costs in Medi-Cal are the restrictions on provider taxes and an increase in the state's share of costs for limited-scope coverage for immigrant populations. These costs are offset by the anticipated decline in enrollment of childless adults due to the new community engagement (or work) requirements. In CalFresh, increased costs largely are driven by the state's share of costs for benefits. (While the state is taking steps to reduce the state's share of costs for benefits, the success of those efforts is yet to be known.) Importantly, our estimate of state costs under H.R. 1 are limited to only those costs the state must pay due to changes in cost sharing ratios and other changes in law. Our estimates do not include any costs of changes in policy that are under the Legislature's discretion, like backfilling reductions in federal funds due to eligibility changes.

Structural Deficits Now Moving in the Wrong Direction.

Under our estimates, structural deficits would be around \$35 billion annually starting in 2027-28. These out-year deficits are larger than our recent outlooks as shown in **Figure 6**. There are two main drivers of these deficits. One, revenues dropped significantly in 2022-23 and today remain below where they were projected to be. Two, the state has not adjusted the current level of ongoing state services to fully reflect this more limited capacity. To some degree, this is because certain solutions, particularly related to state operational efficiencies, were overly optimistic in their assumed level of savings.

Figure 6

Budget Problems Now Moving in the Wrong Direction (Dollars in Billions)



COMMENTS

Budget Position Is Weak. We advise the Legislature to address the budget problem through a combination of ongoing solutions—namely, achievable spending reductions and/or revenue increases. There are three reasons these actions are now critical. First, the budget problem is now larger than anticipated, despite improvements in revenue, and the structural deficits are significant and growing. Second, while our revenue estimates hedge against a market downturn, they do not reflect the revenue declines the state would experience in a recession. Third, as explained below, the state has used most of its budget resiliency tools to address prior deficits. If our estimates hold, the Legislature will face a fourth consecutive year of budget problems—all during a period of overall revenue *growth*.

Budget Resilience Waning. In solving the last few years of deficits, the Legislature largely was able to avoid making ongoing spending cuts to the state's core programs. Rather, the budget problems were addressed mostly with temporary fixes, which included reducing one-time spending,

using budgetary borrowing, withdrawing reserves, and temporarily increasing revenues. Some options remain, however. The state has \$14 billion in reserves and could likely find additional capacity for budgetary borrowing, if needed. That said, at this point, the state has used over \$20 billion in borrowing, one-time and temporary spending solutions are exhausted, and budget reserves are at about half of their peak. As it stands—with larger forecasted deficits and many fewer tools available to address them—California's budget is undeniably less prepared for downturns.

Ignoring Risks Could Create Serious Challenges Later. While important components of the state economy are sluggish, revenues are not falling, nor are conditions as bad as they would be in an outright recession. This makes solving the budget problem with ongoing solutions all the more important. Continuing to use temporary tools—like budgetary borrowing—would only defer the problem and, ultimately, leave the state ill-equipped to respond to a recession or downturn in the stock market. Our revenue forecast begins to factor in the

possibility of such a downturn. As such, building a budget using these revenues would mean taking important steps toward bringing the state into structural balance before a crisis arrives.

Upside on Revenue Unlikely to Balance Budget... Revenues could come in higher than our forecast. Even with significant revenue improvement, however, the state likely would still face deficits in future years. As a rough rule of thumb, due to the requirements of Proposition 98 and Proposition 2, to balance the budget, revenue improvement needs to be almost double the size of the deficit. As such, under our estimates, annual

revenues would need to be about \$60 billion higher than we forecast to close the out-year gaps. Revenue gains of this magnitude are quite unlikely.

...Or Be Sustainable. In the near term, a key source of upside is continued stock market strength. If this occurs, we advise the Legislature to consider such an upside as temporary and still take steps to bring the budget into structural balance. We recommend the Legislature use any additional revenues to rebuild budget resilience either through reserve deposits or repaying outstanding budgetary debts.

APPENDIX

Appendix Figure 1

LAO Fiscal Outlook Revenues

(In Billions)

	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Personal Income Tax	\$128.8	\$130.4	\$125.2	\$133.6	\$141.4	\$151.9
Corporation Tax	41.3	41.7	41.7	41.5	43.0	45.2
Sales Tax	33.6	34.0	34.3	35.4	36.5	37.5
Total “Big Three” Revenue	\$203.7	\$206.1	\$201.2	\$210.4	\$220.9	\$234.7
Other Revenues	\$11.4	\$10.0	\$11.7	\$8.5	\$8.9	\$9.2
Total Revenues	\$215.0	\$216.1	\$213.0	\$219.0	\$229.8	\$243.9
BSA Deposit or Withdrawal	\$4.8	\$4.3	—	-\$2.3	-\$3.0	-\$2.3
Other Transfers	8.8	2.2	-\$0.6	0.7	-0.3	-0.3
Total Revenues and Transfers	\$228.7	\$222.6	\$212.4	\$217.4	\$226.4	\$241.3

BSA = Budget Stabilization Account.

Appendix Figure 2

General Fund Spending by Agency Through 2029-30

(Dollars in Billions)

Agency	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Average Annual Growth ^b
Legislative, Executive	\$7.6	\$5.1	\$3.6	\$3.6	\$3.0	\$3.0	-5.5%
Courts	3.2	3.3	3.4	3.5	3.7	3.8	4.2
Business, Consumer Services, and Housing	3.7	0.7	1.0	0.6	0.6	0.6	-16.8
Transportation	0.3	0.2	—	—	—	—	—
Natural Resources	7.5	2.7	2.5	3.4	3.5	4.0	16.8
Environmental Protection	0.6	0.1	0.1	0.1	0.1	0.1	0.1
Health and Human Services	76.2	86.5	91.8	99.8	104.5	108.9	5.9
Corrections and Rehabilitation	13.6	13.3	13.1	13.0	12.9	13.0	-0.2
Education	19.9	19.3	21.6	23.5	24.3	25.3	5.5
Labor and Workforce Development	1.1	1.0	0.9	1.0	1.0	1.0	1.0
Government Operations	3.5	2.8	3.5	3.2	3.9	3.8	2.4
General Government							
Non-Agency Departments	2.4	1.2	1.1	1.7	1.1	1.1	-0.7
Tax Relief/Local Government	0.7	0.8	0.6	0.7	0.7	0.7	4.3
Statewide Expenditures	1.1	4.4	4.4	6.3	7.5	8.4	23.7
Capital Outlay	0.8	0.7	0.2	0.3	0.2	0.2	-10.6
Debt Service	5.5	5.8	5.9	5.9	5.9	6.0	0.6
Non-98 Spending Total	\$147.8	\$147.9	\$153.8	\$166.6	\$173.1	\$179.9	5.4%
Proposition 98^a	\$89.5	\$84.3	\$82.1	\$85.8	\$90.2	\$97.7	6.0%
Total Forecasted Spending	\$237.3	\$232.2	\$235.9	\$252.3	\$263.2	\$277.5	5.6%

^a Reflects General Fund component of the Proposition 98 guarantee.^b From 2026-27 to 2029-30.

Appendix Figure 3

Proposition 98 Funding Changes for Schools and Community Colleges

(Dollars in Millions)

	June Budget Estimates	November LAO Estimates	Change	
			Amount	Percent
2024-25				
General Fund ^a	\$85,711	\$89,520	\$3,809	4.4%
Local property tax	32,317	32,581	263	0.8
Totals	\$118,029	\$122,101	\$4,072	3.5%
2025-26				
General Fund	\$80,738	\$84,326	\$3,588	4.4%
Local property tax	33,821	34,029	208	0.6
Totals	\$114,558	\$118,355	\$3,796	3.3%
2026-27				
General Fund	\$82,536	\$82,130	-\$406	-0.5%
Local property tax	35,556	35,671	115	0.3
Totals	\$118,092	\$117,800	-\$291	-0.2%
Three-Year Totals				
General Fund	\$248,985	\$255,976	\$6,991	2.8%
Local property tax	101,694	102,280	586	0.6
Totals	\$350,679	\$358,256	\$7,577	2.2%

^a June budget amount excludes \$1.9 billion "settle-up" obligation. Our November outlook assumes the state pays this obligation.

LAO PUBLICATIONS

This report was prepared by Carolyn Chu, Ann Hollingshead, and Brian Uhler, with contributions from others across the office. The Legislative Analyst's Office (LAO) is a nonpartisan office that provides fiscal and policy information and advice to the Legislature.

To request publications call (916) 445-4656. This report and others, as well as an e-mail subscription service, are available on the LAO's website at www.lao.ca.gov. The LAO is located at 925 L Street, Suite 1000, Sacramento, California 95814.



ROBERT RIVAS
SPEAKER OF THE ASSEMBLY



Speaker Rivas' Full Remarks at Organizational Session

Monday, December 2, 2024

Renew the California Dream

Colleagues – Thank you for your trust and faith in me.

Last year – it was my deep honor to undertake the responsibilities of Speaker of the California Assembly.

Now – as then – I am filled with great pride.

I'm proud to lead an Assembly that is the most diverse Legislative body in America.

We're diverse in our ideas, in our priorities, and in our lived experiences.

I'm proud that this Legislative class boasts the greatest number of women legislators in our history as a State.

And I'm proud to see so many familiar faces here today.

To all our incumbents, welcome back. It's an honor to work with you all again.

And joining us this session, there are twenty-three new Assemblymembers. Please join me in giving them a very, very warm welcome.

I also want to acknowledge our wonderful families, children, and loved ones here today.

Thank you, every one of you, including to my own family, my wife, mom, and kids.

Every Assemblymember owes a great debt to our families for their care, their patience, and their unwavering support.

Again, thank you — we couldn't do this job without you.

Colleagues – our constituents told us two very important things in November.

First – They continue to believe deeply in California's values of tolerance, of equality, and of human rights by enshrining abortion rights in our last election and same-sex marriage in this one.

But, second – our constituents don't feel that the state of California is working for them.

That's their lived experience in this moment.

Californians are deeply anxious about our state's cost of living. They're anxious about the challenges of doing business here.

And they're anxious because they feel it.

They feel it at the grocery store and when they pay their bills.

They feel it – every time – they fill up their gas tanks for long commutes between work and home.

And they absolutely feel it when trying to imagine owning a home here in the state that they love.

Our task this session is urgent, and it's clear:

We must chart a new path forward and renew the California Dream by focusing on affordability.

Let's not forget California is unlike anywhere else.

We are – and always will be – America's destination for dreams and opportunities. It's in California where we embody the spirit of possibility, of resiliency and of innovation.

That's why 1 in 8 Americans calls California home.

That's why we have one of the world's largest and strongest economies.

That's why the greatest talents and the biggest thinkers make their homes — and build their businesses — here.

And that's why my family is writing our story here, too.

Most of you know that I grew up in farmworker housing raised by a single mom and my grandparents who worked in the fields and in a cannery to make ends meet.

The anxiety that many Californians are feeling right now asking themselves:

Can I pay my rent next month?

Do I have to cut back on groceries?

Can I afford to pay my electric bill?

I know that anxious feeling – because I can remember it in the pit of my stomach from my own childhood in Paicines.

And there are others in this room who I know remember that feeling as well.

California will always be a place of opportunity.

But that opportunity must shine equally for everyone in every corner of this great state.

And for Californians like Jonathan Lam who runs Pegasus Bakery in South Sacramento with his wife, Cynthia, that opportunity can feel out of reach.

They work tirelessly to keep prices affordable for their customers even as the cost of doing business and essential ingredients continues to rise.

Small business owners like Jonathan and Cynthia need our support.

And then there are Californians like Salvador and Ofelia Sanchez, farmworkers from the Central Coast who spent decades in the fields before becoming school janitors.

Now in their 70s, they find themselves unable to afford the cost of housing.

To make ends meet, Salvador has returned to work at a local Jack in the Box.

Jonathan and Cynthia. Salvador and Ofelia.

They represent millions of Californians in every one of our communities — people who work hard, who give back, and who dream of a better future in this state.

And that's why I am calling on us to consider every bill this session through their lens.

Does it lower day-to-day costs for families?

Does it build more housing quickly?

Does it improve public services in ways people can see and feel?

Does it help small businesses start and thrive?

Everyone in this room has good and important ideas. You are passionate and committed, and I have the greatest respect for you.

But our time and energy here are limited.

So, this session we are lowering the number of bills legislators can introduce from 50 to 35.

Because we want every leader in this room to have the greatest possible bandwidth to focus on laws that uplift affordability and prosperity.

Now, make no mistake – this will not prevent us from standing up for California's values.

If LGBTQ people come under attack, if hard-working immigrants are targeted, if women's reproductive freedom is threatened, we will fight back with everything we have.

The country looks to California for leadership, and we will continue to lead.

But our ability to protect these essential California values of equality, diversity, and opportunity depends on delivering for constituents in practical concrete ways.

Practical solutions like building more housing for lower- and middle-class families.

Affordable decent housing isn't just a policy challenge – It's the civil rights struggle of our time.

Every worker has the right to live near their jobs in the communities they help build, serve, and enrich.

And we have a responsibility to make that a reality.

So, to every school teacher, landscaper, firefighter, and housekeeper, I say this:

Whether you work in Pebble Beach or Davis, in Oceanside or San Jose, you should be able to live where you work so that you can spend more time with your families, not on the road commuting.

And I will do everything – EVERYTHING – in my power to make that possible.

We must do more to lower energy costs.

High energy prices hit low-income Californians the hardest.

Look – California has always led the way on climate. And we will continue to lead on climate.

But not on the backs of poor and working people, not with taxes or fees for programs that don't work, and not by blocking housing and critical infrastructure projects.

It's why we must be outcome driven. We can't blindly defend the institutions contributing to these issues.

This session, I want our Assembly Utilities & Energy and Budget Committees to double down on investigating energy costs.

And for our Housing and Budget Committees to investigate and review every state agency that has oversight of our housing supply.

Let's understand what's working – and what's obstructing – real progress here in California.

And finally, we must also ensure that existing state programs are working full speed ahead.

As I've said before, our job is not just making new laws. It's looking in the rearview mirror.

For example, for CalWORKS, roughly 60% of the families eligible for this important assistance program are enrolled.

And then, there's CalFRESH; about 70% of eligible families are enrolled.

That means millions of eligible families and children are missing out on critical financial support and nutritious food.

These programs are already built – We've done this good work – Now let's make sure they're delivering for Californians.

To my Republican colleagues, I am always open to every good idea that will improve life for Californians. Let's work together.

To my Democratic colleagues, this election was a clarifying moment.

But I don't feel discouraged — and I hope you don't either.

Clarity gives us a unique opportunity to do more.

And I want to stress something important: affordability solutions are social justice solutions.

And to this point, I think of my own story.

I grew up with eight family members living in a two-room house right next to rows of vineyards.

My grandfather often worked eighteen-hour days. Hard work that broke his body down.

My mother and grandmother did everything they could to save a little money.

They did everything they could to make sure that I made it to school on time each day and that I made it to the doctor when I was sick.

They made sure that I made it to college and that I made it here to the California State Capitol.

All of these adults just wanted me to have a better life.

They worked, they saved, they worried, and they did it for my future.

We are all here because the people who came before us opened a door.

Now we are the adults in the room. Now, that is our job.

It's our job to open the door for millions of people who fear it may be closing.

This task is an urgent one because Californians have told us so.

This task is urgent because the new Administration in Washington will claim that you can only lift people up by tearing others down.

We know that there's a better way. It's called the California Dream.

Over the next two years, we must do everything in our power — collectively — to renew it.

Millions of Californians have put their faith in us.

Let's get it done.

Let's get to work.

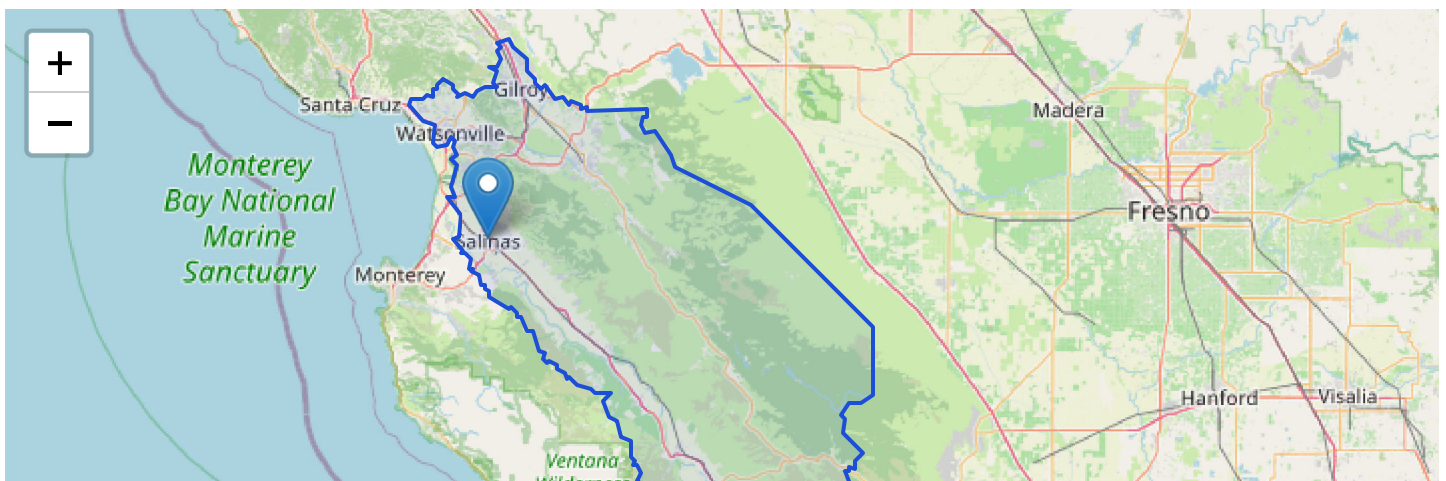
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California State Assembly Democratic Caucus



BLOG POST · MARCH 18, 2026

Most Californians Expect Little Change to Their Finances Despite Economic Uncertainty

Deja Thomas, Sean Cremin, and Sarah Bohn

Uncertainty has been a hallmark of California’s post-pandemic economy, with inflation, a labor market slowdown, and major shifts in federal economic policy. It’s not surprising that seven in ten adults (71%) expect bad financial times in the state over the next year, according to the [February Statewide Survey](#). At the same time, most are not concerned about their own financial situation in the near term. While this survey was conducted before the Iran war began, Californians’ apprehensions were already in play—with an important message for election-year hopefuls.

June’s gubernatorial primary has moved financial concerns front and center. Nearly all California likely voters say that the candidates’ positions on affordability and the cost of living are important in determining their vote in June (61% very; 35% somewhat). Similarly, about nine in ten likely voters say this is important in determining their vote for the US House of Representatives in November (56% very, 36% somewhat).

Unexpectedly, given their doubts about the economic future, Californians mostly view their own financial situation as steady—at least for now. Nearly six in ten adults (58%) expect their personal financial situation over the next six months to be about the same; about two in ten say it will be stronger (3% much, 15% somewhat) or expect it to be weaker (3% much, 18% somewhat). Majorities across major regions of the state expect their finances to be about the same—although Los Angeles residents are somewhat more pessimistic than residents elsewhere.

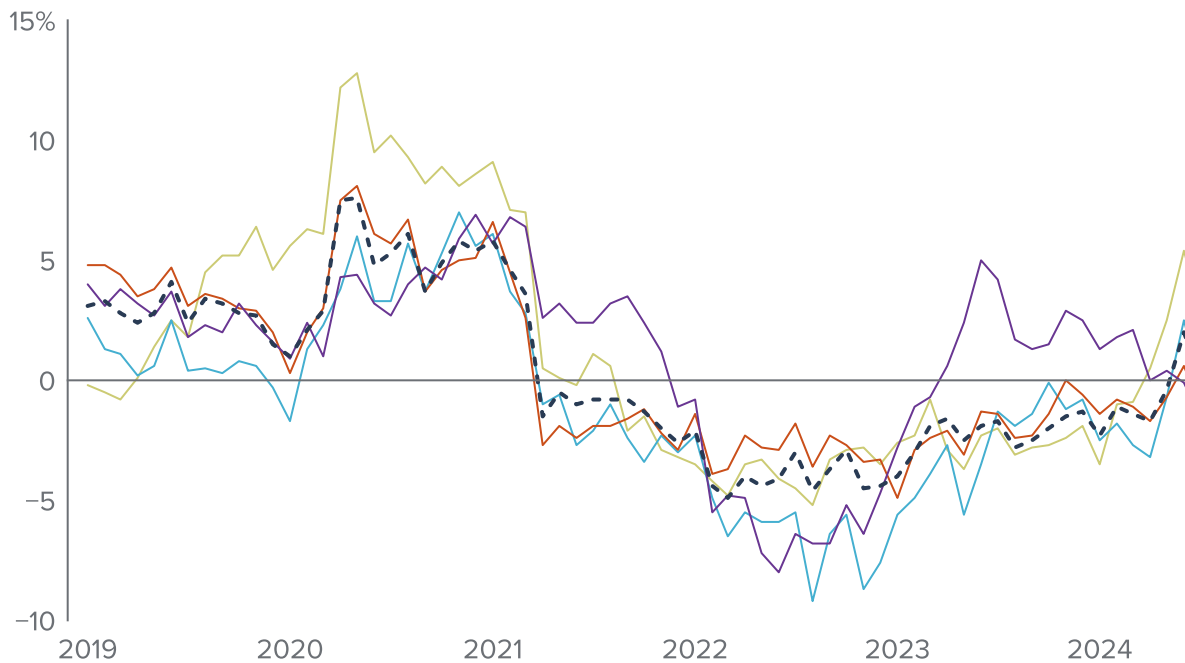
A majority of Californians expect their personal finances to be the same over the next six months

	Much stronger weaker	Somewhat stronger	About the same	Somewhat weaker	Much weaker
All adults	3 15	58		18	5
Central Valley	4 15	60		14	7
Inland Empire	5 14	63		12	6
Los Angeles	2 15	54		24	5
Orange/San Diego	5 18	54		17	6
SF Bay Area	16	61		18	4

Hold-steady views of personal finances—with few expecting gains in the near future—are notable in light of California’s idling labor market. Across almost all of the state’s major industries, job opportunities have been dwindling since 2022, with effectively [no net job growth over the last year](#). Furthermore, average hourly wages for California’s private sector workers were barely in positive territory in 2025 after accounting for inflation, growing just 0.4% over the year (down from a peak of 3.4% in March); changes in average real wages varied across the state’s regions.

Real wage growth slowed statewide in 2025, but varied across regions

Annual change (%)



SOURCE: PPIC calculations using US Bureau of Labor Statistics (BLS) Current Employment Statistics (CES) and Consumer Price Index (CPI), 2019-2025.

NOTES: Average real wages are for all private sector jobs. The percentage displayed for a given month and year is the percentage change relative to the same month in the previous year (i.e., the percentage shown for December 2025 is the percentage change in average real wages from December 2024 to December 2025). California regions displayed here include the four highest populated Core-Based Statistical Areas in the state: Los Angeles-Long Beach-Anaheim, Riverside-San Bernardino-Ontario, San Diego-Chula Vista-Carlsbad, and San Francisco-Oakland-Fremont. Data is not seasonally adjusted. October 2025 data is missing due to a lapse in federal appropriations.

But even though average wage growth outpaced inflation last year, an overwhelming majority (71%) of Californians feel their incomes are not keeping up with rising prices. Most residents across regions and demographic groups say this, with some variation: Californians who earn less than \$40,000 (85%), are renters (77%), have some college education or less (75%), or are ages 18 to 34 (75%) are among those most likely to express concern.

Volatility in prices may be one reason for Californians' overall economic pessimism. In 2021–22, Californians were faced with rising prices at levels unseen in almost 40 years. While today inflation has cooled, overall prices in the state have increased 26% since 2019, a rate almost double that of typical price growth patterns. Larger increases for essentials like rent, utilities, and food have hit lower- and middle-income workers particularly hard as they already spend much of their budgets on basic needs.

Additionally, consumers strongly perceive rising prices as systematically eroding their purchasing power—even if wages are rising—with adverse effects felt most strongly by those with lower earnings. With gas prices on the rise due to the war in Iran, concerns about inflation are poised to continue weighing on consumers.

Californians remain concerned about the state's economic future, and with the June primary less than three months away, the issue of affordability is top of mind. How will candidates tackle this important issue? Their approach will be a key factor in how California voters choose their next governor.

TOPICS





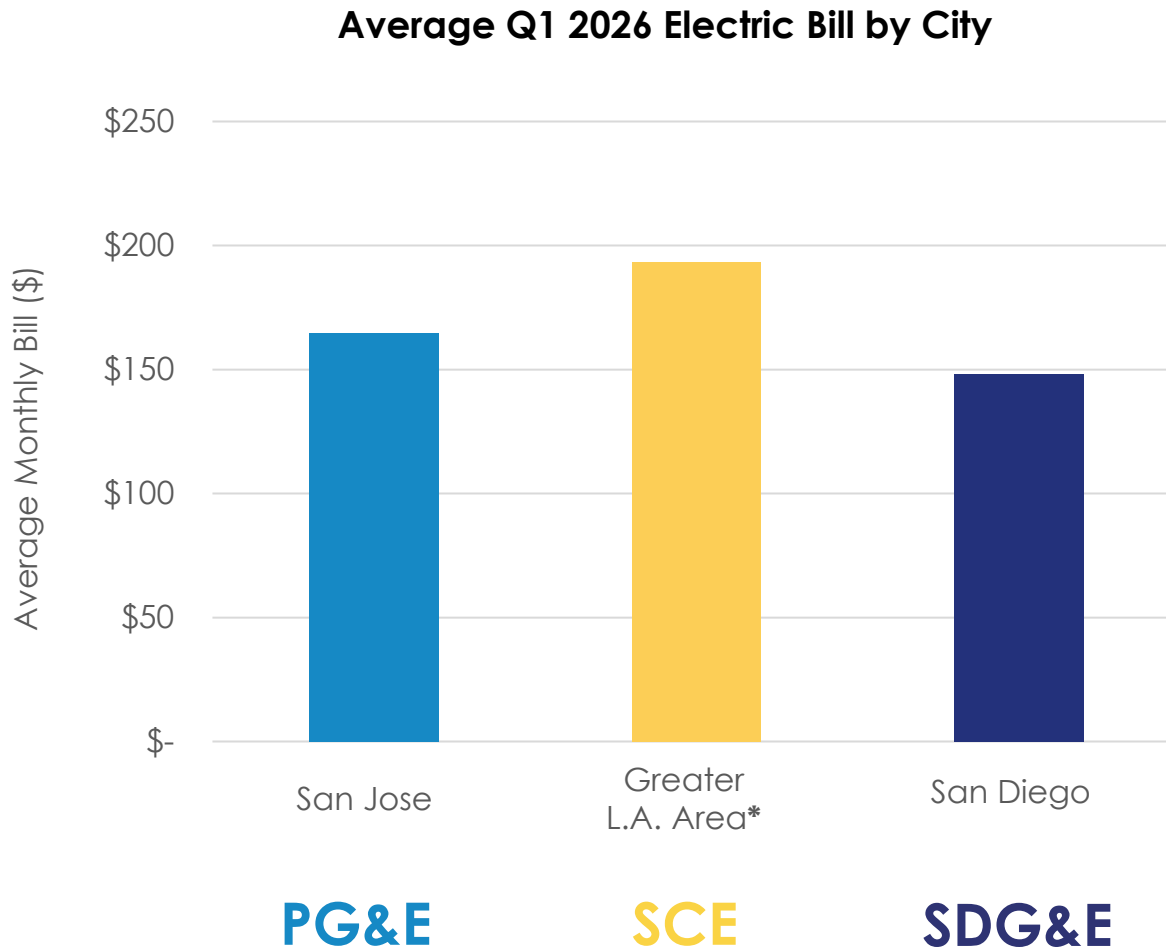
Q1 2026 Electric Rates Report

The Public Advocates Office at the California Public Utilities Commission
March 2026

About

- The Public Advocates Office represents utility customers' interests primarily by participating in proceedings before the California Public Utilities Commission and engaging in other policymaking forums.
- The California electric utilities recover their operational and investment costs through the rates they charge their customers. These rates regularly change due to many factors. We track the rates and develop recommendations to minimize costs to ratepayers.
- This report summarizes residential electric rate changes across Pacific Gas and Electric (PG&E), San Diego Gas & Electric (SDG&E), and Southern California Edison (SCE) service territories through **March 2026**.

Bills compound affordability challenges across the state



- Over the last few years electric bills are generally rising due to **higher electricity use** (e.g., air conditioning) and **higher overall electricity prices ("rates")**.
- Low-income households are most disproportionately impacted from higher rates and bills.

Nearly 1 in 5 households are behind on their energy bills

	# of Customers in Arrears	% of Customers in Arrears	Average Amount Owed
PG&E	1,099,297	19%	\$723
SCE	812,073	17%	\$833
SDG&E	259,329	19%	\$507
Combined	2,170,699	18.5%	\$738

Main electricity rate drivers

10-Year Change

Jan 2016 to March 2026

Primary Statewide Drivers

PG&E

↑ 69%

SCE

↑ 101%

SDG&E

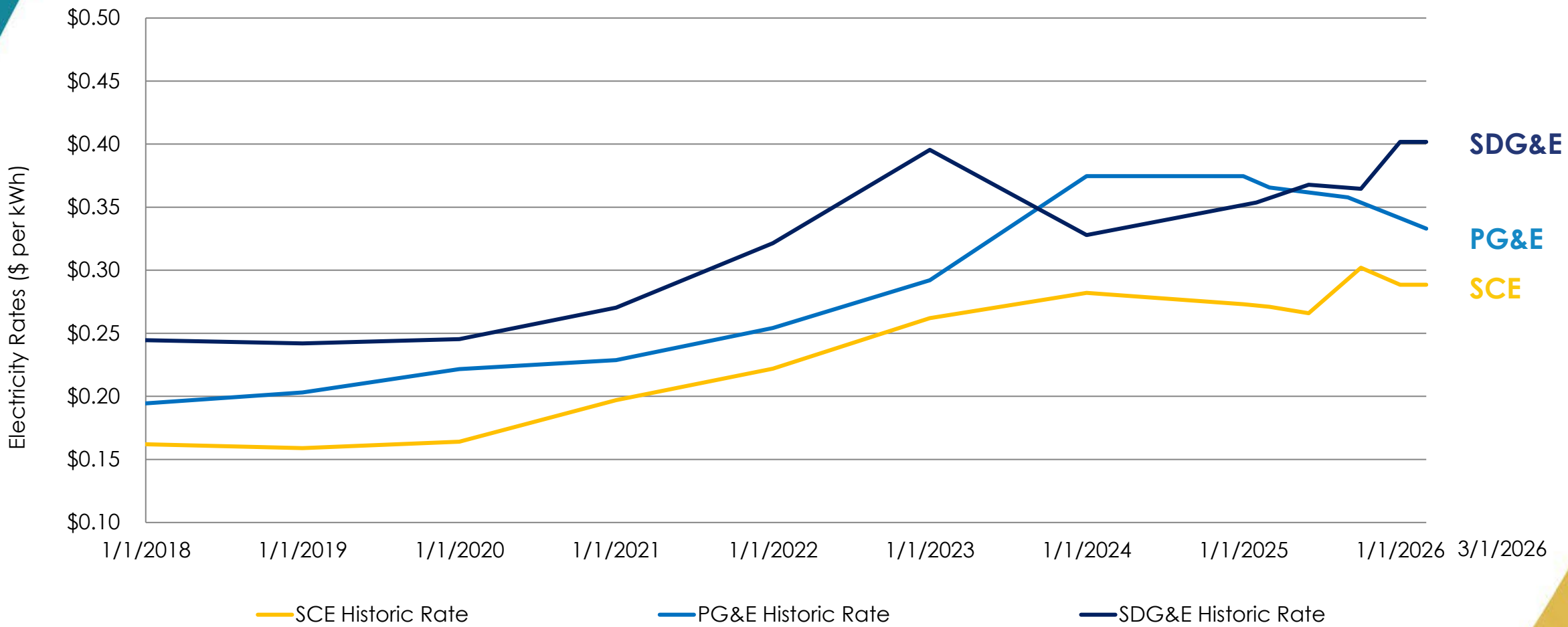
↑ 98%

1. Wildfire mitigation and insurance
2. Transmission & distribution investments
3. Rooftop solar incentives ("net energy metering")

Source: California Public Utilities Commission SB 695 report: Report to the Governor and Legislature on Actions to Limit Utility Cost and Rate Increases... (2025)

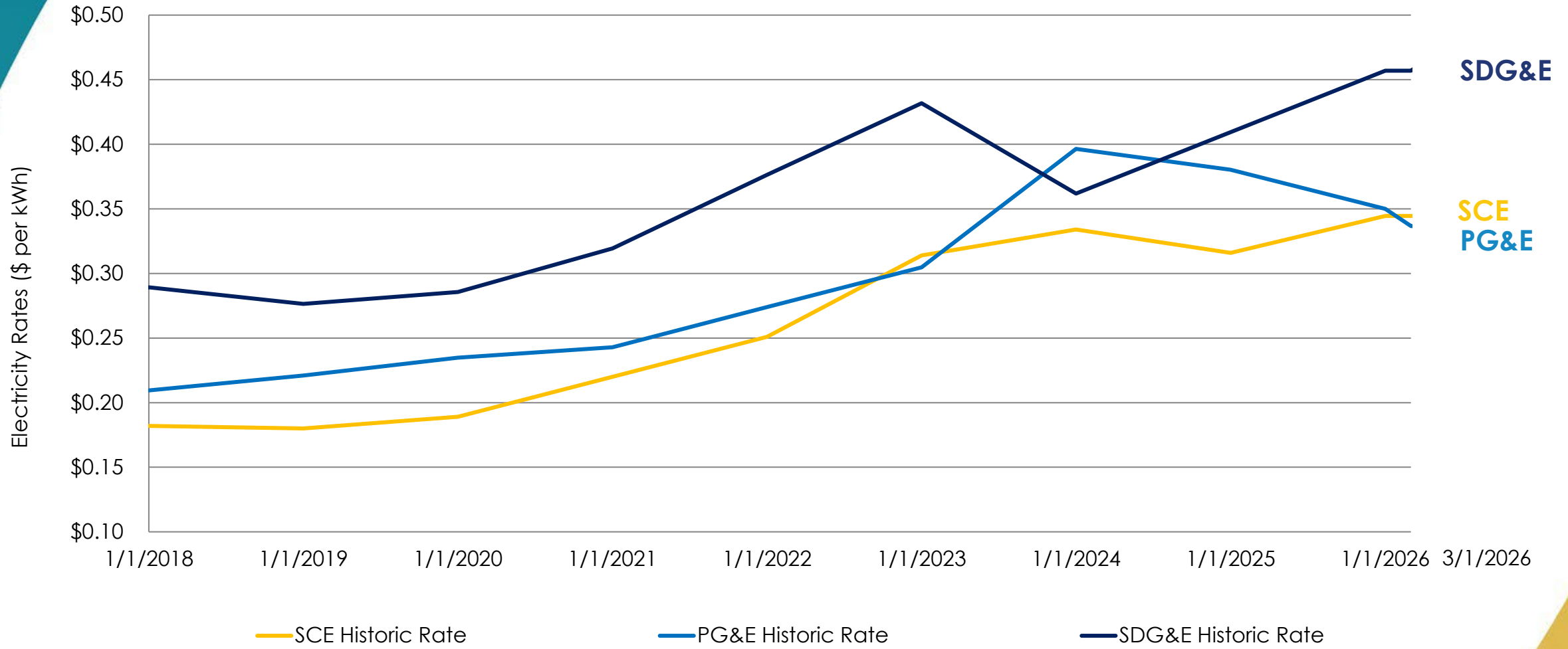
Bundled System Average Rates (SAR)

System Average Rate (SAR) is the average amount paid per kilowatt-hour (\$/kWh) by customers who receive both electricity generation and delivery from their utility. It is calculated by dividing the utility's total electric revenues by the total electricity sold to bundled customers. Customer classes include residential, commercial, industrial, agricultural, street lighting, and public agencies.



*System Average Rate Formula: Bundled customer authorized and pending revenue requirement (\$)/Bundled authorized forecasted sales (kWh).
 Forecasted rates only include known revenue change requests and will likely increase as future revenue change requests are filed.
 Source: Investor-Owned Utility Advice Letters (California Rates) for historic rates and utility submitted Cost and Rate Trackers for forecasted rates.

Average Residential Electricity Rates (RAR)



SDG&E

**SCE
PG&E**

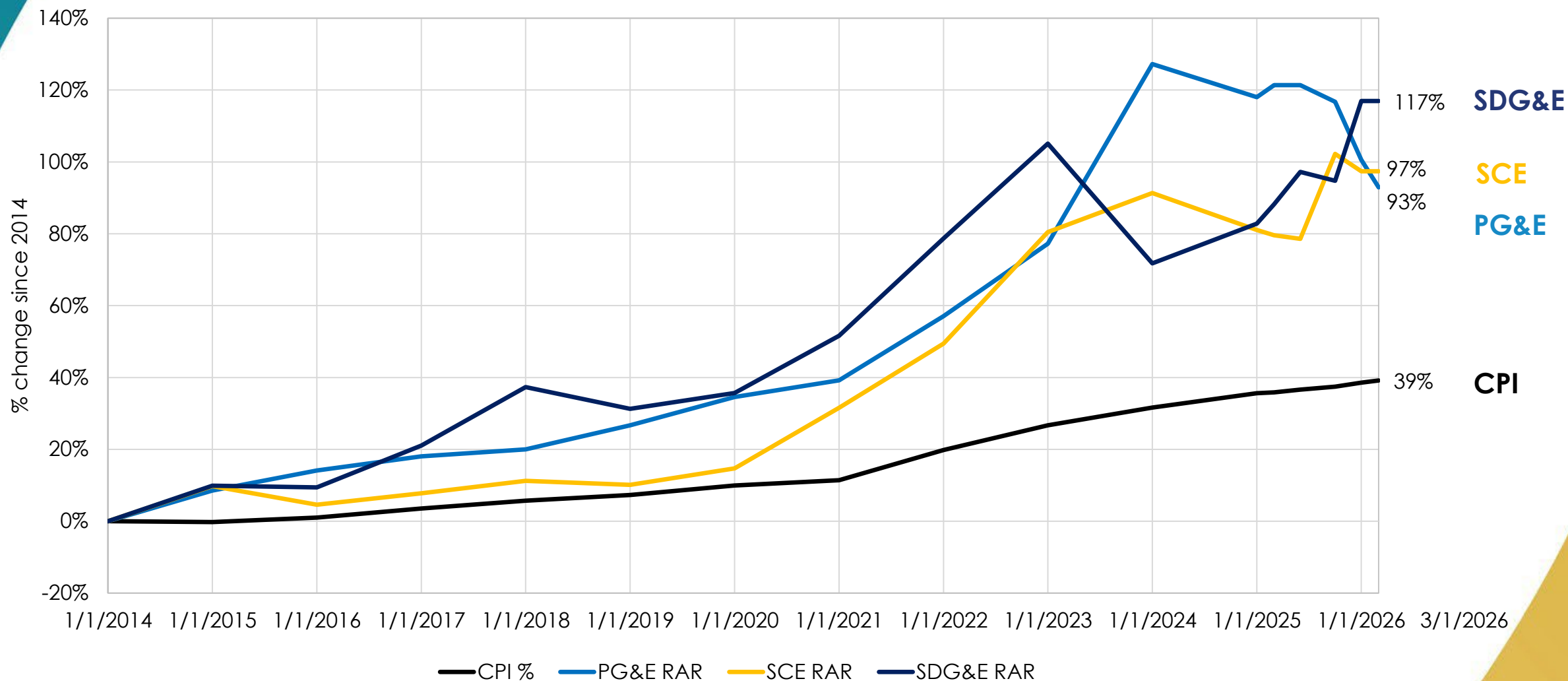
CA rates represent residential average rates excluding California Climate Credit.
 Forecasted rates only include known revenue change requests and will likely increase as future revenue change requests are filed.
 Source: Investor-Owned Utility Advice Letters (California Rates) for historic rates and utility submitted Cost and Rate Trackers for forecasted rates.

Residential average rates have significantly increased

	Average Rate (\$ per kWh)	3-year Change March 2023 to March 2026	5-year Change Jan 2021 to March 2026	10-year Change Jan 2016 to March 2026
PG&E	\$0.337	↑ 6%	↑ 39%	↑ 69%
SCE	\$0.345	↑ 9%	↑ 57%	↑ 101%
SDG&E	\$0.457	↑ 6%	↑ 43%	↑ 98%

Rates have increased substantially since 2014, surpassing inflation

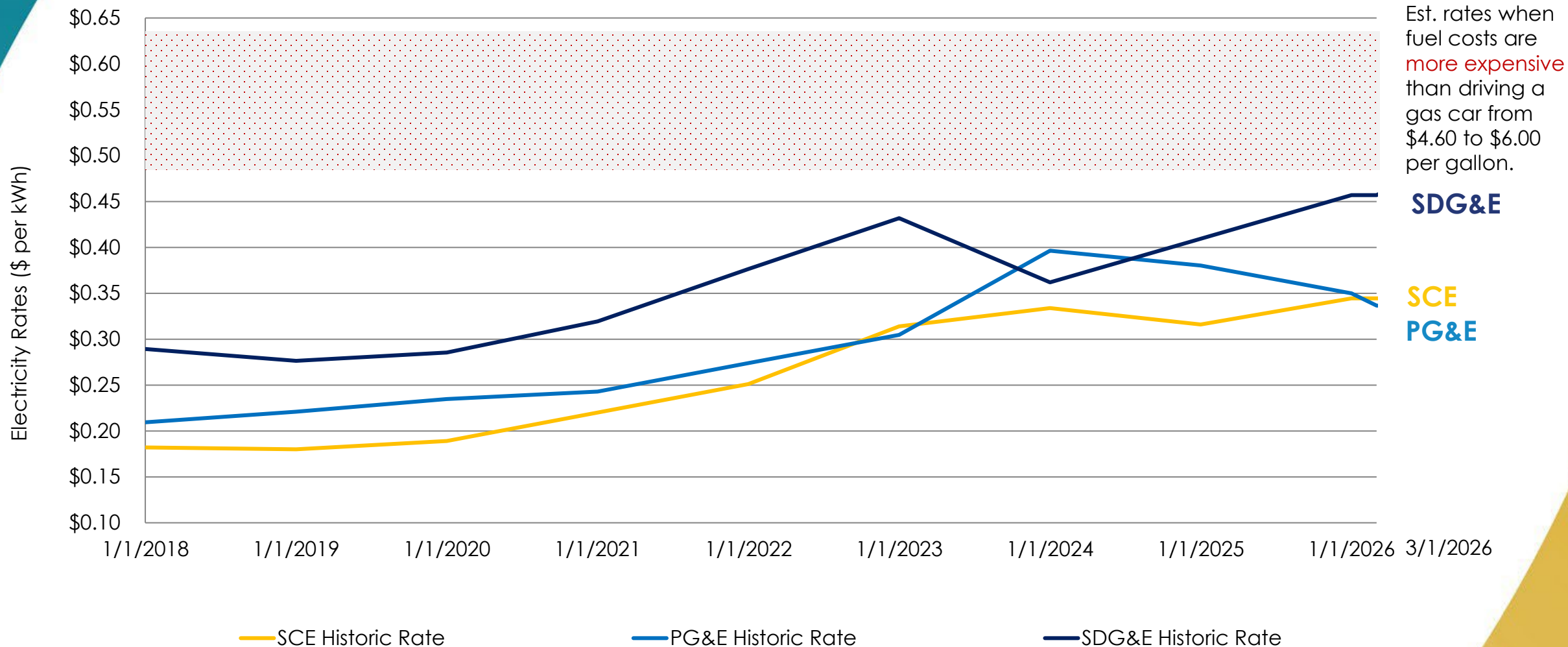
IOU Year-Over-Year Residential Average Rate Changes Relative to Inflation*



*Showing latest Bundled Residential Average Rates (RAR) and Consumer Price Index (CPI) for All Urban Consumers (CPI-U) found at <https://data.bls.gov/cgi-bin/dsrf?cu> as of January 1, 2026.

**For details on primary drivers of rate changes in Q4 2025, see Appendix Slides 18 through 23.

EV Fuel Price Parity w/ Bundled Residential Average Rate



Assumptions for this slide found in Appendix on Slide 18.

Avg residential rates represent average residential rate customers excluding California Climate Credit.

Forecasted rates only include known revenue change requests and will likely increase as future revenue change requests are filed.

Source: Investor-Owned Utility Advice Letters (California Residential Average Rates) for historic rates.

Wildfire-Related Revenue Requirement* (RRQ) by Utility

	Jan 2023	% of Total RRQ 2023	June 2024	% of Total RRQ 2024	Oct 2025	% of Total RRQ 2025	Jan 2026	% of Total RRQ 2026
PG&E	\$2,398,830,000	15%	\$5,326,645,000	25%	\$3,638,277,000	19%	\$3,966,809,000	19%
SCE	\$1,447,261,000	9%	\$2,026,051,000	11%	\$2,582,118,000	15%	\$2,690,943,000	14%
SDG&E	\$372,233,000	9%	\$595,578,000	15%	\$760,797,000	18%	\$675,687,000	14%

The chart above is based on latest figures as of March 2026 and includes wildfire-related insurance and the Wildfire Fund Charge. Some historical data may have been updated by the IOUs and reflected in any change from the figures presented in the Q4 2025 Report. For more context, please visit our website and related memo: <https://www.publicadvocates.cpuc.ca.gov/press-room/reports-and-analyses/wildfire-cost-increases-of-california-electric-iou>

*A revenue requirement is the total amount a utility is authorized to collect from customers to cover its costs – including operations, maintenance, taxes, depreciation, and a return on investment.

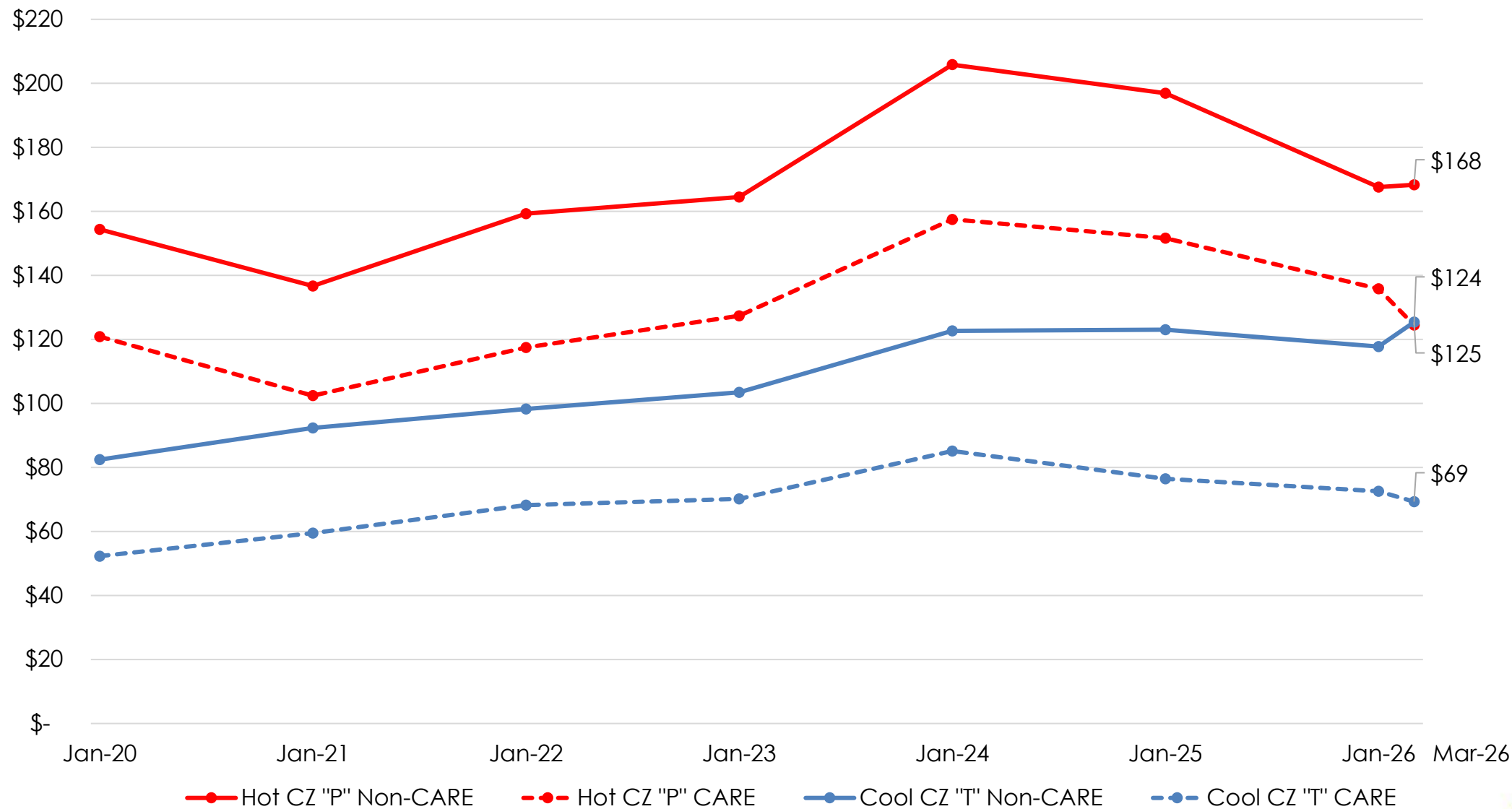
Historic Trend of Average Electricity Bills for CARE* and Non-CARE Customers

Using a Sample of Hot & Cool Climate Zones
from each IOU's Service Territory

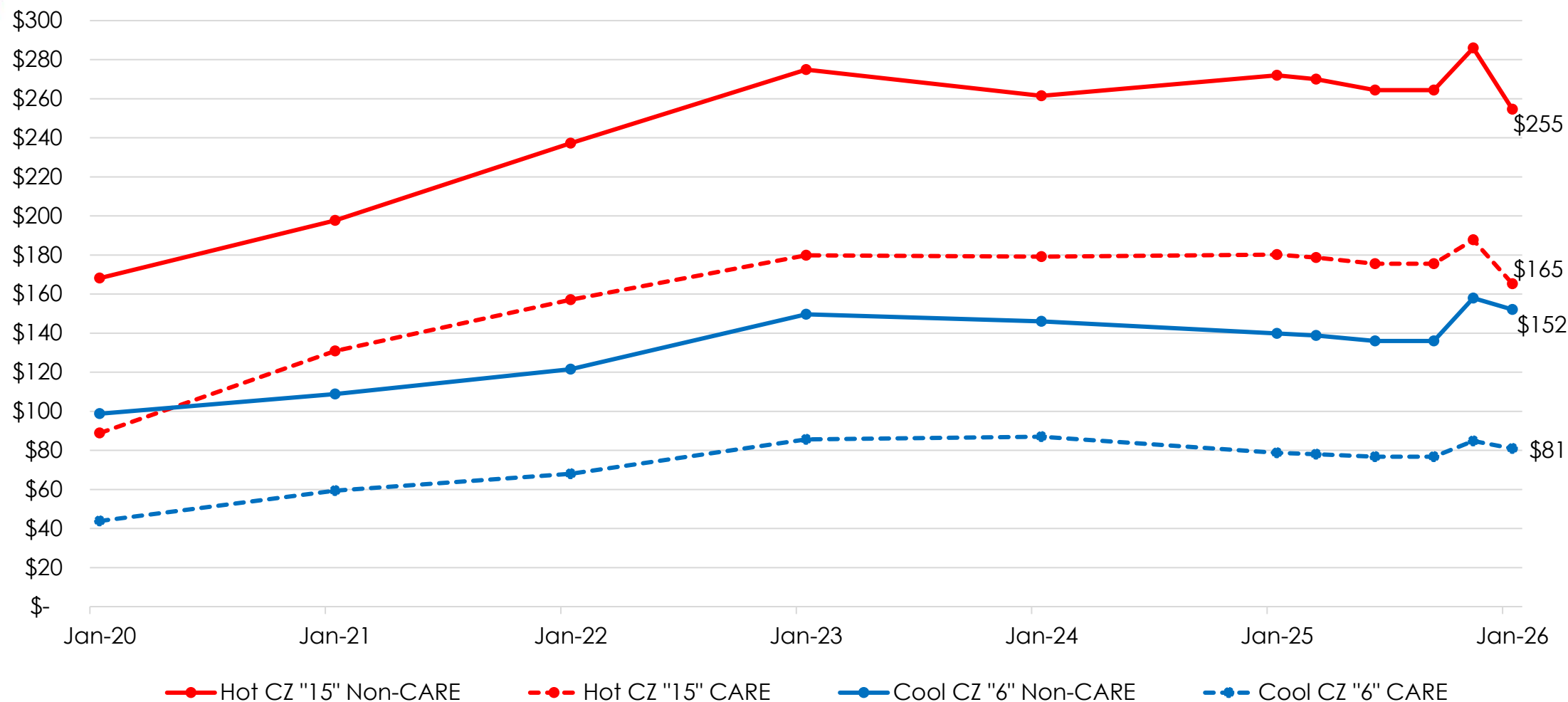
*CARE customers are those households with incomes at or below 200% of the Federal Poverty Level and enrolled in the California Alternate Rates for Energy (CARE) program, which provides them a 30-35% discount on their energy bills. With exemptions from certain costs and implementation of the Base Services Charge, CARE customers will see total discounts of approximately 40%.

The IOUs report estimated bills to Cal Advocates on a quarterly basis. These slides include the latest quarterly rate change from each IOU and resulting bill estimates as of March 1st, 2026.

PG&E's Average Monthly Electricity Bills for CARE & Non-CARE Customers in Hot and Cool Climate Zones

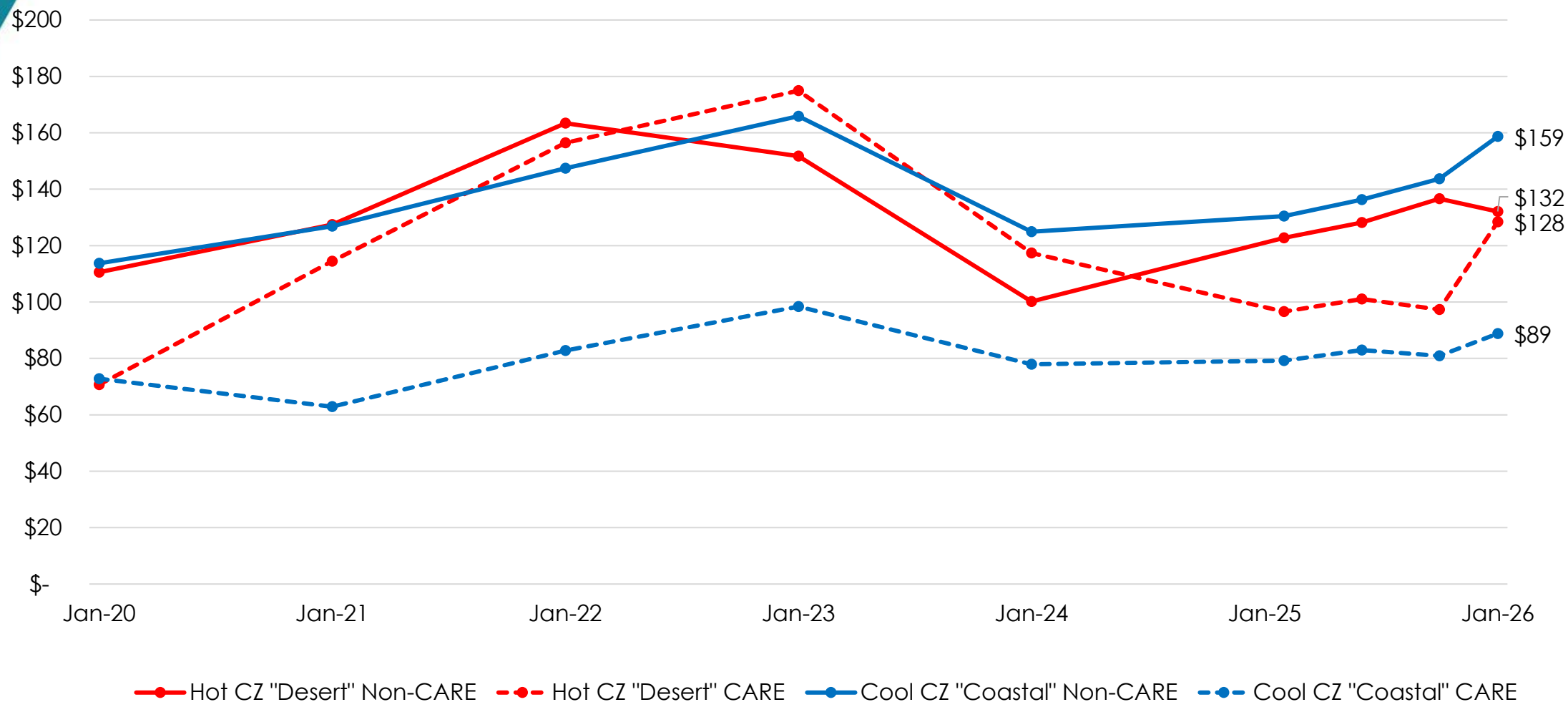


SCE's Average Monthly Electricity Bills for CARE & Non-CARE Customers in Hot and Cool Climate Zones



SCE's hot CZ "15" has relatively high average usage of around 700 kWh monthly usage across Non-CARE & CARE customers. For comparison, cool CZ "6" customers average around 385 kWh of monthly electricity usage.

SDG&E's Average Monthly Electricity Bills for CARE & Non-CARE Customers in Hot and Cool Climate Zones



SDG&E's Non-CARE customers in its Coastal Climate Zone use more electricity on average in the Winter season than Non-CARE customers in SDG&E's Desert Climate Zone. January 1, 2026 bills reflect updated usage data for 2025 showing changes from 2024 usage data used to estimate bills in 2025.

More information

We develop recommendations to ensure that energy, water, and communications services provided by investor-owned utilities are affordable, safe, and reliable.

Visit our website at www.publicadvocates.cpuc.ca.gov

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Appendix

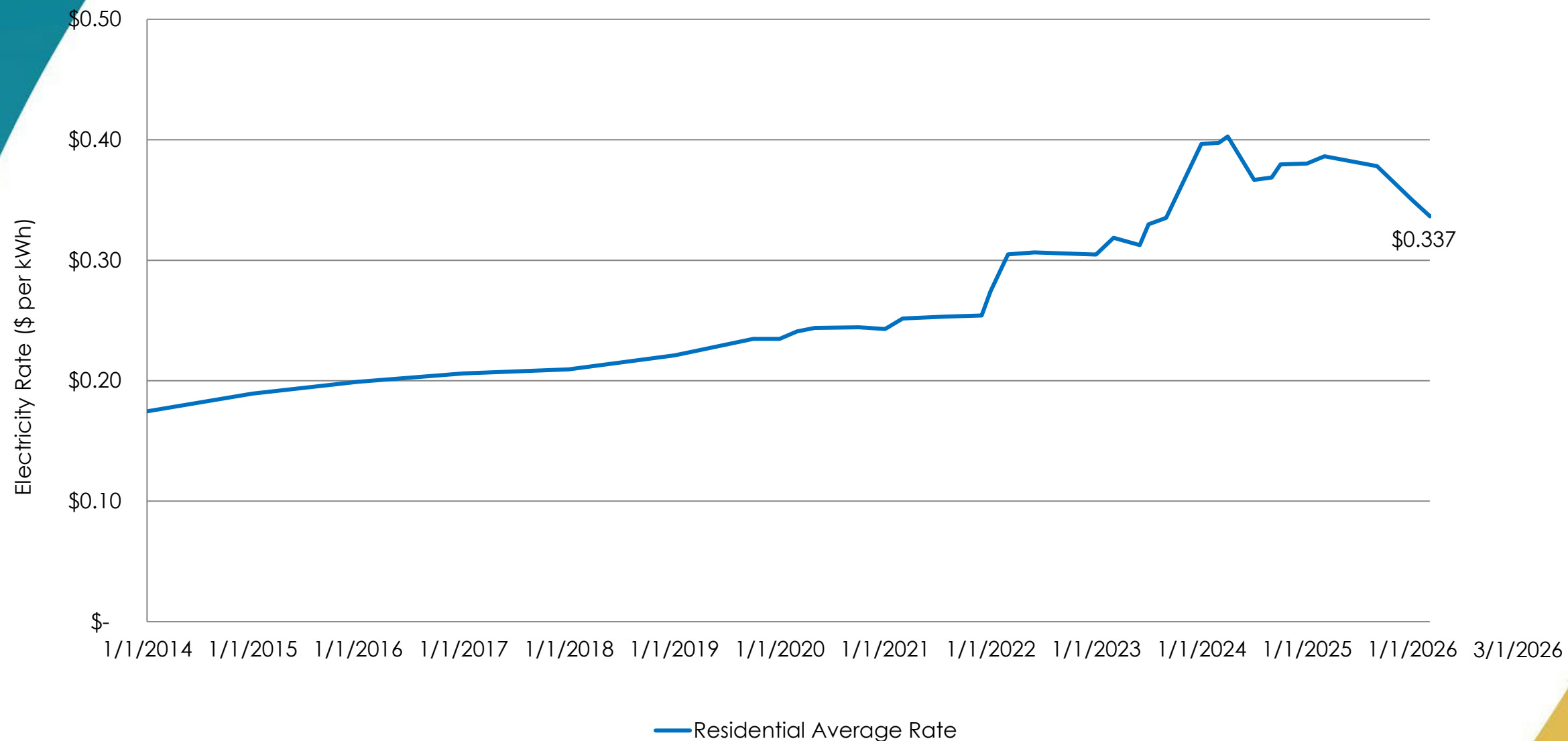
Assumptions & Additional Utility Data

Electric Vehicle (EV) Fuel Price Parity Assumptions (Slide 10)

- Internal Combustion Engine (ICE) MPG: 28
- EV MPGe: 100
- \$/Gallon Range: 4.60 – 6.00
- kWh/Gallon (EPA est.): 33.7

$((\text{EV MPGe} / \text{ICE MPG}) * \$/\text{Gallon}) \div \text{kWh/Gallon}$
= \$0.487 to \$0.636 \$/ kWh equivalent

PG&E Rate Change | Residential Average Rate



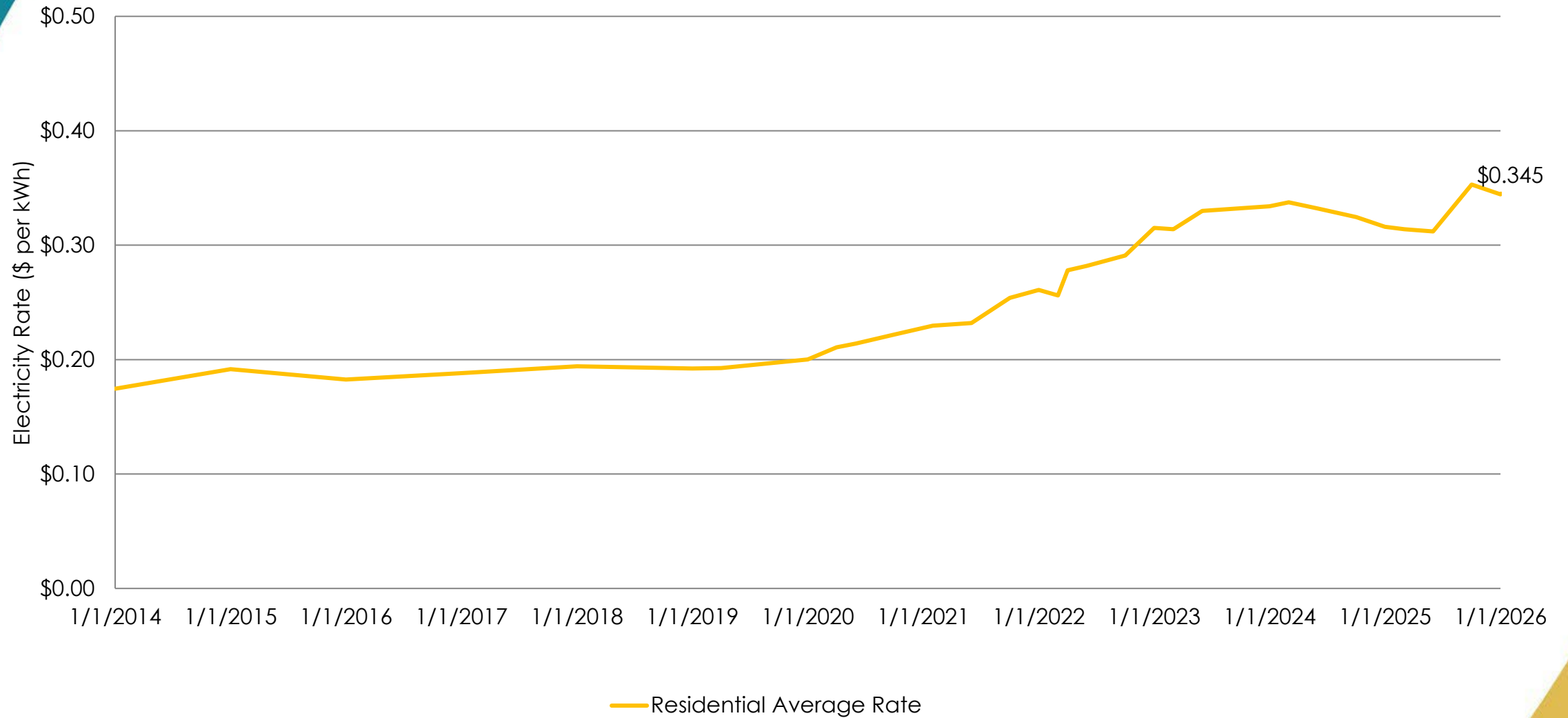
PG&E Q1 2026 Changes to Revenue Requirement

On February 27, 2026 PG&E submitted Advice Letter 7846-E, to update electric rates effective March 1, 2026. Noteworthy changes include:

- **End of recovery for both 2021 Wildfire Mitigation and Catastrophic Events (WMCE) and 2023 WMCE Interim Rate Relief (IRR)** – Resulting in a 4.9% rate decrease for both CARE & Non-CARE customers.
- **Implementing the Base Services Charge** – Resulting in a 6.8% rate decrease for CARE customers.
- **Implementing 2023 WMCE Non-IRR** – This advice letter includes the approved electric revenue requirement amount of \$746.6 million in electric distribution plus additional revenue, fees and uncollectibles expense (RF&U).

March 1, 2026, Rate Change: The changes in AL 7846-E results in a residential average rate (RAR) decrease of approximately **3.7%** for bundled service customers relative to rates in effect on January 1, 2026.

SCE Rate Change | Residential Average Rate



*Excludes Climate Credit (CCC reduces RAR by around 2-3 cents).
Forecasted rates only include known revenue change requests and will likely increase as future revenue change requests are filed.

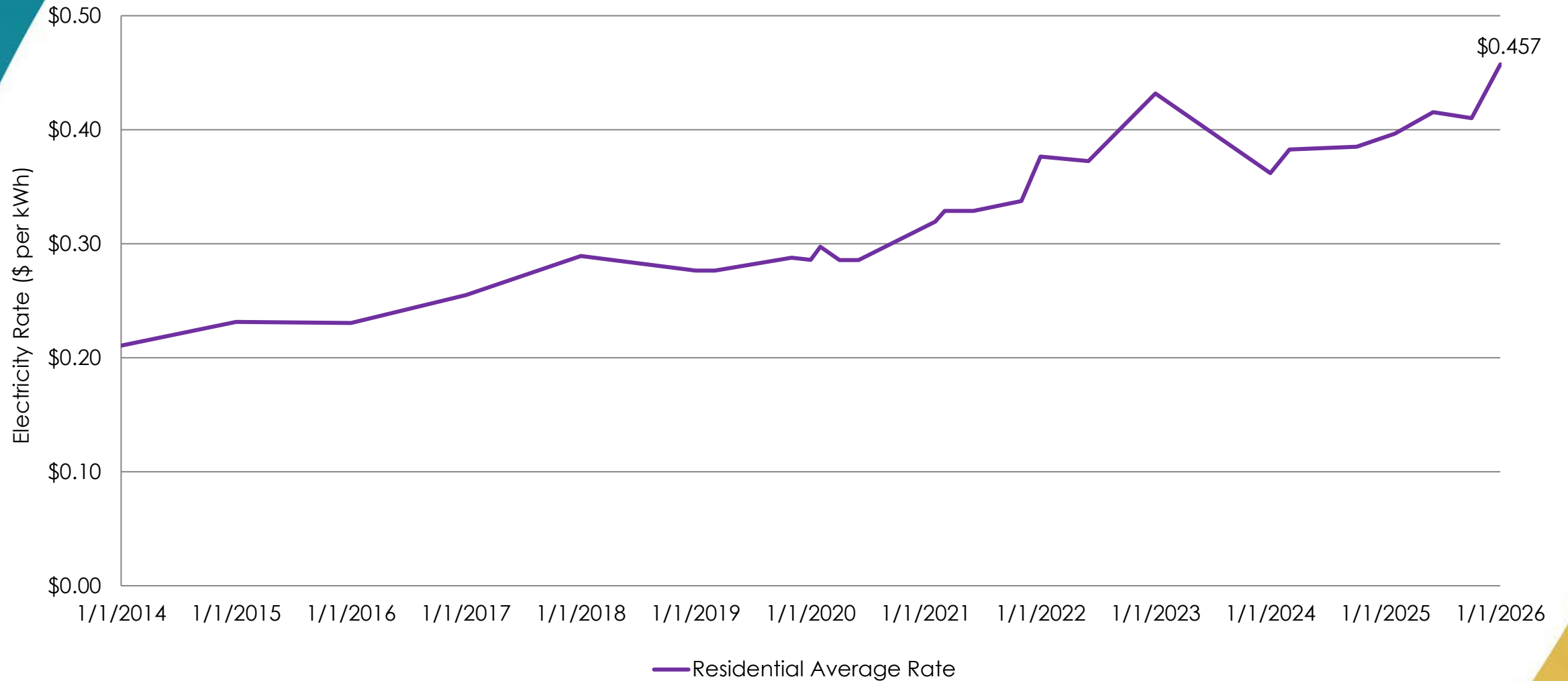
No Changes in Q1 2026: SCE Q4 2025 Changes to Revenue Requirement

On December 30, 2025, SCE submitted Advice Letter (AL) 5725-E, to update electric rates effective January 1, 2026. Noteworthy changes include:

- **Authorized Base Revenue Requirement (ABRR)** – The GRC revenue requirement adopted in D.25-09-030 results in an ABRR of \$10.187 billion, an increase relative to the 2025 Test Year adjusted ABRR of \$9.660 billion. This increase includes a \$449.0 million increase in distribution O&M and capital compared to October 1, 2025.
- **2026 Energy Resource Recovery Account (ERRA) Forecast Proceeding** – D.25-12-028 authorized a 2026 ERRA Forecast revenue requirement of \$4.689 billion, which AL 5725-E updates to \$4.716 billion based on November recorded balances. The ERRA RRQ includes a \$494.3 million increase in the Portfolio Allocation Balancing Account (PABA) and a \$509.8 million decrease in the ERRA Balancing Account, as well as a \$188.4 million increase in fuel and purchased power and a \$198.3 million increase in GHG revenue return.

January 1, 2026, Rate Change: The changes in AL 5725-E result in a residential average rate (RAR) decrease of approximately **2.3%** for bundled service customers relative to rates in effect on November 15, 2025. Though bundled residential rates decreased, the total revenue requirement increased by \$444.228 million.

SDG&E Rate Change | Residential Average Rate



*Excludes Climate Credit (CCC reduces RAR by around 2-3 cents).
Forecasted rates only include known revenue change requests and will likely increase as future revenue change requests are filed.

No Changes in Q1 2026: SDG&E Q4 2025 Changes to Revenue Requirement

On December 31, 2025, SDG&E submitted Advice Letter (AL) 4757-E, to update electric rates effective January 1, 2026. Noteworthy changes include:

- **2026 Energy Resource Recovery Account (ERRA)** – An increase of \$613.8 million in revenue requirement due to the implementation of the authorized 2026 ERRA forecast. The two largest drivers are:
 - **2026 Portfolio Allocation Balancing Account (PABA) revenue requirement:** \$184.6 million increase in Generation revenues.
 - **Recovery of the 2025 year-end balance recorded to PABA:** \$621.0 million increase in generation revenues. This increase is a result of SDG&E's 2025 actual market revenues being lower than forecasted, leaving an under-collection balance to be recovered starting January 1, 2026.
- **Transmission Access Charge Balancing Account Adjustment (TACBAA)** – The inclusion of the TACBAA will result in a \$172.2 million increase in revenue requirement.

January 1, 2026, Rate Change: The changes in AL 4757-E results in a residential average rate (RAR) increase of approximately **11.4%** for bundled service customers relative to rates in effect on October 1, 2025.



Sophie Ellinghouse

Vice President, General Counsel & Corporate Secretary

March 11, 2025

California Energy Commission
Docket Unit, MS-4
715 P Street
Sacramento, California 95814

Uploaded to Docket 25-PIIRA-01

RE: WSPA Comments on February 2025 AB X2-1 Pre-Rulemaking Workshop [25-PIIRA-01]

The Western States Petroleum Association (WSPA) appreciates the opportunity to comment on the California Energy Commission's (CEC) February 25, 2025, pre-rulemaking staff workshop regarding a refinery resupply planning framework to implement Assembly Bill (AB) X2-1 (2024) – specifically, towards developing rules regarding necessary refinery maintenance and turnarounds, including the CEC's authority to establish refinery resupply requirements, pursuant to Public Resources Code (PRC) Section 25354.2.

We appreciate the CEC's ongoing engagement with WSPA member companies to better understand California's gasoline market, particularly around planned refinery maintenance activities and recent refinery transitions and closure impacts on the market. We welcome an ongoing dialogue in search of practical solutions to offset lost production due to planned maintenance. We remain concerned, however, that any attempt by the State to micromanage refinery fuel inventories or refinery maintenance will further complicate California's fundamental, systemic problems, which are a result of decades of intentional State policies that actively restrain locally produced fuel supplies while increasing local refining costs. Such issues will likely only worsen California's susceptibility to price volatility – especially when the few remaining California refineries perform necessary maintenance activities required for safe, reliable, and responsible operations.

WSPA is also concerned that any refinery resupply requirement, if not carefully crafted, could conflict with existing statutory mandates for refiners *not* to withhold fuel from the market – which would not only adversely impact the California market but would harm Arizona and Nevada consumers if refineries are required to withhold fuel supplies for the benefit of Californians. These types of impacts to states like Arizona and Nevada could ultimately lead to costly and time-consuming litigation for California's interference with interstate commerce. We therefore urge the CEC to further analyze whether refinery resupply requirements are indeed needed – and at what cost. Any requirement that keeps fuel from the market will require the market to increasingly resort to foreign sources, forcing more long-duration marine imports into a market that may not be short and creating unintended and even more expensive consequences for consumers.

Fortunately, AB X2-1 is clear that the CEC “shall not” adopt a regulation “unless it finds that the likely benefits to consumers from avoiding price volatility outweigh the potential costs to consumers.” Resupply requirements that prevent the free transaction of fuel on the open market when and where needed to satisfy demand will distort the market, further restrict available supply, and hurt consumers. We urge the CEC to continue working with WSPA and our member companies to reach a mutually beneficial framework that supports supplying fuel to the market and does not compromise refinery safety while seeking to mitigate potential consumer impacts.

ONGOING PROCEDURAL CONCERNS WITH USE OF EMERGENCY RULEMAKINGS

In addition to concerns regarding the delay in posting workshop presentation slides – which limits the time stakeholders have to review, analyze, and opine on them – WSPA reiterates here its ongoing concerns regarding the continued use of, and reliance upon, truncated emergency rulemaking procedures in implementation of AB X2-1. There is no actual “emergency” as defined by California law; the State has faced structural fuel supply issues for decades, and these problems are entrenched and complex. Considering these rules on an emergency basis denies both the public and stakeholders their right to due process and meaningful engagement in an iterative process with staff. The scope and impact of this proposed regulatory framework demands no less than a full and proper assessment by the CEC, the industry, and the public.

WSPA agrees that it is critical to ensure Californians have adequate and affordable supplies of fuel and are protected from price volatility resulting from structural market influences. But effectively addressing these issues will require proper consideration of refinery-specific variables, relevant market data, and of the functioning of the industry as a whole across three states. Given the importance and complexity of the issues involved, the CEC should not short-change a thorough assessment which could result in workable and effective regulations, and Californians deserve adequate time to review and comment on whatever system emerges from that assessment.

In the future, the CEC should provide workshop materials prior to the start of the workshop. This would provide stakeholders that will be directly impacted by proposed policies with sufficient opportunity to assess potential impacts, inform the CEC as to whether the proposals are consistent with existing statutory and operational requirements, and seek clarification from staff regarding any ambiguous policies or regulatory proposals as far in advance as possible.

WSPA RESPONSE TO CEC PRESENTATION ON PROPOSED RESUPPLY FRAMEWORK

We appreciate the CEC staff’s ongoing efforts to better understand California’s complex transportation fuel system. However, WSPA believes that a “one size fits all” approach to setting reporting thresholds and exemption pathways is unlikely to solve the State’s concerns regarding market volatility for consumers. We urge the CEC to meet individually with each refiner, under the confidentiality protections afforded by the Petroleum Industry Information Reporting Act, to fully understand the implications of the proposed resupply framework on each refiner and to ensure that any such framework would not cause more harm than good.

A resupply threshold can present operational challenges if set too high or too low – because this is refinery-dependent. While we appreciate staff’s belief that setting a resupply threshold amount too low may not mitigate price volatility, WSPA also believes that setting a resupply threshold amount too high may not mitigate price volatility either, and instead further starve the market of needed fuel supplies. We would further question whether the CEC has the expertise and capacity to intervene in planned refinery maintenance events that would trigger resupply requirements.

We are also concerned about the prospect of any inconsistent application, and therefore enforcement, under any potential exemption pathways. For example, a proposed “trigger level” of merely 450,000 total barrels in an anticipated event is quite low (using ICF’s base case of an 8-week outage, that is only approximately 8,000 barrels per day). We would suggest substantially increasing this amount – and reducing the reporting threshold to at least 90 days – to avoid being overly burdensome and potentially intrusive.

Whether the CEC’s goal is to drive industry accountability for managing resupply planning or simply to assess how such decisions are made, WSPA questions whether there may be other

frameworks to accomplish this. We look forward to working with the CEC to discuss alternative options.

WSPA RESPONSE TO ICF PRESENTATION ON RESUPPLY BENEFIT COST ANALYSIS

WSPA believes that a thoughtful response would involve reviewing how ICF sourced the data that led to the conclusions presented. A review would assist in our evaluation of ICF's underlying cost-benefit analysis assumptions, including assisting WSPA member companies in assessing how ICF's conclusions would impact refinery operators and to validate whether they are consistent with any statutory or operational requirements and constraints.

For example, ICF assumed a conservative scenario whereby refiners would lose money (at a 25% loss) on marine imports brought in. As this is likely the case for marine cargoes, we question what assumptions were made given increasing constraints placed upon marine imports by the California Air Resources Board through the 2020 At-Berth Regulation amendments and other regulations, and for refiners that may have limited access to marine terminals. Furthermore, the assertion that a resupply plan should account for 70-90% of lost production requires further analysis by industry experts to assess feasibility and potential real-world cost impacts, and should be assessed against California market demand rather than refiner production. Specifically, WSPA is concerned about the following analysis assumptions:

1. *Overestimation of Consumer Benefits:* The analysis may overestimate the benefits to consumers by assuming refiners were not already utilizing resupply plans during benchmark events. ICF assumes that an 8-week planned refinery outage event resulted in a total gasoline production loss of 2.5 million barrels. However, the actual impact on prices may be minimal if other factors – such as global oil prices, consumer demand, and market dynamics – continue to play a dominant role.
2. *Underestimation of Compliance Costs:* The analysis might underestimate the costs associated with compliance for refinery operators. Implementing resupply requirements, rather than allowing refineries to implement their own resupply plans – which refiners have been doing for decades, could necessitate uneconomic strategies to secure non-spot market resupplies (e.g., marine imports) and additional capital to guarantee inventories. These costs could be passed on to consumers, potentially leading to higher gasoline prices. This is similar to the concerns we have highlighted around managing mandated inventory levels and how that may reduce the available supply for consumers, thereby increasing costs.
3. *Lack of Flexibility and Potential Conflicts:* The proposed resupply requirements may lack the necessary flexibility to take advantage of unique operational opportunities identified within 60 days prior to planned maintenance or economic supply opportunities identified during the planned maintenance event. This rigidity could result in compliance difficulties and potential conflicts with existing statutory requirements that prohibit refiners from withholding fuel from the market. WSPA has emphasized the need for flexibility in resupply source, quantity, and timing to minimize consumer costs and to avoid unintended consequences.

WSPA intends to provide additional comments to the docket regarding ICF's gasoline forecast model pending a detailed review of their modeling assumptions.

WSPA RESPONSE TO DPMO PRESENTATION ON ECONOMIC CONSIDERATIONS

WSPA reiterates here that a thoughtful response would involve understanding the assumptions used in the Division of Petroleum Market Oversight's (DPMO) cost-benefit analysis. The DPMO's claim that price increases are due to refinery outages has been disputed in the past;

there are numerous underlying reasons for California's rising gasoline prices, including the permanent loss of refinery production, providing boutique fuel blends to an isolated fuel market, minimum wage increases at retail stations, fluctuating crude oil prices on the global market, and the increasing cost of compliance with California-specific regulations (e.g., the Low Carbon Fuel Standard and the Cap-and-Trade Program).

WSPA has repeatedly raised warnings¹ regarding the State's attempt to micromanage California's gasoline inventory supplies and refinery maintenance events. Unfortunately, these warnings appear to have gone unheeded and, since then, another California refinery has opted to close. As part of prior comment letters – including regarding the DPMO's past presentations – we have repeatedly expressed concerns that California's policies present a recipe for increased fuel costs for the consumers of California and potentially reduced fuel supplies to California, as well as Arizona and Nevada.

Yet the DPMO's ongoing attribution of consumer price increases to refinery outages and "profit spikes" for industry continues to fail to appreciate both indirect and direct pricing factors, and also fails to explain why a refiner in a competitive free market would willingly schedule maintenance activities during the busiest demand periods. Basic refinery operations necessitate that tanks will always be partially used to ensure optimal and safe rates for refining operations, as some tank applications can have upstream operational effects, necessitating a reduction in unit rates when the tank levels are too high. In the simplest of terms, if a refiner has two similarly sized tanks, with demand and production balanced, an operator will only have an approximately 50% utilization rate as one tank will be filling at the same rate as the other tank is emptying. As a result, any effort to force the industry to store more product in existing storage vessels would *reduce* refinery production and *increase* supply variability – counter to what the DPMO and CEC are striving to achieve.

CONCLUSION

WSPA appreciates the opportunity to provide these comments on fuel supply issues of critical importance to all California consumers – and consumers of other states dependent on California's refinery production – who rely on affordable and reliable sources of transportation fuel every single day. These comments are based on WSPA's review of the materials and statements at the workshop, and we reserve the right to amend these comments or add to the docket as necessary to reflect additional materials or changes in the CEC's decisions.

Please do not hesitate to contact me with any additional questions.

Sincerely,



Sophie Ellinghouse
Vice President, General Counsel & Corporate Secretary

¹ Western States Petroleum Association Comments - WSPA Comments on Gasoline Supply Reliability Workshop 9-10-2024 (Docket #23-SB-02); September 10, 2024 at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-SB-02>



Sophie Ellinghouse

Vice President, General Counsel & Corporate Secretary

March 17, 2025

California Energy Commission
Docket Unit, MS-4
715 P Street
Sacramento, California 95814

Uploaded to Docket 25-PIIRA-01

RE: WSPA Comments on AB X2-1 Refinery Resupply Planning Pre-Rulemaking Workshop [25-PIIRA-01]

The Western States Petroleum Association (WSPA) appreciates the opportunity to comment on the California Energy Commission's (CEC) March 5, 2025, pre-rulemaking workshop on refinery resupply planning to implement Assembly Bill (AB) X2-1 (2024) and Senate Bill (SB) X1-2 (2023) – specifically, the refinery resupply framework and draft “express terms,”¹ pursuant to Public Resources Code (PRC) Section 25354.2. WSPA acknowledges the CEC’s ongoing dialogue with WSPA member companies to better understand planned refinery maintenance activities, and efforts by staff to release the proposed express terms in advance of this workshop. However – given the unusually short comment period, even in an emergency rulemaking proceeding – WSPA recommends that materials be released at least five business days (not calendar days) in advance to afford the public and affected industry stakeholders the opportunity to review, assess impacts, and prepare well-informed comments in time for the workshop.

WSPA reiterates its concerns with any State attempt to micromanage refinery fuel inventories. The CEC has a limited knowledge of complex refinery operations, and its lack of technical expertise leaves open great potential here for unintended consequences that can end up hurting California consumers. If the CEC is going to insist on adopting a refinery resupply policy, any such policy must provide maximum flexibility for refinery operators while minimizing any potential consumer impacts associated with compliance. Indeed, AB X2-1 expressly forbids the CEC from adopting any such regulation “unless it finds that the likely benefits to consumers from avoiding price volatility outweigh the potential costs to consumers.” WSPA is concerned that the CEC does not currently have the facts in front of it to legitimately support such a finding with respect to imposing a refinery resupply requirement.

Any refinery resupply requirement, if not carefully crafted, could conflict with existing statutory requirements in SB X1-2 for refiners **not** to withhold fuel from the market – such withholding can potentially result in market distortions and undesirable price impacts due to the purposeful and artificial reduction of immediately available supply to the market, and could violate California’s Cartwright Act requirements. These potential adverse impacts very likely would extend to Arizona and Nevada as well, and make it harder for those states to secure needed supplies of fuel in the face of regulations expressly favoring Californians’ access to fuel. These types of interstate impacts could ultimately lead to costly and time-consuming litigation for California’s interference with interstate commerce. In short, the adoption of a “one size fits all” rule for a complex issue such as California refinery fuel inventories has the potential to harm California

¹ CEC “Draft Language Refinery Resupply Plans” California Code of Regulations, Title 20, Chapter 15 Refinery Maintenance Timing, Article 1 Refinery Maintenance Scheduling, Section 3400; dated February 28, 2025.

consumers more than help them. Additionally, it is deeply concerning that the CEC would impose civil penalties upon a refinery operator for either failing to perform resupply under an approved plan, or where the CEC's Executive Director has denied a plan despite the need for planned or unplanned refinery maintenance when legitimate operational, safety, and/or uncontrollable reasons exist.

WSPA continues to believe that the CEC's analysis (as informed by consultants) is likely overestimating the assumed consumer benefits while underestimating compliance costs. It is wrong to assume that refiners are not already utilizing resupply plans during benchmark events, just as it is incorrect to assume that factors such as global crude oil prices and market dynamics may not have dominant roles to play in impacting prices. Further, implementing resupply requirements could necessitate uneconomic strategies to secure non-spot market resupplies and additional capital to guarantee inventories that could potentially lead to higher gasoline prices. Not providing the necessary flexibility to take advantage of unique operational opportunities could result in compliance difficulties and potential conflicts with existing statutory requirements that prohibit refiners from withholding fuel from the market. WSPA previously emphasized the need for flexibility in resupply source, quantity, and timing to minimize consumer costs and avoid unintended consequences.

WSPA RESPONSE TO DRAFT REFINERY RESUPPLY PLANS (EXPRESS TERMS)

WSPA has identified numerous issues and concerns with the CEC's draft refinery resupply plan language ("Proposed Refinery Maintenance Scheduling Rule") and offers the following suggestions where appropriate.

§3400 – Definitions

The following proposed definition requires technical modifications:

- **"Seasonal specification" [§3400(e)].** The CEC's proposed definition is incomplete. Reid Vapor Pressure is only one specification that changes between summertime and wintertime blends. The California Air Resources Board (CARB) also sets a different standard for the T50 distillation specification, and California Business and Professions Code §13440 calls for gasoline to meet ASTM D4814, which has several specifications that differ between seasons.

§3401 – Refinery Maintenance Scheduling

- **Reporting threshold [§3401(b)(2)].** The CEC's reporting threshold to require submittal of a "Refinery Maintenance and Turnaround Supply Plan" in §3401(b)(2) is inappropriate.
 - §3401(b)(2) proposes to set a "trigger level" at "more than 450,000 barrels total" or 20,000 barrels per day for at least 21 days. Understanding that there will likely be operational complexities should the CEC set a threshold that is either too low or too high, as either may not mitigate price volatility, we question the appropriateness of 450,000 total barrels. We look forward to hearing from the CEC and the Division of Petroleum Market Oversight (DPMO) regarding the basis of how a suitable volume threshold for resupply plans was determined. WSPA cautions the CEC that there appears to be no perfect threshold amount that would both protect consumers and not place undue burden on refiners and the CEC.
 - §3401(b) requires refiners to submit their resupply plan "at least **120 days** prior" to a qualifying planned maintenance or turnaround event. WSPA recommends that this be changed to "not prior to **90 days**" given the impracticality of assessing significant global market changes that can happen between 30 to 120 days. An extended time horizon would therefore offer little benefit to the CEC in its attempts to assist refiners in finding affordable consumer resupply inventory. Further, the rule does not address the scenario of a qualifying planned maintenance or turnaround event that occurs inside the 120-day

(or 90-day) window. WSPA recommends these scenarios be expressly eligible for exemption under §3402, particularly if resupply is not feasible.

- **Spot market purchases [§3401(c)].** First, WSPA is perplexed by the CEC's presumption that refiners can predict how resupply sourcing plans would impact the California market. The ability to do so would necessarily require participation in the spot market, which would be precluded in §3401(c)(3). Second, restricting spot market participation in order to resupply California's market is likely demanding the impossible. Refiners cannot demonstrate, or even provide evidence of impacts, prior to participation in the spot market. WSPA strongly recommends that this subsection be modified to allow for spot market participation to help address any perceived resupply problem. Third, WSPA questions the practical constraints associated with removing spot market transactions as a viable resupply option as doing so would force California's refiners to take costly imports with timing risks. Such an approach would likely hurt California consumers, not help them. WSPA strongly suggests that the CEC better understand the potential impacts of dictating spot sales.
- **85% resupply [§3401(c)(1)].** The proposed rule fails to distinguish between resupply of contract volumes versus spot volumes, which is a critical distinction. WSPA believes it is inappropriate to require refiners to resupply spot sale volumes at 85%; spot sale resupply should only be required if market conditions demand it, and even then, the spot sale resupply requirement should be the minimum amount demanded by the market. Otherwise, the rule unnecessarily burdens refiners with the business risk of bringing supplemental spot volumes into a market that does not need additional volume.
- **1.3-barrel multiplier [§3401(c)(1)(i)].** The proposed language counting each barrel of resupply obtained via imports to count as 1.3 barrels requires further clarification.
- **Market availability [§3401(c)(2)].** WSPA presumes that "same rate" means *product* and not *price*; if so, this should be appropriately clarified in the proposed regulatory text. WSPA otherwise questions whether this proposal is authorized under SB X1-2 or AB X2-1, as the meaning is unclear. Any price "cap" must adhere to strict procedural and analysis requirements under both statutes, neither of which are not legally satisfied here.
- **Penalties [§3401(e)].** WSPA has significant concerns with the CEC Executive Director's proposed authority to grant or deny a Refinery Maintenance and Turnaround Supply Plan, in whole or in part, and then assess civil penalties for a denial. The decision-making authority is not associated with any standard; that lack of specificity, especially when associated with a potential civil penalty, raises serious due process concerns.
- **Reporting intervals.** The industry supports transparency but believes additional reporting will be overly burdensome for all involved. We question the CEC's ability to manage the number of planned versus actual resupply reports – particularly given that the proposed language is also void of guidance in how the CEC or industry should manage the process for what is considered substantial updates or changes needed to resupply plans.
- **Planned exports.** Refineries may need to cancel exports of non-CARBOB optimal (higher sulfur, higher benzene) fuel blendstock to meet resupply needs during significant events. Therefore, it is recommended that the proposed language acknowledges this necessity for managing resupply.

§3402 – Request for Exemption

- WSPA strongly recommends that the CEC detail a well-defined and clearly understood exemption pathway process – this would include how it would be administered and governed in the event of any disagreement. The exemption process, as currently drafted, gives the CEC excessive discretion in determining exemption eligibility and provides insufficient certainty for refiners to comply with the rule.
- The CEC's proposal does not provide necessary flexibility for refiners to source the most readily available and affordable resupply options at the start of, or during, a planned event. Because the proposed regulation is seemingly intended to lock resupply plans in, it would

eliminate other opportunistic solutions that would likely benefit California consumers after resupply plans are approved. Eliminating such flexibility is a critical concern for industry as in-State refiners must stay economic. As the primary goal is to economically replenish lost production, the CEC should not be dictating the method by which industry does so; rather, the CEC should be providing an exemption pathway after work has commenced if an extraordinary issue arises.

- The CEC's proposal does not provide any flexibility to address material factors – which are likely to be outside of industry's control – but are reasonably close to meeting planned resupply.
- WSPA questions how the CEC would propose to address any extraordinary market conditions that may occur before a planned maintenance event. This includes any unplanned refinery maintenance activities (including those elsewhere in the California market), any significant and materials impacts affecting consumer demand, any geopolitical changes that impact imports given California's significant and growing susceptibility to the global market, and any delays associated with over-water imports.

WSPA RESPONSE TO DPMO COMMENTS

The DPMO contends that this regulation is justified and necessary to ensure that refiners adopt responsible resupply mechanisms. According to the DPMO, the current market lacks adequate incentives to address supply constraints associated with essential refinery maintenance.

Refiners already implement measures to mitigate the impact of planned outages on gasoline supply. For example, they may increase production prior to an outage, import additional supplies, or utilize inventory reserves to maintain a stable supply during maintenance periods. These proactive steps demonstrate that refiners are motivated to ensure product availability to fulfill their contractual obligations or supply the market during any planned or unplanned events involving competitors' inability to meet California market needs. Introducing further accountability measures may impose unnecessary regulatory burdens and increase costs to consumers without significantly enhancing supply reliability.

The DPMO further asserts that this regulation, as written, provides sufficient flexibility to allow refiners to remain economically viable under California market constraints. However, we remain concerned that the DPMO and CEC should be researching methods of protecting existing market incentives to replenish lost production without prescribing or locking in the specific methods that are in or out of scope for replenishment.

WSPA SUPPLEMENTAL RESPONSE TO ICF RESUPPLY COST-BENEFIT ANALYSIS

WSPA still questions ICF's cost-benefit analysis supporting the proposed regulation. It is critical to have additional transparency and time to conduct an accurate cost-benefit analysis to ensure the CEC has the data necessary, per AB X2-1, to decide whether regulations will impose more harm than good for consumers. It is believed that this analysis lacks critical sensitivities, which may underestimate costs and overestimate benefits for these proposed resupply plans or the potential of regulating inventory. In addition to consumer costs, there are interactions between CARB's policies on marine emissions and regulations aimed at supply reliability that require thorough examination.

WSPA requests detailed information regarding the assumptions in ICF's worst-case resupply costs, including: the percentage of imports or use of other mechanisms assumed to manage resupply; how resupply assumes the use of imported finished fuels versus imported blending components; whether benchmarking scenarios regarding prices accounted for the resupply costs already incorporated and performed in past planned maintenance activities; whether

operational slowdowns or other risks due to resupply plans were included; and whether any analysis was conducted on how the resupply plans may conflict with current California environmental policies for stationary and marine mobile sources.

CONCLUSION

WSPA appreciates the opportunity to provide these comments on fuel supply issues of critical importance to all California consumers – and consumers of other states dependent on California's fuel supply chain – who rely on affordable and reliable sources of transportation fuel every single day. These comments are based on WSPA's review of the materials and statements at this and the prior February 25, 2025, workshop, and we reserve the right to amend these comments or add to the docket as necessary to reflect additional materials or changes in the CEC's decisions.

Please do not hesitate to contact me with any additional questions.

Sincerely,



Sophie Ellinghouse,
Vice President, General Counsel & Corporate Secretary



Jodie Muller
President & CEO

October 8, 2025

California Energy Commission
Docket Unit, MS-4
715 P Street
Sacramento, California 95814

Uploaded to **Docket 25-OIIP-02**

RE: WSPA Comments on Petroleum Supply Stabilization Workshop – Informational Proceeding

The Western States Petroleum Association (WSPA) appreciates the opportunity to comment on the California Energy Commission's (CEC) September 24, 2025, "Petroleum Supply Stabilization" informational proceeding workshop¹ to implement Assembly Bill (AB) X2-1 (2024) and Senate Bill (SB) X1-2 (2023). WSPA appreciates the CEC's ongoing dialogue with our member companies to better understand complex refining operations, but reiterates concerns we have raised to date with efforts to micromanage fuel inventories.^{2,3,4,5,6} Real-world market conditions show that California no longer has enough in-State refining assets left to meet its own demand – and announced refinery closures will only worsen this situation. We strongly discourage policies that would further burden operators, compromise competitiveness for in-State refiners, leads investors to lose confidence in California's market, and could compromise the ability to provide affordable and reliable fuels envisioned by these statutes.

Further measures are necessary to ensure continued investments in California's petroleum supply to meet current and projected consumer demand. To summarize the main points of this letter:

- **No economic consensus exists on the cost-benefit analysis of inventory mandates.** The workshop did not include operational, economic, or scientific analysis demonstrating that consumer benefits outweigh potential costs.⁷ WSPA notes that an academic consensus has not been established, indicating that further examination and modeling of the operational factors affecting production and costs related to inventory and resupply mandates is warranted.
- **State policy action is needed – more California mandates are not.** WSPA reminds the CEC and the Division of Petroleum Market Oversight (DPMO) that decades of compounding State policies created this situation. As the need to provide investor confidence is a critical component of achieving the goal of stabilizing supply as set forth by this workshop, we caution against adding layers of policy that lack a firm operational basis. WSPA supports policies that limits mandates, avoids unnecessary cost increases without clear consumer benefits, sets practical timelines, and aligns investment risks with what investors are willing to accept for energy infrastructure improvements.
- **Need for realistic planning timelines.** Staff should incorporate ongoing and realistic investment needs for consumers rather than planning only for scenarios that align with California's ambitious transportation technology-forcing mandates. A longer, more complex transition is expected.⁸

¹ See CEC Workshop on Informational Proceeding - Petroleum Supply Stabilization, September 24, 2025, at: <https://www.energy.ca.gov/event/workshop/2025-09/workshop-informational-proceeding-petroleum-supply-stabilization>.

² Western States Petroleum Association Comments - WSPA Comments on SB X1-2 Implementation Process; May 17, 2024.

³ Western States Petroleum Association Comments - WSPA Preliminary Comments on Gasoline Supply Reliability Workshop; Aug. 29, 2024.

⁴ Western States Petroleum Association Comments - WSPA Response to DPMO 9-13-2024 Letter; September 19, 2024.

⁵ Western States Petroleum Association Comments - WSPA Comments on AB X2-1 Resupply Framework Pre-Rulemaking Workshop; March 11, 2025.

⁶ WSPA Comments on Second AB X2-1 Refinery Resupply Pre-Rulemaking Workshop; March 17, 2025.

⁷ See The Brattle Group's analysis of minimum inventory requirements; August 2024 at pg. 10 Section "Summary" item 30.

⁸ The California Air Resource Board (CARB) recently sought to adopt an Emergency Vehicle Emissions Regulation, in response to Federal disapprovals of three preemption waivers previously granted by the United States Environmental Protection Agency to enforce its Advanced

We remain concerned that CEC and DPMO analysis of minimum inventories may be overestimating assumed consumer benefits while underestimating anticipated compliance costs. There is great potential here for unintended consequences that can hurt consumers across California, Arizona, and Nevada – directly contrary to statutory direction that the CEC *not* adopt regulations “unless it finds that the likely benefits to consumers from avoiding price volatility outweigh the potential costs to consumers”⁹ and Governor Newsom’s April 21st letter to Vice Chair Siva Gunda¹⁰ that the CEC “work closely with refiners...to help ensure that Californians continue to have access to a safe, affordable, and reliable supply of transportation fuels, and that refiners continue to see the value in serving the California market...”

WSPA agrees with concerns the CEC raised in its 2024 Transportation Fuels Assessment,¹¹ including how a minimum inventory requirement could create artificial shortages, increase prices for refiners, and that the State itself could be criticized for requiring refiners to withhold fuel supplies from the market. We wholeheartedly agree that it would also be beneficial for stakeholder participants to operate from a common understanding of basic industry facts going forward. Commentary that misunderstands contractual fuel import and export obligations, operational and regulatory constraints related to fuel specifications, or that presupposes that industry would compromise worker safety are not helpful to reaching policies that serves our collective interests. We look forward to working with the CEC to ensure that stakeholder participants have a better understanding of these important issues, including that which is explained below.

WSPA RESPONSE TO CEC STAFF PRESENTATION

To summarize the main points of this section:

- The State must realistically plan for a range of transportation demand scenarios while ensuring fuel supplies remain reliable and affordable for all consumers over coming decades.
- The CEC must work with industry to support the fuels market, rather than raise additional barriers.
- A robust information-gathering process is required as AB X2-1 forbids the CEC from adopting a resupply or minimum inventory regulation *unless* specified conditions are met.

While WSPA appreciates staff’s desire to balance fuel supply with meeting California’s ambitious climate policies over the next five years, we believe the State must also plan for a lengthier transition. This is especially important now given the numerous uncertainties associated with attempting to transition California’s entire transportation system to Zero-Emission Vehicles (e.g., infrastructure and permitting delays, elimination of Federal tax incentives for consumers, ongoing challenges to California’s vehicle standards, etc.). WSPA recognizes the challenges California faces in meeting its emissions reduction goals and believes that the transportation sector is integral in any solution. However, we have expressed concern that California’s transportation and energy policies are attempting to reduce affordable and reliable fuel supplies faster than consumers can afford. Ignoring affordability and reliability leads to volatile markets and higher prices, especially for economically disadvantaged individuals, which would only serve to compromise this “managed transition.”

We agree that the State Legislature has directed the CEC to proceed carefully and deliberately. Indeed, AB X2-1 expressly forbids the CEC from adopting any such regulation “unless it finds that the likely benefits to consumers from avoiding price volatility outweigh the potential costs to consumers.” WSPA reiterates here the importance of gathering a robust set of facts to legitimately support any such finding with respect to imposing a refinery resupply obligation and/or a minimum inventory requirement.

Clean Cars II and Advanced Clean Trucks, amongst other regulations. CARB argued that these waiver disapproval resolutions “introduced an unprecedented degree of uncertainty into the California market for new motor vehicles.” The CEC should be adjusting timelines accordingly given ongoing, and likely lengthy, legal challenges regarding these regulations. See CARB 5-Day Public Notice and Comment Period, Emergency Amendment and Adoption of Vehicle Emissions Regulations, at 2. Available at: <https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2025/emergencyvehemissions/notice.pdf>.

⁹ See AB X2-1 at: https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202320242AB1.

¹⁰ See April 21, 2025, Governor Gavin Newsom letter to CEC Vice Chair Siva Gunda at: <https://www.gov.ca.gov/wp-content/uploads/2025/05/Newsom-Gupta-Letter-4.21.pdf>.

¹¹ See “Transportation Fuels Assessment: Policy Options for a Reliable Supply of Affordable and Safe Transportation Fuels in California” at: <https://www.energy.ca.gov/publications/2024/transportation-fuels-assessment-policy-options-reliable-supply-affordable-and>.

Resupply obligations that prevent or inhibit the free transaction of fuel on the open market will distort the market, further restrict available supply, and hurting consumers. Minimum inventory requirements may also have major drawbacks. The CEC previously identified,¹² that 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. Neither of these approaches are likely to prevent market volatility either. Please refer to The Brattle Group’s analysis outline of what would be needed to assess costs and benefits in quantitative terms.¹³

We urge the CEC to continue working with WSPA and our member companies to reach a mutually beneficial framework that supports supplying fuel to the market, does not raise additional barriers for in-State refineries, and does not compromise safety while seeking to mitigate potential consumer impacts. This includes working with refiners to prevent near-term refinery closures, incentivize infrastructure improvements to allow for additional imported fuels required to balance California’s gasoline market demands; and encourage in-State crude production to help lower crude oil and transportation costs.

WSPA RESPONSE TO DPMO STAFF PRESENTATION

To summarize the main points of this section:

- Market concentration will only intensify as more unique and costly California policies are introduced.
- California should now be actively working to help retain the few remaining in-State refiners.
- There is already a substantial amount of gasoline inventory, and DPMO has yet to demonstrate how maintaining even higher inventories would *not* undermine operational flexibility nor risk slowing production. Ignoring these factors may lead to more volatile and higher prices.
- A sophisticated market self-corrects for imbalances without the need for regulatory intervention.

DPMO Chief Economist Dr. Gigi Moreno continues to contend that California’s highly concentrated industry, which she says presents barriers to entry and misaligns incentives towards profit maximization rather than “secondary” concerns of supply and price reliability for consumers. This is a false narrative. Market concentration in California is directly attributable to numerous State policies, approved over decades, *actively seeking to shut down the petroleum industry* and force consumers to stop using gasoline and other petroleum products. As more unique and costly California policies are introduced (e.g., minimum inventory mandates, resupply obligations), this market concentration will likely only intensify, not recede. Additionally, there is no similar precedent – domestically or internationally – demonstrating the successful management of transitioning an entire economy from a free-market transportation fuel paradigm to one driven by select policies aimed at eliminating fuel demand by consumers in a free market. Given compounding implementation barriers that negatively affect California’s baseline planning scenarios to transition the entire transportation sector towards Zero-Tailpipe Emission Vehicles, and the very few refiners left in California to meet robust demand for decades to come, the State should be actively working in the best interests of all Californians to help retain those that are left – and that are operating under strict regulatory policies.

It is also a fact that California has refining capacity constraints – which have become more pronounced in recent years – to safely and reliably produce additional fuel supplies, and a finite amount of on-site tankage to store supplies at refineries needed in the gasoline production process. These gasoline tanks are used in the gasoline blending process; if one or more tanks are required for storage, the tankage available to blend gasoline will decrease, which would reduce the amount of gasoline sent to the market and likely create artificial fuel shortages. Even with recently enacted legislation,¹⁴ it is extremely difficult to build new tanks given the myriad of environmental, permitting, and potential legal challenges unique to California. California’s fuel supply chain already maintains substantial amounts of gasoline inventory; the DPMO has yet to demonstrate how maintaining higher inventories would not undermine operational flexibility and increase the risk of slowing production if the infrastructure cannot identify

¹² “Market-based Policy Concepts Overview & Issues” staff presentation to Petroleum Market Advisory Committee, August 16, 2016.

¹³ See The Brattle Group’s analysis of minimum inventory requirements; August 2024, at pg. 6, Cost-Benefit Analysis.

¹⁴ See SB 237 (2025). Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202520260SB237.

viable outlets. Nor has it demonstrated how mandating additional inventory stockpiles *only at California refineries* would not come with significant additional costs for refiners, and potentially elevated prices, for consumers. Ignoring these factors may lead to more volatile and higher prices, further exacerbating California's already pronounced affordability and reliability challenges, especially for economically disadvantaged individuals who can least afford it.

California's fuel market participants actively work to address this market volatility if and when it arises. This is demonstrated in Dr. Gigi Moreno's presentation, where unplanned refinery incident reduces in-State supply and leads to an increase in the market differential spot price – in order to attract additional fuel supplies to California's market. Following the arrival of economically driven imports, prices stopped their upward trajectory and decreased in the market. A sophisticated market can self-correct for supply and demand imbalances; a higher price attracts additional product to the market, stabilizing and reducing prices for consumers. This occurs without regulatory intervention.

While DPMO supports the economic theory of how minimum inventories and/or resupply obligations could theoretically address price volatility in California, market dynamics and regulatory constraints also play critical roles in their real-world application. For example, supporting more marine imports to help reduce price volatility presumes the availability of port space, tankers, tankage, and pipeline capacity, and ignores regulatory constraints (e.g., California's unique Ocean-Going Vessels At-Berth Regulation) that can add to operational costs for these imported supplies. University of California Berkeley Professor Severin Borenstein also previously explained¹⁵ that, on a long-run trend basis, we are not seeing a widening gap of California's spot market relative to the rest of the country, so focusing on solutions like holding more inventory may mean we end up with solutions that do not address the problem – or make the problem worse by limiting supply to the market. Finally, DPMO has also yet to confirm with any certainty that mandatory inventory thresholds would prevent price volatility in California's market as was identified in the CEC's 2024 Transportation Fuels Assessment:

- “it may artificially create shortages in downstream markets”
- “[it] could increase average prices for refiners to maintain additional storage”
- “market equilibrium may likely emerge at a higher price level”
- “potential exists for the state to be criticized for requiring refiners to withhold fuel from the market”

WSPA RESPONSE TO ICF PRESENTATION

To summarize the main points of this section:

- Refiners are already utilizing resupply plans during planned events. Any resupply requirement could result in refiners withholding fuel from the market – which could have adverse regional impacts.
- Implementing resupply requirements could necessitate uneconomic strategies that could potentially lead to higher gasoline prices.
- California has significant economic, geographic, and market differences versus other countries.

WSPA appreciates comments made by Tom O'Connor, including how the slowing ZEVs transition correlates to a more challenging pathway to dramatically reduce gasoline demand; that more needs to be done to improve California production to keep pipelines operating for refineries; the need to enhance port capacity to accommodate large import volumes of both gasoline and blendstocks; and the challenges that imposing minimum inventory obligations only on in-State refiners can present. We agree that this raises equitability concerns, and reiterate our concerns with placing undue burdens on California's few remaining refineries that further risks their competitiveness.

WSPA has commented previously on a resupply requirement for refinery turnarounds, including at an 80% (or higher) level. We continue to believe it is wrong to assume that refiners are not already utilizing resupply plans during planned events. WSPA has raised concern that any resupply requirement, if not carefully crafted, could result in refiners withholding fuel from the market – which would not only adversely impact the California market, but would harm Arizona and Nevada consumers if refineries are

¹⁵ California State Assembly SB X1-2 implementation oversight hearing, May 15, 2024: <https://autl.assembly.ca.gov/hearings/2023-24-informationaloversight-hearings>.

required to withhold fuel supplies for the benefit of Californians. These types of impacts to states like Arizona and Nevada could ultimately lead to costly and time-consuming litigation. We therefore urge the CEC to further analyze whether refinery resupply requirements are indeed needed – and at what cost. Any requirement that keeps fuel from the market will require the market to increasingly resort to foreign sources.

Further, implementing resupply requirements could necessitate uneconomic strategies to secure non-spot market resupplies and additional capital to guarantee inventories that could potentially lead to higher gasoline prices. Not providing the necessary flexibility to take advantage of unique operational opportunities could result in compliance difficulties and potential conflicts with existing statutory requirements. Moreover, implementing import only-based resupply requirements would disincentivize in-State production, expose refiners to global market risks, and further strain import infrastructure. WSPA previously emphasized the need for flexibility in resupply source, quantity, and timing to minimize consumer costs and avoid unintended consequences.

We agree with ICF’s assessment that there is no comparable model for California. There are significant differences with Australia,¹⁶ which depends on imports for two-thirds of their total production demand. That nation also provided approximately \$1.8 billion in direct subsidies to keep their only two remaining refineries operational until 2027, provides funds for refinery upgrades, and makes certain production payments. They are also geographically located close to major Asian refining centers. California is not.

WSPA RESPONSE TO STANFORD INSTITUTE PRESENTATION

To summarize the main points of this section:

- Maintaining high inventory levels reduces available storage and may force refineries to reduce production, this may lead to *higher* average retail gasoline prices.
- Questions how a mandate results in negligible implementation costs and zero replacement costs.
- There are significant concerns with who, and how, releasing additional inventory would be decided.

WSPA agrees with Ryan Cummings that many challenging issues are being hastened by the closure of California’s few remaining refineries – including exposing Californians to price volatility. We disagree, however, that there would be minimal price impacts even if marine import capacity is expanded and in-State refining capacity decreases as part of a “managed transition.” While he presumes that there is a solid economic case academically for the implementation of new minimum inventory requirements, we raise significant real-world application and cost concerns for consumers. We also challenge the presumption that refiners do not have an incentive to keep adequate inventory on hand due to their exposure to incident-driven market volatility. Supply reliability is a cornerstone of the refining industry and expert refinery employees maintain appropriate inventories to ensure said reliability within operational and economic constraints. Intermediate and finished product tanks are part of a continuous production system whereby maintaining high inventory levels reduces available storage and may force refineries to reduce production. Moreover, holding excess inventory locks up capital and directly increases operating costs for refiners.¹⁷

WSPA requests additional data on how Mr. Cummings arrived at the conclusion that such a requirement would result in a small, one-time, negligible cost to implement the requirements and how the marginal cost to replace additional inventories once established would be zero. We would also request additional information on which policymakers Mr. Cummings envisions would make determinations on when to release inventories – and how any associated margins would be adjusted. We would have significant concerns should releasing additional inventory supplies be tied to events or indicators not directly tied to alleviating supply constraints in the market.

DETAILED WSPA RESPONSES TO GUIDING PANELIST WORKSHOP QUESTIONS

To summarize the main points of this section:

¹⁶ U.S. Energy Information Administration. “Australia Country Analysis.” International Energy Data and Analysis, EIA.gov.

¹⁷ See The Brattle Group’s analysis of minimum inventory requirements; August 2024, pg., Item 10.” Inventory holding costs.

- Any minimum inventory requirement would fundamentally conflict with operational flexibilities refiners need and would likely raise significant safety issues.
- Mandatory inventory thresholds remove supply from the market that refiners may otherwise sell.
- Any policy refinements must preserve operational integrity for refineries while avoiding any burdensome requirements.
- More must be done to “provide sufficient confidence to industry to invest in maintaining reliable and safe operations to meet continued demand” by addressing regulatory and administrative issues.

How do minimum inventory requirements align or conflict with existing refinery planning practices?

WSPA remains concerned that any “one size fits all” attempt by the CEC to micromanage in-State fuel inventories will not solve California’s structural fuel supply challenges.^{18,19,20,21,22,23,24,25} Especially if any minimum inventory requirement could unintentionally decrease supply and lead to *higher* average retail gasoline prices on an annualized basis for consumers. We have also raised significant questions regarding the availability of existing storage capacity at California’s refineries, and whether imposing such a requirement would even act to mitigate any short-term price volatility for consumers. It may, in fact, only exacerbate transportation fuel supply challenges across California, Arizona, and Nevada.

Any minimum inventory mandate would fundamentally conflict with operational flexibilities refiners need to produce fuels and would likely raise significant worker and public safety issues. For example, having to accommodate mandatory inventories requirements during planned maintenance periods undermines expert-led decision-making regarding turnaround timing, planning, and execution, thereby shifting control away from experienced refinery engineers and operators to State regulators with limited (if any) operational expertise or refining experience. This presents a significant safety concern.

Operating a refinery while efficiently managing inventory is an extremely complex process that requires real-time adjustments based on operational constraints and market demands. Refineries typically operate with dynamic inventory levels that balance throughput optimization, blending complexity, and supply reliability. This requires operators to adjust inventory levels based on operational constraints and market needs. As such, refiners generally set inventory targets at a reasonable level that provides operational flexibility for both the refining and downstream (or pipeline and terminals) assets, while still ensuring a reasonable level of supply to weather minor delays or unplanned disruptions. Whereas, setting minimum inventory levels could potentially push a refiner out of this range and into a mode of having to respond much more quickly and steeply should an operational issue arise.

Mandatory inventory thresholds also remove supply from the market that refiners may otherwise sell. It may require refiners to make purchases to maintain mandatory inventories while meeting contractual obligations, creating an economic dynamic of driving up wholesale prices. As component and finished product tanks are part of continuous production systems, requiring refiners to maintain high inventory levels can force refineries to turn down operations, thereby reducing in-State gasoline output. This is because imposing a holding requirement would effectively act to shrink this tank capacity just to make room for additional inventory. Since operators must utilize tanks within approved safety limits, refineries may be forced to slow production rates down to accommodate keeping this extra storage on hand rather than selling otherwise available supplies to the market.

Refinery operators that ship product on third party pipelines also have less insight and control over the outlying terminal inventories than with their own inventory in refinery tanks. Trying to maintain minimum inventories in a system that a refiner does not fully control would certainly present a challenge. A

¹⁸ Western States Petroleum Association Comments - on SB 2 Implementation; May 30, 2023.

¹⁹ Western States Petroleum Association Comments - on Transportation Fuels Assessment Report Workshop; September 11, 2023.

²⁰ Western States Petroleum Association Comments - Solomon Report California Refiners' Cost and Margin Analysis, 2000-2022; November 27, 2023.

²¹ Western States Petroleum Association Comments - on Nov 28 SB X1-2 Margin Cap and Penalty Workshop; December 12, 2023.

²² Western States Petroleum Association Comments - on April 11 SB X1-2 Margin Cap and Penalty Structure Workshop; April 25, 2024.

²³ Western States Petroleum Association comments - on Gasoline Summer Outlook Workshop; June 20, 2024.

²⁴ Western States Petroleum Association Comments - WSPA Comments on Gasoline Supply Reliability Workshop 9-10-2024; Sept. 10, 2024.

²⁵ See The Brattle Group’s analysis of minimum inventory requirements; August 2024, at pg. 9, “Potential Unintended Consequences.”

conflict could also occur during the winter to summer Reid Vapor Pressure transition when refiners naturally need to pull inventories to lower levels to efficiently facilitate the mandatory turnover. This would be extremely difficult if a high minimum inventory level must also be accommodated and maintained.

What is the most significant cost or operational challenges posed by new mandates?

The forced holding of additional inventory creates numerous challenges. This includes locking up capital and creating artificial supply chain inefficiencies that do not exist today. Setting minimum inventories has the potential to introduce instability into California's already challenged fuel supply system in the event an operations issue arises. For example, if a refinery must maintain a high inventory level and there is an issue with a downstream asset, such as a pipeline shutdown, there would be much less "buffer space" to maintain refinery operations at the desired levels. A refinery operator would potentially have to reduce process rates very quickly because of this. It would also be challenging to balance inventory space with pipeline batch shipments. Because transportation fuels are dispatched out of the refinery on pipelines in batches, the receiving tanks must have enough space to receive these batches without overfilling. If the available space is reduced, the batches have to become smaller, which introduces significant inefficiencies in blending, certification, pumping times, etc. and could present even more challenges to providing a steady supply of product to the market. Additional complications arise where refinery operators ship fuels on third party pipelines, such as Kinder Morgan, that they do not fully control. This presents refinery operators with less insight and control over the outlying terminal inventories than with their own inventory in refinery tankage.

Another conflict could arise during the seasonal fuel specification transition period. Because refineries undertake tank maintenance activities for the winter to summer Reid Vapor Pressure transition, operators will necessarily pull inventories to low levels to efficiently facilitate this required turnover. This would be extremely difficult to do if a high minimum inventory level also needs to be maintained.

WSPA would also be concerned with any result that stifles market participants from engaging with one another to provide supplemental supplies when any refinery operations issues arise. Refiners may be less able to sell barrels to others if they are forced to artificially maintain their own inventories at a high level. Refiners are not the only market participants supplying product to meet demand – importers, traders, and integrated retailers should be treated similar to refiners. Moreover, gasoline inventory health is influenced as much by absolute volume as it is by finished and component balance characteristics. Setting a minimum mandatory inventory bypasses the expert judgement of refinery employees trained to manage gasoline inventory and may negatively affect gasoline reliability by requiring refineries to prioritize volume over blend feasibility.

There will likely be direct carrying costs too. Refiners may need to increase fuel and component inventories in excess of historic levels, which increases working capital costs and further restricts operational flexibility. Even a 20-cent per gallon inventory carrying cost could lead to billions of dollars per year in extra expenses. The physical and operational burdens to sustain unnecessary inventory may also require additional storage – and building just one new storage tank can take a decade and cost \$35 million in California's challenging business environment. Forcibly increasing marine imports of gasoline above those driven by supply and demand fundamentals will further bottleneck import infrastructure and, per Vice Chair Siva Gunda's response to the governor in June,²⁶ "introduce new vulnerabilities by making the state more exposed to impacts of geopolitical events, external markets, and regulatory changes in other jurisdictions." These associated costs – including any price increases and resulting price volatility – would likely be passed on to consumers in California, Arizona, and Nevada.

Finally, WSPA notes, as was identified in the CEC's 2024 Transportation Fuels Assessment, that CARBOB refiners outside of California are limited. These in-State refiners also must follow California's strict labor, health, environmental, and safety laws.

²⁶ See CEC Vice Chair Siva Gunda's June 27, 2025, response letter to Governor Newsom at: https://www.energy.ca.gov/sites/default/files/2025-07/CEC%27s_Response_to_Governor_Newsom%27s_Letter_June-27-2025_ada.pdf.

Are there best practices already in place that California can build on?

Any CEC policy refinements must preserve operational integrity for refineries while avoiding any burdensome requirements. WSPA encourages the CEC to work with industry stakeholders to leverage the comprehensive suite of the CEC's existing resources. For example, the SB X1-2 Transportation Fuels Assessment could be expanded to include a much more robust and transparent economic analysis of potential inventory and import impacts. SB 1322 (2022) reporting mechanisms – while duplicative and overly burdensome to comply with – already provides detailed monthly data that could be leveraged for better, more targeted guidance documents, regulations, and engagement with industry stakeholders.

The SB X1-2 maintenance reports also provide the CEC with advanced notice of planned turnaround activity that could be leveraged for targeted refiner engagement to ensure robust resupply planning, including shifts in exports and inter-state balancing (e.g., allowing resupply balancing within California across the San Francisco Bay vs. Los Angeles Basin refining regions). Notably, DPMO's September 16, 2025, "California Gasoline Market Update and Consumer Advisory"²⁷ commented that, "West Coast gasoline and blending component inventories are also relatively healthy" based on the U.S. Energy Information Administration's West Coast (PADD 5) Stocks data.²⁸ WSPA believes this demonstrates that industry has postured itself well to manage planned events for consumers without government interference. WSPA cautions the CEC against creating regulatory bottlenecks that could complicate inventory storage.

Finally, per the Vice Chair's response to Governor Newsom in June, we would encourage regulators to "provide sufficient confidence to industry to invest in maintaining reliable and safe operations to meet continued demand" by addressing identified regulatory and administrative issues – such as common-sense application of CEC's regulatory tools and CARB's Ocean-Going Vessels At-Berth Regulation. California should address permitting issues and develop incentives for refiners to invest in gasoline supply production and storage assets to improve reliability and supply resiliency, including:

- avoiding mandates – such as minimum inventory, resupply requirements, or import thresholds;
- avoiding and removing rules that increase costs;
- avoiding emission limit timelines that are infeasible to comply with (i.e., Zero-Tailpipe Emission Vehicles-only policy mandates, CARB's At-Berth Regulation);
- avoiding and removing requirements that increase turnaround costs beyond what investors are willing to assume financial risks on; and
- assuming that these investor risks are mitigated, efforts to reduce permitting thresholds and timelines for infrastructure improvements.

CONCLUSION

WSPA appreciates the opportunity to provide these comments on fuel supply issues of critical importance to all California consumers – and consumers of other states dependent on California's fuel supply chain – who rely on affordable and reliable sources of transportation fuel every single day. These comments are based on WSPA's review of the materials and statements at this workshop, and we reserve the right to amend these comments or add to the docket as necessary to reflect additional materials or changes in the CEC's decisions.

Please do not hesitate to contact me with any additional questions.

Sincerely,



Jodie Muller
President & CEO

²⁷ See DPMO California Gasoline Market Update and Consumer Advisory: <https://content.govdelivery.com/accounts/CNRA/bulletins/3f2f8b5>.

²⁸ See EIA "West Coast (PADD 5) Stocks," at: https://www.eia.gov/dnav/pet/pet_stoc_wstk_dcu_r50_w.htm.



Catherine H. Reheis-Boyd
President and CEO

September 10, 2024

California Energy Commission
Docket Unit, MS-4
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Uploaded to Docket

WSPA Comments on Gasoline Supply Reliability Workshop [Docket #23-SB-02]

Thank you for the opportunity to comment on the California Energy Commission (CEC) and the Division of Petroleum Market Oversight's (DPMO) August 22, 2024, Senate Bill (SB) X1-2 (2023) gasoline supply reliability workshop. In responding to the information presented and comments made at the workshop, this letter incorporates by reference our prior comment letters, including preliminary comments we filed on August 29, 2024.^{1,2,3,4,5,6,7,8}

To summarize the main points of this letter:

- It is troubling that industry had no opportunity to review, analyze, or provide input on the minimum gasoline supply inventory framework until it was presented at the workshop.
 - Industry input has not been appropriately considered.
 - Previous CEC studies have not been appropriately considered.
 - No analysis of cost, feasibility, operability, or safety considerations was presented.
 - The only data we have seen indicates that a minimum inventory would likely raise prices for consumers – expressly against the goals of SB X1-2.
- The exclusive focus on refinery operations and storage presents an incomplete picture of supply and distribution within California.
- International case studies are not representative of California's unique fuel market. In particular, Australia is not at all analogous with California's fuel supply system.
- WSPA is concerned that SB 950 (2024) and Assembly Bill X2-1 (2024) was/is poorly formed and will likely lead to unintended consequences for consumers in California, Arizona and Nevada.

WSPA remains concerned that this workshop was framed as an opportunity to share both the CEC and DPMO's support for the Governor's legislative framework (what became SB 950), to regulate gasoline inventory and refinery turnarounds. It is also troubling for industry to have had no opportunity to review or understand the framework until it was presented at the workshop, all the while the CEC and DPMO continued to frame the presentation as if there was significant analysis and input from industry to shape the proposal and understand the associated risks. However, without a full vetting by industry experts, the only data we have seen indicates that a minimum inventory would likely raise prices.

¹ Western States Petroleum Association Comments - on SB 2 Implementation; May 30, 2023.

² Western States Petroleum Association Comments - on Transportation Fuels Assessment Report Workshop; September 11, 2023.

³ Western States Petroleum Association Comments - Solomon Report California Refiners' Cost and Margin Analysis, 2000-2022; November 27, 2023.

⁴ Western States Petroleum Association Comments - literature review on Energy Price Controls; November 27, 2023.

⁵ Western States Petroleum Association Comments - on Nov 28 SB X1-2 Margin Cap and Penalty Workshop; December 12, 2023.

⁶ Western States Petroleum Association Comments - on April 11 SB X1-2 Margin Cap and Penalty Structure Workshop; April 25, 2024.

⁷ Western States Petroleum Association comments - on Gasoline Summer Outlook Workshop; June 20, 2024.

⁸ Western States Petroleum Association Comments - WSPA Preliminary Comments on Gasoline Supply Reliability Workshop (Docket 23-SB-02); August 29, 2024

First, WSPA strongly objects to any policy proposal that would jeopardize refinery safety by allowing the CEC to dictate the timing of refinery turnarounds and maintenance. Both the workshop proposal and SB 950 stray from industry's calls to avoid compromising refinery safety at all costs. Labor had also raised similar concerns. Instead of fixing decades of poor policies that have driven supply down, these proposals hold industry's safety-first turnaround planning efforts hostage. Indeed, if passed, SB 950 would have given unlimited authority to an agency that lacks expertise in running a refinery, advised by a committee devoid of industry experts, to hold turnaround plans hostage in response to price signals – not legally binding safety and compliance needs. This endangers workers and communities. There is nothing to prevent the CEC from interfering with any existing health and safety requirements, leaving refiners to manage profoundly conflicting regulations.

Second, we must question how the CEC can legally pursue binding minimum inventory rules in advance of any presumed legislative authority to do so. To put it simply, this is putting the proverbial cart far before the horse.

Third, WSPA has, in fact, repeatedly raised warnings about the State's attempt to micromanage California's gasoline inventory supplies that have gone unheeded. We have repeatedly expressed concerns that doing so is a recipe to raise everyday California fuel costs and potentially reduce fuel supplies to Arizona and Nevada – all while minimizing the existing safety-first priority at refineries.

California's fuel supply chain already maintains substantial volumes of gasoline inventory. As a result, California has not come close to emptying its gasoline supplies; the lowest gasoline inventory recorded since 2011 was still over 425 million gallons (in 2023), representing over 12-days' worth of supply. Furthermore, mandatory stockpiles have been investigated by the CEC and shown to come with significant costs – which will likely and ultimately be borne by consumers. Minimum inventory levels would most likely create sustained gasoline price increases due to new tankage and working capital costs and would not reduce market volatility. This likely means that gasoline that could be supplied to California, Arizona, and Nevada consumers might need to be kept off the market, creating shortages and inflating costs for drivers today.

Price volatility can happen regardless of how much gasoline is in inventory. WSPA previously explained how even a massive amount of additional storage cannot correct this problem due to permitting and operational cost constraints. We have explained that what *could* help stabilize the imbalance is having sufficient local fuel manufacturing capacity, connectivity to other regional markets, and fewer policy restrictions on imports.

While in certain contexts having additional fuel inventories may be useful to address *energy security* concerns, it is not a *price-control* mechanism. Inventory supplies safeguard against the possibility of running out of fuel until additional supplies arrive or local production resumes. The resupply market works *because* higher prices attract additional gasoline supplies to balance an undersupplied market in that instance. But under the CEC/DPMO's proposal, refiners may be forced to hold inventory back as they await State authorization.

Fourth, WSPA has urged the State to focus on practical supply-driven solutions to meet California's ongoing demand for affordable gasoline per the goals of SB X1-2. We have recommended that the State prioritize practical solutions to meaningfully help address current and future supply constraints. Specifically, WSPA has exhorted the CEC to provide more robust, State-led discussions to address a patchwork of local permitting and regulatory obstacles that are already constraining the delivery of cleaner fuels – particularly for marine imports – which will be critical for meeting Californians' future fuel demands.

While WSPA would need further information to specifically address some underlying proposals presented in the CEC and DPMO staff's presentations, we offer the following initial input to help inform policymaking discussions in both the regulatory and legislative arenas.

WSPA RESPONSE TO DPMO STAFF PRESENTATION

California's Storage Infrastructure

The DPMO presentation at Slide 11 refers to "west coast capacity" for storage in the course of addressing minimum inventory in California. However, the data presented are drawn from PADD 5, not California's inventory numbers. The two are not the same. We also note that DPMO's staff separately acknowledged that it has no understanding of the State's actual storage capacity – a foundational data point for the subject proposal – instead relying on publicly-reported PADD 5 data, and stating it is "still working to understand exactly what capacity we have available here in California."⁹ This is an important distinction given that California's storage is significantly capacity constrained given both the expense of such facilities (including for associated pipelines) and lengthy permitting delays – if permits can even be acquired.

The gasoline inventory data available from the CEC's Weekly Fuels Watch (WFW)¹⁰ appears to be an under representation of the total gasoline volumes available to the industry when compared to the U.S. Energy Information Administration (EIA) aggregated gasoline inventory data provided for refiners and bulk terminals published each month. Comparing weekly CEC inventory data to selected EIA end-of-month dates for California illustrates that there has recently been between 4 and 7 million barrels of additional gasoline supplies on hand in California than WFW database contains. It is important to emphasize that the differences are not attributable to the accuracy of refiner reporting, but reporting requirements for different purposes.

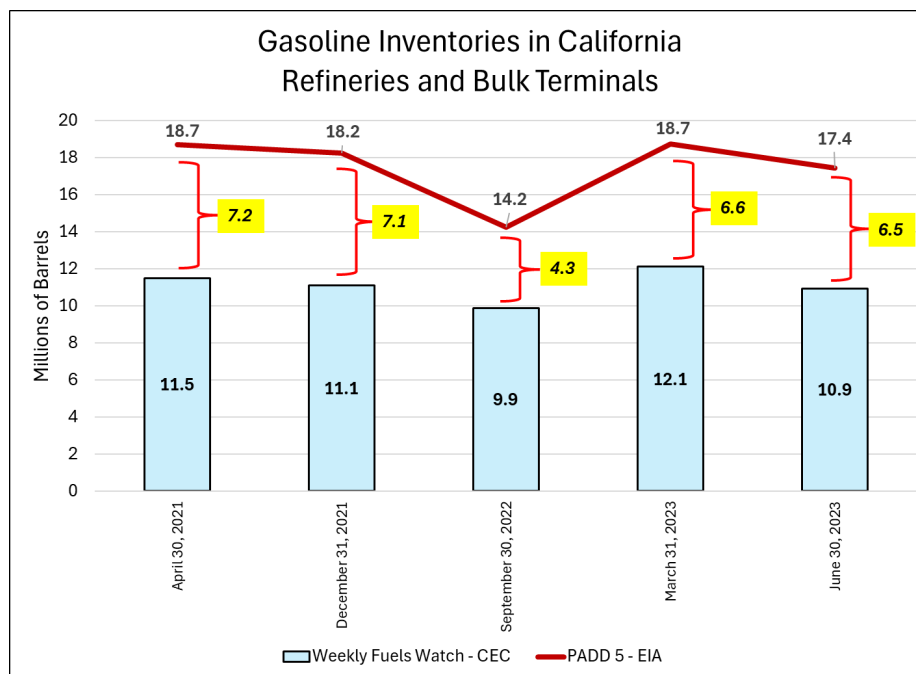


Figure 1 - California Total Gasoline Inventories: CEC compared with EIA data (2021-2023)

⁹ CEC August 22, 2024, Gasoline Supply Reliability Workshop at 48:07 mark.

¹⁰ <https://www.energy.ca.gov/data-reports/reports/weekly-fuels-watch> (last accessed 8/27/24).

The implications of additional gasoline volumes available at bulk terminals outside of California refineries is best illustrated by a calculation of days-of-supply (DoS). According to the CEC, average daily gasoline demand of **802,000** barrels per day = 1 DoS.¹¹ Based on the CEC total gasoline inventory of 10.9 million barrels on June 30, 2023, California would have had **13.6 DoS** in total inventory. However, using the EIA gasoline inventory of 17.4 million barrels held at refineries and bulk terminals on June 30, 2023, California would have had **21.7 DoS** in total inventory.

In the interest of transparency, it would be beneficial for the CEC to provide additional gasoline storage data statistics for stakeholders to review before further discussion of any potential minimum gasoline inventory requirements. Fortunately, the CEC already collects inventory information on gasoline and other petroleum products from all terminal operators on a weekly and monthly basis.¹² Although none of that aggregated gasoline inventory data has yet been made available, the CEC should take this opportunity to provide at least a near-term historical dataset back to January 2023 or earlier that will include a more accurate picture of gasoline supply availability held at all California bulk terminals before adopting regulations specifying how much gasoline California refiners should withhold from working inventory capacity.

Case Studies Presented

The DPMO presented three case studies presumably intended to illustrate the use of minimum inventory requirements to mitigate gasoline price volatility. WSPA finds the cases presented distracting and irrelevant, as well as inappropriate analogies to California's gasoline supply challenges.

Case Study 1: U.S. Strategic Petroleum Reserve (USSPR)

It is unclear why the CEC or DPMO would consider the USSPR as a useful analogue to resolving market volatility in California's gasoline supply markets. The USSPR was created as a **crude oil** emergency reserve following the Iran oil embargo in the 1970s. The strict rules established by the enabling statute¹³ requires the President of the United States to make findings of an emergency – including catastrophic interruption of global crude oil supplies – in which release from the USSPR would temporarily relieve shortages for U.S. refiners. While the President did authorize the release over 340 million barrels in 2022¹⁴, over a 7-month period, in response to global crude oil market volatility following Russia's invasion of Ukraine, any parallel with California's fuel market situation is vague and misleading. Moreover, this is a government-owned storage supply – not something imposed upon industry.

Case Study 2: Northeast Gasoline Supply Reserve

Superstorm Sandy in 2012 damaged two refineries and left more than 40 fuel terminals in New York Harbor inoperable. As a temporary measure, in June 2014, U.S. Department of Energy (DOE) Secretary Ernest Moniz issued an order to negotiate storage contracts for gasoline in New York and Maine creating a million-barrel reserve.¹⁵ Clear rules were established by DOE for storage capacity bidding and participation in the use of the reserve in order to mitigate negative market effects from government purchases of fuel and ensure complete transparency. Guardrails were established by DOE to avoid negative effects on the market as the fuel

¹¹ CEC Summer Outlook Webinar presentation, June 6, 2024 <https://content.govdelivery.com/accounts/CNRA/bulletins/3a1209d> (last accessed 8/16/2024)

¹² CEC reporting requirements include obligations for terminal operators to report weekly and monthly inventory levels for all refined products and crude oil per Petroleum Information Reporting Act (PIIRA) regulations. The relevant forms are the [CEC W08](#) weekly California Major Petroleum Product Storer and Terminal Weekly Report and the [CEC M08](#) monthly California Major Petroleum Product Storer and Terminal Monthly Report.

¹³ Pub. L. 94–163, Dec. 22, 1975, 89 Stat. 871.

¹⁴ [Why Have a Strategic Petroleum Reserve](#), Christopher J. Neeley, Economic Research, posted March 20, 2024.

¹⁵ As with the USSPR, the authorizing legislation was Pub. L. 94–163, Dec. 22, 1975, 89 Stat. 871. Secretary used this authorizing legislation to issue a directive to the Office of Petroleum Reserves on June 20, 2014 to purchase gasoline reserves.

infrastructure recovered from that disaster. The reserve was closed in 2024, as the market and fuel infrastructure in the Northeast was deemed to be sufficiently robust with enough redundancy to ensure resilience in the face of future disruption.

In addition, we have data as the National Petroleum Council (NPC), the federal advisory to the Secretary of Energy, investigated these concepts and reported:

More recent studies from [Government Accountability Office] and [Department of Energy] have conflicted about the recommendations for and against the strategic petroleum product reserve (SPPR) concept. In summary, there is not a clear record on the desirability or the feasibility of creating and maintaining an SPPR. The costs of procuring and storing the initial volume of fuel are high, especially if capital costs are incurred to build new storage facilities. Leasing of existing facilities would avoid capital costs but would result in a loss in distribution efficiency due to tankage that would not be available to manage daily inventories. To be effective at buffering supply disruptions, the stored volume of fuel would need to be much greater than the amount currently stored in the NGS. There would need to be multiple storage locations to ensure fuel is available when and where it is needed. There are also challenges with the number and diversity of different products that are stored in the reserve. The reserve inventory must be actively managed to ensure that fuel does not degrade over time. These are some of the many challenges that have been identified with the SPPR concept.

The SPPR concept fundamentally interferes with market signals for supply, demand, pricing, and inventory management. A preferred option over the SPPR would be to enhance supply through increased domestic production and by increasing redundancy in existing infrastructure. A robust fuel marketplace can address the challenges of supply reliability more effectively than a mandated SPPR.¹⁶

Case Study 3: Australia

The DPMO staff presentation also pointed to a requirement for minimum stockholding obligations (MSO) recently adopted in Australia that should be considered as an example for California.¹⁷ It is curious that DPMO staff are suggesting looking to the Australia MSO program for guidance when the gasoline market conditions in Australia are so dissimilar to California. Based on 2022 data, the differences appear significant, and not at all analogous with California's fuel supply system:

Policy Differences	
Australia has no vehicle standards that compare to California's stringency: • This opens import availability and reduces prices for lower-quality feedstock • Australia has no strong vehicle technology/fueling signals to incentivize a shift to ZEVs that heavily rely upon the electric grid • Australia is not limited by the Jones Act nor pending stringent emission control standards with no viable near-term solutions, such as CARB's Ocean Going At-Berth Regulation	California has adopted multiple standards, including: • The most stringent fuel specifications in the world; Australia has amongst the least stringent • Heavy-Duty Engine and Vehicle Omnibus Regulation • Zero-Emission Vehicle (ZEV) mandates, such as Advanced Clean Cars I and II, Advanced Clean Trucks, and Advanced Clean Fleets • The Ocean Going At-Berth Regulation California is also constrained by the Federal Jones Act for marine imports; Australia is not

¹⁶ National Petroleum Council. (2023). *Petroleum Market Developments*. Retrieved Sept 2024 from at page 63: npc.org/reports/Petroleum_Market_Developments-2023-5-16.pdf; see 5.4.5 Strategic Petroleum Product Reserve

¹⁷ [Conceptual Frameworks for Resupply and Minimum Inventory Requirements](#), Varsha Sarveshwar, Senior Policy Advisor, Division of Petroleum Market Oversight, August 22, 2024, slide 15.

Refining

Petroleum refiners in Australia produced 36% of the gasoline to meet local demand.¹⁸ In addition, the Australian government provided approximately \$1.8 billion in funding to keep their only two remaining refineries operational until 2027, provides funds for refinery upgrades, and makes certain production for refiners who make specific types of transportation fuel when margins drop below AU \$7.30 a barrel (i.e. USD ~\$5/barrel).¹⁹ Australia's gasoline demand is approximately 25% of California's; that nation depends on imports for <i>two-thirds</i> of their total production demand.	By contrast, California refiners produced 90% of the gasoline to meet domestic demand.²⁰ The State of California imposes multiple regulatory compliance fees on industry to meet California's demand.
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		Gasoline (MBD)	Diesel (MBD)	Jet (MBD)	Source
Australia	Demand	278	568	158	Australian Petroleum Statistics, 2024
	Production	103	73	26	
	Imports	175	495	132	
California	Demand	874	222	276	CEC 2023 IEPR forecast
	Production	904	281	270	CEC Transportation Fuels Assessment 2024 ²¹
	Imports	77	65	34	

Imports

Australian consumers depend heavily on gasoline imports, accounting for 64% of total supply	California gasoline imports amounted to only 10% of statewide demand
"Stock on water" timelines to resupply Australia range between 6-14 days from Southeast Asia ²²	To resupply California, 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

Finished Product and Fuel Specifications

Australia finished gasoline ethanol content averaged 1.1% by volume	California's ethanol content averaged 10.5% by volume ²³
Australia does not have a specialized fuel specification – in fact, it notably trails European and United States fuel standards. Australia still allows leaded gasoline, high aromatics, and high sulfur. Such specifications likely mean that Australia's gasoline is cheaper and easier for refineries to produce than California's specifications, and importantly, that Australia accepts product from virtually anywhere in the world.	Most refineries outside of California <i>do not, and cannot</i> , produce fuels that meet California's strict gasoline specifications, for which no emergency exception exists. California and Australia have seasonal specifications, requiring regular turnover in inventory.

¹⁸ [Australian Petroleum Statistics 2022](#), Australian Department of Climate Change, Energy, the Environment and Water. 2022 monthly automotive gasoline refinery production and sales data. Automotive gasoline refinery production of 1,508 million liters divided by 4,220 million liters of automotive gasoline sales adjusted to 4,173 million liters to remove ethanol portion of finished gasoline.

¹⁹ See refining section at <https://www.eia.gov/international/analysis/country/AUS>

²⁰ [Transportation Fuels Assessment](#), Commission Report, California Energy Commission, Publication Number CEC-200-2024-003-CMF, August 2024, pages 11 and 12. CARB gasoline instate refinery production of 796 thousand barrels per day (TBD) adjusted to 723 TBD to remove ethanol portion divided by statewide gasoline sales of 885 TBD adjusted to 800 TBD to remove ethanol portion of finished gasoline demand.

²¹ [Transportation Fuels Assessment](#), Commission Report, California Energy Commission, Publication Number CEC-200-2024-003-CMF, August 2024, pages 11 and 12.

²² "Maintaining supply security and reliability for liquid fuels in Australia" report, at page 9:

https://www.aip.com.au/sites/default/files/download-files/2017-09/Maintaining_Supply_Security_and_Reliability_for_Liquid_Fuels_in_Australia_0.pdf

²³ California's finished gasoline ethanol concentration during 2022 exceeded 10 percent by volume due to the sales of E-85 that amounted to 103.5 million gallons during 2022 according to the California Air Resources Board's [Annual E85 Volumes](#) data.

Obligated Parties	
Australia counts inventory across the entire supply chain, including refineries, bulk terminals, and other storage facilities Australia also counts contractually obligated product that is in port or in transit between Australian ports.	California's proposal would place the primary (if not exclusive) burden on refineries for storage of minimum inventory
Fuel Prices	
In calendar year 2023, Australians paid USD \$7.18/U.S. gallon ; Australians are paying the same or more per gallon of gasoline than Californians are ²⁴	Californians paid USD 4.88/gallon in the United States ²⁵
Fuel quality and transit times are key factors given that Australia's imported cargo resupply transit times are 57-68% shorter than California's	It is worth repeating that California has the most stringent fuel specifications in the world, while Australia has one of the least stringent

The heavy reliance on imports to meet Australia's transportation energy demand is the primary reason that the country took steps to require sufficient inventories of gasoline and other petroleum products to cover at least 27 days-worth of *net imports*, not total demand. **These requirements are intended to improve Australia's energy security resilience, and not intended to protect consumers and businesses from price escalation associated with significant unplanned refinery outages.**

Further, the potential minimum gasoline inventory requirement mentioned by DPMO appears confined to gasoline inventory volumes held at refineries. The Australian MSO obligations allow obligated parties to count inventory volumes at several points along the Australian transportation energy supply and distribution chain (refineries, bulk terminals, and import terminals), as well as volumes of transportation fuels contained on marine tankers already in Australian ports or traveling between Australian ports.²⁶

The minimum volumes of transportation fuels held in storage is calculated by taking the previous 12-month average of imports multiplied by the minimum number of "cover days" set by the Commonwealth Department of Climate Change, Energy, the Environment and Water (the DCCEEW) for each fuel type. Cover days for importers are now 27 days for gasoline, 32 days for diesel fuel, and 27 days for jet fuel.²⁷ The MSO obligations for refiners are based, in part, on their anticipated conversion of crude oil and other refinery feedstocks to gasoline, diesel, and jet fuel.

Australia's fuel security regulations include other non-MSO programs designed to: increase storage tank capacity for diesel fuel;²⁸ provide payments to refiners when margins drop below a specified lower threshold;²⁹ and capital for refinery projects to upgrade diesel fuel quality.³⁰ Given the energy security purposes of Australia's MSO regulations, the significant dependence on imports to meet the nation's transportation fuel demand, and government funding incentives to help the industry to construct new storage infrastructure and upgrade refineries, there is little in common with California's fuel supply system. If it is to inform the Commission's decision-making on minimum inventory, much more in-depth analytical work than has been presented would need to be done.

²⁴ EIA data, "California All Grades All Formulations Retail Gasoline Prices (per gallon)" at https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMM_EPM0_PTE_SCA_DPG&f=M.

²⁵ See national average retail fuel pricing data from the Australian Institute of Petroleum at <https://www.aip.com.au/pricing>.

²⁶ [Fuel Security Act 2021](#), registered November 15, 2021.

²⁷ [Minimum Stockholding Obligations](#), Australian Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW), revised as of July 1, 2024.

²⁸ [Boosting Australia's Diesel Storage Program](#), DCCEEW.

²⁹ [Fuel Security Services Payment \(FSSP\)](#), DCCEEW.

³⁰ [Refinery Upgrades Program](#), DCCEEW.

WSPA RESPONSE TO CEC STAFF PRESENTATION

“Days of Supply” (DoS) Metric

The CEC’s staff presentation generally explained and promoted the use of a “days of supply” metric in California. This was reportedly developed in discussions with CEC’s expert consultants and is intended to represent a measure of how long California’s current gasoline and diesel inventories would last. Unfortunately, despite our request during the intervening 10 days that this workshop was noticed, industry was provided no advance opportunity to review any information presented at the workshop.

Prior to instituting any new regulations on the industry, it should be incumbent upon the regulator to afford the industry adequate time to meaningfully engage in the development process to ensure that the data being used is indeed accurate and the framework, as a result, is implementable. Industry must be afforded an opportunity to alert the agency of any flaws in the underlying analysis and/or approach that must be corrected before it is applied to California’s transportation fuels market. Not doing so would constitute a failure in the CEC’s responsibilities as the State’s chief energy planner.

It is extremely important for legislators and the public to understand the likely unintended consequences of using this “day of supply” metric. Once the CEC establishes a DoS threshold and mechanism to release inventory, market trading behavior may drive prices up in response to the lack of market liquidity, which could occur for a number of reasons. For example, if a refiner has product on-hand sufficient to meet demand but risks going below required minimum inventory levels, then the refiner may have to first wait for additional production and/or supply to come in before making such sale, or otherwise risk being non-compliant. And because onsite refinery tankage is necessary to balance *existing* production, blending, certification, and marketing needs, a minimum inventory requirement that occupies such tank space may cause delays that, in turn, force refiners to actually *reduce* production. In other words, this proposal could ironically result in artificial supply shortages caused by compliance needs.

In addition, while industry makes concerted efforts to replenish their gasoline production during planned maintenance events, there are significantly different considerations during *unplanned* maintenance events. These include:

- whether refiners must or can hold supply to maintain their inventory for any upcoming planned maintenance events;
- whether a refiner can help replenish supplies for any unplanned events in another California region; and
- how the State’s efforts to micromanage planned maintenance events impact critical safety considerations.

None of these issues were identified or addressed during the workshop.

Potential Impacts of Micromanaging California’s Gasoline Inventory

WSPA has identified the following potential issues in the State’s presumed attempt to micromanage California’s gasoline inventory supplies.

First, California is a “fuel island.” WSPA agrees with the State’s conclusion of this fact in its recently approved 2024 Transportation Fuels Assessment.³¹ It must be recognized that California is geographically large and topographically complex, that neighboring state populations and economic centers are far from California’s, and that there are few supply- or demand-side substitution opportunities.

³¹ CEC Transportation Fuels Assessment Report: <https://www.energy.ca.gov/publications/2024/transportation-fuels-assessment-policy-options-reliable-supply-affordable-and>.

Second, California has a unique regime of environmental policies. Yet, a minimum inventory requirement does not consider California's storage constraints under such policies. A minimum inventory requirement does not consider the storage ability constraints that are real in California, which is a key constraint for meeting the State's fuel needs today. A minimum inventory requirement also ignores the challenges with importing fuel from other regions, due to California's unique geography and existing policies (e.g., California's unique CARBOB fuel blend requirement, Ocean Going At-Berth Regulation, disproportionate marine import constraints under the Federal Jones Act).

Third, international case studies are *not* representative of California's unique fuel market. As WSPA has previously and repeatedly explained in great detail, California's unique transportation fuel market is extraordinarily complex. Therefore, any examples of purported policy "successes" in other regions do not necessarily account for the many factors affecting supply and demand, as the CEC's 2003 report identified³² when analyzing California's conditions. Unfortunately, it is apparent that the CEC and DPMO have not undertaken a detailed analysis of California's storage and inventory challenges. There are especially significant differences with Australia, as is outlined above. That nation – which, again, depends on imports for *two-thirds* of their total production demand – provided approximately \$1.8 billion in funding to keep their only two remaining refineries operational until 2027, provides funds for refinery upgrades, makes certain production payments, and has one of the least stringent fuel blend requirements worldwide, thereby making it a prime import market.

Fourth, a minimum inventory requirement may have unintended consequences. Further work must first be done to determine whether any such requirement would even be feasible in California's market – including whether such a requirement would avoid price volatility. The CEC and DPMO must thoroughly analyze what the costs to consumers will be, and other unintended consequences. Without such analysis, WSPA would otherwise question where the transparency is from CEC and DPMO on these economic costs.

Fifth, neither the CEC nor DPMO appear to have any certainty to confirm that mandated thresholds will prevent market volatility in California's market as was identified in the 2024 Transportation Fuels Assessment:

- "it may artificially create shortages in downstream markets"
- "[it] could increase average prices for refiners to maintain additional storage"
- "market equilibrium may likely emerge at a higher price level"
- "potential exists for the state to be criticized for requiring refiners to withhold fuel from the market"

Thus far, neither the CEC nor DPMO appear to have any certainty they can confirm that mandated thresholds will prevent market volatility in California's market. No analysis has been done on whether a minimum inventory requirement may actually decrease domestic gasoline production given that available onsite storage is needed to efficiently balance blending, testing and certification, and marketing activities. No analysis has been done on how refiners would store increased supply or be able to increase imports under the Ocean Going At-Berth Regulation and Federal Jones Act constraints. No consideration has been given to the likely competitive advantage provided by a minimum inventory requirement to foreign importers over domestic refiners, or how such an advantage could be alleviated. Likewise, there are other, non-refiner inventory holders in the State, yet no consideration has been given to requiring a minimum inventory across *all* inventory holders in the State. Maintenance cannot be determined based on economic interests alone, and under no circumstances should such interests prevail

³² CEC. July 2003. "Feasibility of a Strategic Fuel Reserve in California." P600-03-013CR. https://web.archive.org/web/20060926070356/http://www.energy.ca.gov/reports/2003-07-31_600-03-013.PDF (Last accessed Sept. 9, 2024).

over or otherwise compromise safety or environmental needs – needs that are more appropriately understood and addressed by CalOSHA, industry, and labor.

Finally, the CEC and DPMO have not explained potential cost impacts. It is especially concerning that important policy decisions would be made with minimal, if any, acknowledgement and ownership about potential cost impacts to end consumers. These impacts are only compounded when layered upon other State policies. A new minimum inventory requirement will certainly create incremental costs per gallon of gasoline for California consumers – and will likely impact Nevada and Arizona consumers too. While exact costs are difficult to estimate, a worst-case scenario regulation requiring a 13-day supply could result in higher costs over an annual period than past market volatility. This policy would require refiners to build inventory when it is already uneconomic to do so. Requiring refiners to increase inventory when prices are low will come at a cost likely to be passed on to consumers.

WSPA again notes that these significant market and policy dynamics, which will constrain California's fuel supply, *are already in motion*.

TRANSPARENCY AND LEARNING FROM THE CEC'S OWN HISTORY ON STRATEGIC FUELS RESERVE (2002-2003)

The DPMO's workshop presentation made brief reference to significant work led by the CEC in 2002 and 2003 in response to an investigation of gasoline price volatility by California's then Attorney General, Bill Lockyer. The Legislature mandated through AB 2076 (2000) that "the commission shall examine the feasibility, including possible costs and benefits to consumers and impacts on fuel prices for the general public, of operating a strategic fuel reserve to insulate California consumers and businesses from substantial short-term price increases arising from refinery outages and other similar supply interruptions."³³ Over a period of two years, the CEC convened several workshops, contracted with consultants to write extensive reports, and published multiple CEC authored reports to meet the requirements of the statute. In its own final report after two years of effort, the CEC set the stage with familiar words:

In the last few years, California motorists have experienced significant short-term increases, or "spikes" in the price of gasoline. The state's gasoline refineries are operating at near maximum production, and when an unplanned refinery outage occurs, especially when gasoline inventories are low, the price of gasoline can spike. Outages drive the price higher because of the temporary imbalance between supply and demand. The price increase required to restore this balance can be significant due to a very low demand response—California motorists have little alternative to gasoline use in the short run.

WSPA has identified more than 23 separate documents that are no longer available to the public on the CEC's website, but which are critical to understanding the complexities and history of proposals to establish some kind of Strategic Fuel Reserve (SFR) to mitigate price volatility in the California fuels markets. A mandate for minimum inventory would simply be another variation of an SFR, which was thoroughly examined in the course of fulfilling the requirements of AB 2076 in 2002 and 2003. We include a chronology, complete with links to internet archives, in Appendix 1. Further, for the sake of public transparency, we also submit separately to the docket – due to file size limitations – copies of several reports and workshop presentations published at the time that help to demonstrate the following:

³³ AB 2076 (Shelley, Chapter 986, Statutes of 2000)

1. Proposals to mitigate fuel price volatility in California have been seriously considered in the past. The State reached conclusions that show, at least at the time, that the solutions examined were subject to too many risks, uncertainties, and potential unintended consequences. As a matter of public record, the CEC rejected establishment of a SFR in 2003.
2. The documentation also shows that **thorough** analysis of policy options takes both time and resources, demonstrated by the depth and breadth of documentation and the more than two full years that the public, consultants, and the CEC took to thoroughly examine the options. This is a far more robust effort than the single page of pros and cons on the matter included in the 2024 Transportation Fuels Assessment recently adopted by the commission.³⁴
3. Any serious engagement with industry to develop a Strategic Fuel Reserve – or other policy options to stabilize fuel supplies and mitigate gasoline price volatility – requires expertise and resources that the CEC does not currently have and is not likely to develop in the urgent time frame implied in the Governor’s public messaging and his pressure on the Legislature to find immediate solutions.

Finally, the CEC’s Petroleum Market Advisory Committee (PMAC) – which was formed in 2014 to advise the Commission on the transportation fuel supply system and fuels markets – considered the potential of a SFR among several policy options through a series of meetings from 2014 to 2017. In its September 13, 2017, meeting at which they delivered their final report (before the Committee was dissolved by order of the CEC) – the Committee concluded that a SFR would not be an appropriate response to the gasoline price volatility that followed the Torrance refinery event in 2015. Again, their final report concurred with conclusions previously reached by the CEC in 2003.³⁵

Therefore, in the interest of transparency and thoroughness, WSPA herein submits to the docket a full record of the previous work conducted by the commission, including presentations in workshops, transcripts of those workshops, reports by consultants, and reports published by the commission itself. WSPA finds that this full record is likely to contain substantive information useful to the public and demonstrates by example the kind of serious work that is required to develop and establish energy policies of such gravity and consequence.

The documents – submitted in supplemental packages to the docket – are outlined in the chronological record of the documentation in Appendix 1 (attached). To demonstrate the breadth and scope of the work previously published by the CEC, WSPA is also submitting to the docket the entire publicly available record of those documents in separate filings.

CONCLUSION

WSPA appreciates the opportunity to provide our comments on these issues of critical importance not only to us, but to all California citizens – and citizens of other states dependent on California’s fuel supply chain – who rely on affordable and reliable sources of transportation fuel every single day. These comments are based on WSPA’s review of the materials and statements at the workshop, and we reserve the right to amend these comments or add to the docket as necessary to reflect additional materials or changes in the CEC’s decisions.

³⁴ Gee, Quentin, and Aria Berliner and Alexander Wong. 2024. 2024 Transportation Fuels Assessment. California Energy Commission. Publication Number: CEC-200-2024-003-CMF. Adopted by unanimous vote of the Commission at their regular business meeting August 14, 2024.

³⁵ Borenstein, Severin, Kathleen Foote, Dave Hackett, Amy Jaffe, and James Sweeney. Petroleum Market Advisory Committee, 2017. Petroleum Market Advisory Committee Final Report, December 2014 to November 2016. California Energy Commission. Publication Number: CEC-200-2017-007. Available at <https://www.energy.ca.gov/data-reports/planning-and-forecasting/petroleum-market-advisory-committee>. (Last accessed 8/27/2024.)

Please do not hesitate to contact me with any additional questions.

Sincerely,



Catherine H. Reheis-Boyd
President and CEO

Appendix 1:

Chronological Sequence of Documents Produced 2002-2003 by CEC Under AB 2076 (Shelley, Chapter 936, Statutes of 2000) – RE Strategic Fuel Reserve Options for California

Attachments under separate cover submitted to the docket:

As outlined in Appendix 1, each of the documents enumerated will be submitted under separate cover to Docket 23-SB-02.

Appendix 1: Chronological Sequence of Documents Produced 2002-2003 by CEC Under AB 2017 (Shelley, Chapter 936, Statutes of 2000) – RE Strategic Fuel Reserve Options for California

Archived CEC Strategic Reserve Documents Page Website

https://web.archive.org/web/20061005153802/http://www.energy.ca.gov/strategic_reserve/documents/

California SFR March 13, 2002 Workshop – Stillwater Draft Report

Online March 11, 2002

https://web.archive.org/web/20060926185303/http://www.energy.ca.gov/reports/2002-03-11_600-02-004CR.PDF

File Name: 2002-03-11_600-02-004CR.pdf

115 pages

California SFR March 13, 2002 Workshop – Stillwater Presentation

Online March 13, 2002

https://web.archive.org/web/20061001041709/http://www.energy.ca.gov/strategic_reserve/documents/2002-03-13_STILLWATER_PRES.PDF

File Name: 2002-03-13_STILLWATER_PRES.pdf

101 Slides

California SFR March 13, 2002 Workshop Transcript

Online March 26, 2002

https://web.archive.org/web/20061001042146/http://www.energy.ca.gov/strategic_reserve/documents/2002-03-13_TRANSCRIPT.PDF

File Name: 2002-03-13_TRANSCRIPT.pdf

175 pages

California Strategic Fuels Reserve – Revised Contractor Report

Publication Number P600-02-017D

Online July 4, 2002

https://web.archive.org/web/20060926185106/http://www.energy.ca.gov/reports/2002-07-04_600-02-017D.PDF

File Name: 2002-07-04_600-02-017D.pdf

199 pages

Economic Benefits of Mitigating Refinery Disruptions – Consultant Report

Publication Number 600-02-018D.

Online July 8, 2002

https://web.archive.org/web/20060926184643/http://www.energy.ca.gov/reports/2002-07-08_600-02-018D.PDF

File Name: 2002-07-08_600-02-018D.pdf

114 Pages

April 2003 SFR Workshop – Agenda

https://web.archive.org/web/20061001041555/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-24-25_agenda.html

File Name: 2003-04-24-25_agenda.pdf

2 Pages

Permit Streamlining for Petroleum Product Storage – Draft Consultant Report

Publication Number P600-03-006D

April 2003

Online April 15, 2003

https://web.archive.org/web/20061001042021/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-15_600-03-006D.PDF

File Name: 2003-04-15_600-03-006D.pdf

77 Pages

Government Use of the California Gasoline Forward Market – Draft Consultant Report

Publication Number P600-03-007D

April 2003

Online April 21, 2003

https://web.archive.org/web/20061001041642/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-21_600-03-007D.PDF

File Name: 2003-04-21_600-03-007D.pdf

30 Pages

California Marine Petroleum Infrastructure – Draft Consultant Report

Publication Number P600-03-008D

April 2003

Online April 21, 2003

https://web.archive.org/web/20061001041611/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-21_600-03-008D.PDF

File Name: 2003-04-21_600-03-008D.pdf

13 Pages

April 2003 SFR Workshop – Panel Questions

Online April 21, 2003

https://web.archive.org/web/20061001042204/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-21_questions.html

File Name: 2003-04-21_questions.pdf

2 Pages

April 2003 SFR Workshop – April 24 Presentation: Government Use of the California Gasoline Forward Market - Jeffrey Williams & Gregg Haggquist

Online April 24, 2003

https://web.archive.org/web/20060926032620/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-24-25_presentations/2003-04-24_WILIAMS-HAGQUIST.PPT

File Name: 2003-04-24_WILIAMS-HAGQUIST.ppt

16 Slides

April 2003 SFR Workshop – April 24 Presentation: Permit Streamlining for Petroleum Product Storage – ICF Consulting

Online April 24, 2003

https://web.archive.org/web/20060926032620/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-24-25_presentations/2003-04-24_ICF.PPT

File Name: 2003-04-24_ICF.ppt

42 Slides

April 2003 SFR Workshop – April 24 Presentation: California Marine Petroleum Infrastructure – Stillwater Presentation

Online April 24, 2003

https://web.archive.org/web/20061001041456/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-24-25_presentations/2003-04-24_MARINE_PETROLEUM.PDF

File Name: 2003-04-24_MARINE_PETROLEUM.pdf

30 Slides

April 2003 SFR Workshop – April 24 Presentations: California Strategic Fuels Reserve – Stillwater Presentation

Online April 24, 2003

https://web.archive.org/web/20061001041955/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-24-25_presentations/2003-04-24_SFR_WORKSHOP.PDF

File Name: 2003-04-24_SFR_WORKSHOP.pdf

47 Slides

April 2003 SFR Workshop – April 24 Presentations: Issues Related to the Strategic Fuels Reserve – Tony Finizza Presentation

Online April 24, 2003

https://web.archive.org/web/20061001041645/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-24-25_presentations/2003-04-24_FINIZZA_TONY.PDF

File Name: 2003-04-24_FINIZZA_TONY.pdf

37 Slides

April 2003 SFR Workshop – April 25 Presentations: Selected Issues Related to Storage – Jeffrey Williams Presentation

Online April 25, 2003

https://web.archive.org/web/20060926032620/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-24-25_presentations/2003-04-25_WILLIAMS.PPT

File Name: 2003-04-25_WILLIAMS.ppt

27 Slides

April 2003 SFR Workshop – April 25 Presentations: The Economic Context for the Strategic Fuels Reserve – Philip K. Verleger Presentation

Online April 25, 2003

https://web.archive.org/web/20060926032620/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-24-25_presentations/2003-04-25_VERLEGER_PK.PPT

File Name: 2003-04-25_VERLEGER_PK.ppt

32 Slides

April 2003 SFR Workshop – April 25 Presentations: Comments on Strategic Fuels Reserve – Robert Hermes, Purvin & Gertz Presentation

Online April 25, 2003

https://web.archive.org/web/20060926032620/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-24-25_presentations/2003-04-25_HERMES.PPT

File Name: 2003-04-25_HERMES.ppt

11 Slides

April 2003 SFR Workshop – April 25 Presentations: Strategic Fuels Reserve: The Right Strategy? – Tony Hoff, ST Services Presentation

Online April 25, 2003

https://web.archive.org/web/20060926032620/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-24-25_presentations/2003-04-25_HOFF_TONY.PPT

File Name: 2003-04-25_HOFF_TONY.ppt

12 Slides

April 2003 SFR Workshop – April 24 Transcript

Online June 1, 2004

https://web.archive.org/web/20061001041739/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-24_TRANSCRIPT.PDF

File Name: 2003-04-24_TRANSCRIPT.pdf

340 Pages

April 2003 SFR Workshop – April 25 Transcript

Online June 1, 2004

https://web.archive.org/web/20061001042216/http://www.energy.ca.gov/strategic_reserve/documents/2003-04-25_TRANSCRIPT.PDF

File Name: 2003-04-25_TRANSCRIPT.pdf

282 Pages

Feasibility of a Strategic Fuels Reserve – Draft Committee Report

Publication Number P600-03-010D

July 2003

Online July 10, 2003

https://web.archive.org/web/20061001041634/http://www.energy.ca.gov/strategic_reserve/documents/2003-07-10_600-03-010D.PDF

File Name: 2003-07-10_600-03-010D.pdf

23 pages

Feasibility of a Strategic Fuels Reserve – Commission Report

Publication Number P600-03-013CR

July 2003

Online July 31, 2003

https://web.archive.org/web/20060926070356/http://www.energy.ca.gov/reports/2003-07-31_600-03-013.PDF

File Name: 2003-07-31_600-03-013.pdf

22 pages



Catherine H. Reheis-Boyd
President and CEO

August 29, 2024

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

Uploaded to Docket

Preliminary WSPA Comments on Gasoline Supply Reliability Workshop [Docket #23-SB-02]

On behalf of the Western States Petroleum Association (WSPA), I am providing these initial comments on the California Energy Commission (CEC) and the Division of Petroleum Market Oversight's (DPMO) August 22, 2024, Senate Bill (SB) X1-2 (2023) gasoline supply reliability workshop. We are providing preliminary comments given the Governor's last-minute legislation (SB 950), proposed on August 27, that would allow the State to impose binding minimum gasoline supply inventory rules on industry.

At the August 22 workshop, DPMO staff stated that, "Governor Newsom has now proposed legislation that would give CEC this authority, and we are excited to support his proposal"¹ while simultaneously acknowledging that "we are still working to understand exactly what capacity we have available here in California."² The CEC then made it appear that industry had somehow helped shape the concepts, "...because industry really understands how to do this, these complex operations, and have been... doing this for decades to be able to kind of navigate the system" and "also recognizing industry, who are collaboratively working with us, and the ability to kind of do that."³

This is simply not true. The proposed legislation was not made available prior to its public release on August 27, and WSPA does not believe that industry was able to shape any such framework or the now pending SB 950 – upon which the authority to do so would be based. Rather, WSPA has repeatedly raised warnings that have gone unheeded. We hope the following information will help inform policymaking discussions in the State's attempt to micromanage California's gasoline inventory supplies – which **is a recipe to raise everyday California fuel costs and potentially reduce fuel supplies to Arizona and Nevada, too – all while minimizing the existing safety-first priority.**

PROPOSALS COMPROMISE SAFE REFINERY TURNAROUNDS

The workshop proposal and SB 950 stray from industry's calls *to avoid compromising refinery safety at all costs*. Labor had raised similar concerns. Instead of fixing decades of poor policies that have driven supply down, these proposals hold industry's safety-first turnaround planning efforts hostage. SB 950 would give unlimited authority to an agency that lacks expertise in running a refinery, advised by a committee devoid of industry experts, to hold turnaround plans in response to price signals – not legally binding safety and compliance needs; this endangers workers and communities. There is nothing to prevent the CEC from interfering with any existing health and safety requirements, leaving refiners to manage profoundly conflicting regulations.

NO EVIDENCE SHOWN THAT MORE FUEL IN INVENTORY WOULD STOP PRICE SPIKES

- California's fuel supply chain already maintains substantial volumes of gasoline inventory. California has not come close to emptying its gasoline supplies; the lowest gasoline inventory recorded since 2011 was still over 425 million gallons (in 2023), representing over 12-days' worth of supply.
 - Mandatory stockpiles have been investigated by the CEC and shown to come with significant costs, which will likely and ultimately be borne by consumers.

¹ CEC August 22, 2024, Gasoline Supply Reliability Workshop at 46:29 mark: <https://www.energy.ca.gov/event/workshop/2024-08/workshop-gasoline-supply-reliability>

² CEC August 22, 2024, Gasoline Supply Reliability Workshop at 48:07 mark.

³ CEC August 22, 2024, Gasoline Supply Reliability Workshop at 57:34 mark.

- Minimum inventory levels would most likely create sustained gasoline price increases due to new tankage and working capital costs and would not reduce price spikes.
- Gasoline that could be supplied to California, Arizona, and Nevada consumers might need to be kept off the market, creating shortages and inflating costs for drivers today.
- **Removes industry and labor voices from proposed Expert Advisory Committee.** Excluding CalOSHA and any recent industry consultants means the framework lacks any real-world expert advice and input.
- **Price volatility can happen regardless of how much gasoline is in inventory.** Massive additional storage cannot correct this problem due to permitting and operational cost constraints. What *could* help stabilize the imbalance is having sufficient local fuel manufacturing capacity, connectivity to other regional markets, and fewer policy restrictions on imports.
 - While having additional fuel inventories may be useful to address *energy security* concerns, it is not a *price-control* mechanism. Inventory safeguards against the possibility of running out of fuel until additional supplies arrive or local production resumes. The resupply market works because higher prices attract additional gasoline supplies to balance an undersupplied market.
 - Refiners may be forced to hold inventory back as they await State authorization.
 - Once the CEC establishes a “Days of Supply” threshold and mechanism to release inventory, market trading behavior may result to drive prices up in response to the lack of market liquidity.
 - No analysis has been done on whether a minimum inventory requirement may actually *decrease* domestic gasoline production given that available onsite storage is needed to efficiently balance blending, testing and certification, and marketing activities.
- **DPMO reference to international case studies is not representative of California’s unique fuel market.** Any examples of policy successes in other regions do not necessarily account for California’s unique and extraordinarily complex transportation fuel market.
 - California is a fuel island. This was acknowledged in the Transportation Fuels Assessment.⁴
 - California is geographically large and topographically complex
 - Neighboring state populations and economic centers are far from California’s
 - There are few supply- or demand-side substitution opportunities
 - California has a unique regime of environmental policies
 - A minimum inventory requirement does not consider California’s storage constraints
 - A minimum inventory requirement also ignores challenges with importing fuel from other regions, due to California’s unique geography and existing policies (e.g., CARBOB blend requirements, Ocean Going At-Berth Regulation, disproportionate Federal Jones Act harms).
 - There are especially significant differences with Australia.⁵ That nation – which depends on imports for *two-thirds* of their total production demand – provided approximately \$1.8 billion in funding to keep their only two remaining refineries operational until 2027, provides funds for refinery upgrades, and makes certain production payments.
- **CEC and DPMO did not address unintended consequences of minimum inventories.** Further work must be done to determine if any such requirement is feasible in California.
 - What will be the costs to consumers and other unintended consequences?
 - Where is the transparency from CEC and DPMO on these economic costs?
 - Neither CEC nor DPMO appear to have any certainty to confirm that mandated thresholds will prevent price spikes in California’s market as identified in the Transportation Fuels Assessment:
 - “it may artificially create shortages in downstream markets”
 - “[it] could increase average prices for refiners to maintain additional storage”
 - “market equilibrium may likely emerge at a higher price level”
 - “potential exists for the state to be criticized for requiring refiners to withhold fuel from the market”

⁴ CEC Transportation Fuels Assessment Report: <https://www.energy.ca.gov/publications/2024/transportation-fuels-assessment-policy-options-reliable-supply-affordable-and>

⁵ See refining section at <https://www.eia.gov/international/analysis/country/AUS>

- No analysis has been done on how refiners would store increased supply or be able to increase imports under the criteria pollutant summer CARBOB blend, Ocean Going At-Berth Regulation, and Federal Jones Act constraints.
- No consideration has been given to the likely competitive advantage provided by a minimum inventory requirement to foreign importers over domestic refiners, or how such an advantage could be alleviated.
- Likewise, there are other, non-refiner inventory holders in the State, yet no consideration has been given to requiring a minimum inventory across *all* inventory holders in the State.
- Maintenance cannot be determined based on economic interests alone, and under no circumstances should such interests prevail over or otherwise compromise safety or environmental needs – needs that are more appropriately understood and addressed by CalOSHA, industry, and labor.

It is especially concerning that important policy decisions would be made with minimal, if any, acknowledgement and ownership about potential cost impacts to end consumers. With no economic impact accountability – and lack of transparency at the CEC and DPMO– there is no line item to show how this proposal could increase consumer costs. The CEC and DPMO have the means to hide costs under refiners' margin data and continue to blame issues on industry. California's regulatory framework and logistical constraints already make it the most expensive refining environment in the nation. Even more regulation will only disincentivize investments and increase operating hurdles. This could lead to more refinery shutdowns, supply reductions, and even higher prices. This is only compounded when SB 950 would impose penalties of up to \$1 million per day. This is not a sign of being collaborative with the industry that produces fuel California demands. It is wholly punitive – not to mention unlawful.

Sincerely,



Catherine H. Reheis-Boyd
President and CEO



Catherine Reheis-Boyd

President and CEO

Western States Petroleum Association

May 17, 2024

California Energy Commission

Docket Unit, MS-4

Docket No. 23-SB-02

715 P Street

Sacramento, California 95814

Uploaded to CEC Docket #23-SB-02

RE: SB X1-2 Draft Transportation Fuels Assessment

Thank you for the opportunity to comment on the California Energy Commission's (CEC) "Draft Transportation Fuels Assessment" (CEC-200-2024-003-D), published on April 12, 2024, and the focus of the CEC workshop on May 3, 2024.

WSPA is a non-profit trade association representing companies that import and export, explore, produce, refine, transport, and market petroleum, petroleum products, natural gas, and other energy supplies in California and four other western states, and has been an active participant in transportation fuels planning issues for over 30 years.

The CEC's Draft Transportation Fuels Assessment is a reasonable initial draft and recognizes California's fundamental structural gasoline supply challenges – but much work is left to be done.

With the Draft Transportation Fuels Assessment (herein referred to as Draft), the CEC, working with the California Air Resources Board (CARB), has provided the public with a useful primer on the California liquid transportation fuels system, focused primarily on gasoline. The description of the realities of the California transportation fuel system makes adequate reference to both the structure and the structural risks associated with refining and distributing liquid fuels in the State.

In the Draft's Executive Summary, the CEC acknowledges the basic reality of California's gasoline supply dynamics: California's constrained local refining capacity, limited number of available local suppliers, regionalized supply chains, reliance on marine transportation of fuel supplies, and stringent fuel specification requirements combine to make it a "fuel island" isolated from the rest of the nation's transportation fuels market. The limited number of spot market gasoline transactions in California also give the local spot market an outsized influence on California prices that is not seen elsewhere in the country. At the same time, the CEC emphasizes that "gasoline remains California's dominant transportation fuel" and demand will remain robust well beyond 2035. As the CEC correctly points out, "[t]hese vehicles will need fuel to operate, and many of the vehicles may be owned by lower income individuals and families, making it even more compelling to identify ways to ensure an affordable, reliable, equitable, and safe supply."¹

The first chapter describes the California "fuel landscape" and briefly dwells on market dynamics,

¹ Draft, p. ES-1

including price spikes and potential causes of disruption to the system. It emphasizes the mandate of Senate Bill (SB) X1-2 (2023) to the State agencies and explains how the CEC and CARB addressed this mandate in the Draft.

The chapter also focuses on anticipated changes to demand for fuels in the near future, and expectations of how the market will respond to declining demand. The declines in demand, according to the analysis, will be due in large part to the eventual electrification of the light duty vehicle fleet and anticipated reductions in vehicle miles traveled (VMTs) over time by gasoline engine powered vehicles. The chapter further explores pathways by which refiners might attempt to keep pace with declining demand and identifies “how the state might intervene to assure an affordable, reliable, equitable, and safe supply of gasoline for consumers who need it.”²

The second chapter undertakes a high-level “primer on petroleum” including crude oil sources and refining basics. The narrative attempts to give the public a very basic education on blendstocks, California gasoline requirements (such as California Reformulated Blendstocks for Oxygenate Blending (CARBOB)), and briefly explains the differences between summer and winter blends, based on Reid Vapor Pressure (RVP). The chapter concludes with another high-level discussion of the distribution system from refinery, to spot market, to retail, including brief discussions of spot markets and the differences between branded and unbranded gasoline sales at the pump.

Finally, a third chapter presents in very brief form about a dozen “policy options” for future consideration by the CEC for meeting the mandates in SB X1-2 to ensure market stability and benefits to consumers.

The Draft fails to address critical elements of the supply chain.

SB X1-2 directs the CEC to submit an assessment to the Legislature and to the Governor that “[i]dentifies methods to ensure a reliable supply of affordable and safe transportation fuels in California.”³ The statute further calls for “the evaluation of oil and gas extraction and refining”⁴, but this Draft only covers the supply of transportation fuels, primarily gasoline. A proper transportation fuels assessment must look at all current fuels, e.g., gasoline, diesel (petroleum and renewable), jet (petroleum and SAF), LPG, natural gas (CNG, LNG, and RNG), hydrogen (combustion and fuel cell), and electricity. Such an assessment should also review the entire value chain for each transportation fuel. For example, petroleum fuels segments would include upstream, pipelines, marine infrastructure, storage terminals, refineries, distribution, and retail service station networks, while a review of the electricity value chain would include generation, the grid (transmission and distribution), charging networks (industrial, commercial, single-family, multi-family), and zero-emission vehicle (ZEV) availability.

WSPA notes that the CEC had the resources in hand to include assessments for diesel and aviation fuel by using the same outlooks used for their gasoline assessment, as is reflected in the data presented in the 2023 Independent Energy Policy Report (IEPR).⁵ Each of these fuel sources

² Draft, page 17.

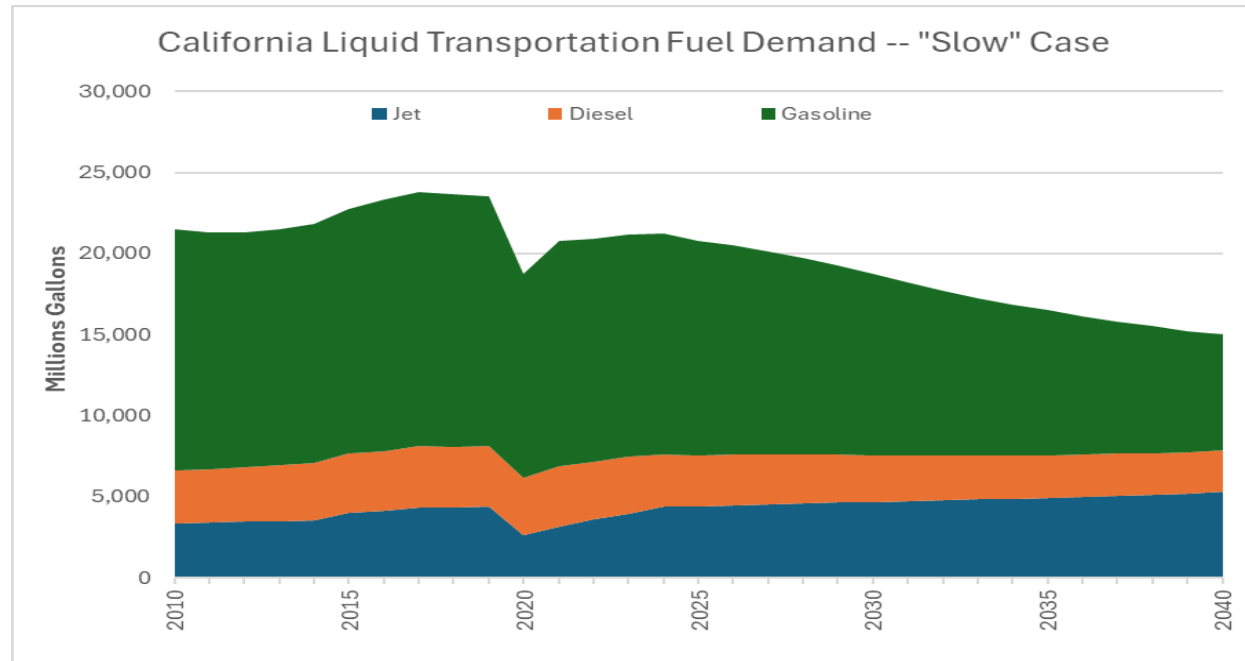
³ Cal. Pub. Res. Code (PRC) § 25371(a)(2)

⁴ PRC § 25371(a)(2)

⁵ Bailey, Stephanie, Jennifer Campagna, Mathew Cooper, Quentin Gee, Heidi Javanbakht, and Ben Wender. 2023. 2023 Integrated Energy Policy Report. California Energy Commission.

were analyzed under “slow”, “fast”, and “rapid” scenarios, in which key assumptions about declines in demand were made based on the CEC’s demand modeling. To remind the CEC of its earlier published work, we include graphs from the 2023 IEPR report and from the modeling data submitted as supplemental to the CARB 2022 Scoping Plan Update.⁶

Figure 1 - CA Liquid Transportation Fuel Demand - "Slow Case"



Publication Number: CEC-100-2023-001-CMF.

⁶ [2023 Statewide Fuel Demand Forecast - CA Energy Planning | California Energy Commission](https://www.energy.ca.gov/media/9574), last accessed May 14, 2024 at <https://www.energy.ca.gov/media/9574>. And from the Scoping Plan: [2022-sp-PATHWAYS-data-E3.xlsx \(live.com\)](#). Note: We concur with CEC’s aviation fuel assumption that it has the same demand profile as the IEPR baseline case.

Figure 2 - "Fast" = 2023 IEPR AATE3 Case

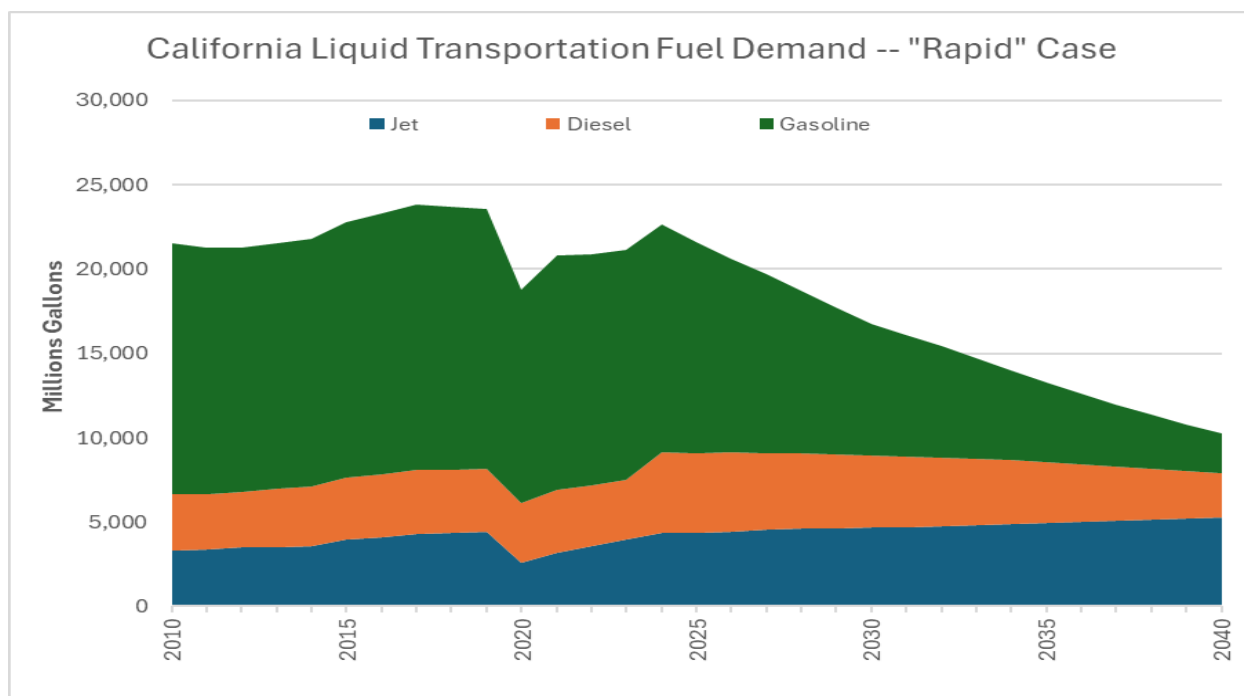
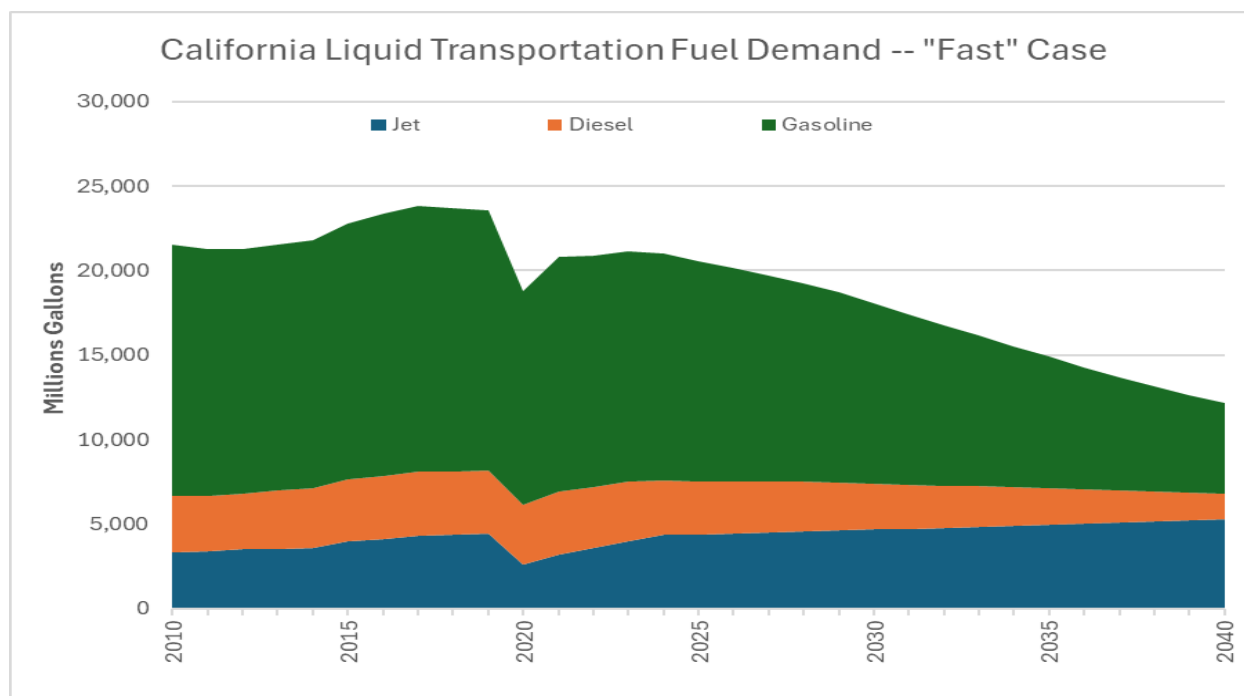


Figure 3 - "Rapid" = 2022 CARB Scoping Plan

The Draft is explicitly meant to underpin the CEC's and CARB's obligation under SB X1-2 to formulate a Transportation Fuels Transition Plan encompassing California's full range of transportation fuels and potential future demand scenarios for each. However, this Draft presents

just one preferred scenario (i.e., varying degrees of sustained declining gasoline demand) rather than evaluating other possible scenarios. The scenario in this Draft implicitly assumes that everything works as planned in terms of policy implementation and required investments. That is not a proper transportation fuels assessment that leaves the State agencies prepared to develop a robust transition plan and strategy for the transportation sector.

An assessment evaluating the status of the value chain of all transportation fuels as described above (and required by statute) would provide the State agencies with a range of fuel scenarios, which would enable them to develop a more robust transition plan. There are several potential demand pathways the various fuel supply chains could follow in the future, and not all of them involve perfect implementation of the State's current policies. One cannot simply assume that gasoline demand will fall off precipitously (as do the three scenarios above), nor that the gasoline (or for that matter, diesel or jet fuel) supply chain will smoothly adapt to the CEC and CARB's predicted declining market. ***A more robust assessment would explore several "failure points" (e.g., meeting a significant reduction in Vehicle Miles Traveled) or places in the system that are lacking resilience (e.g., port infrastructure or electric grid build-out), and would model scenarios that take into account those potential failures.*** The only vulnerabilities that are explored in this Draft are those related to the spot market and the vaguely defined potential for "manipulation", with several other key vulnerable elements left unexplored.

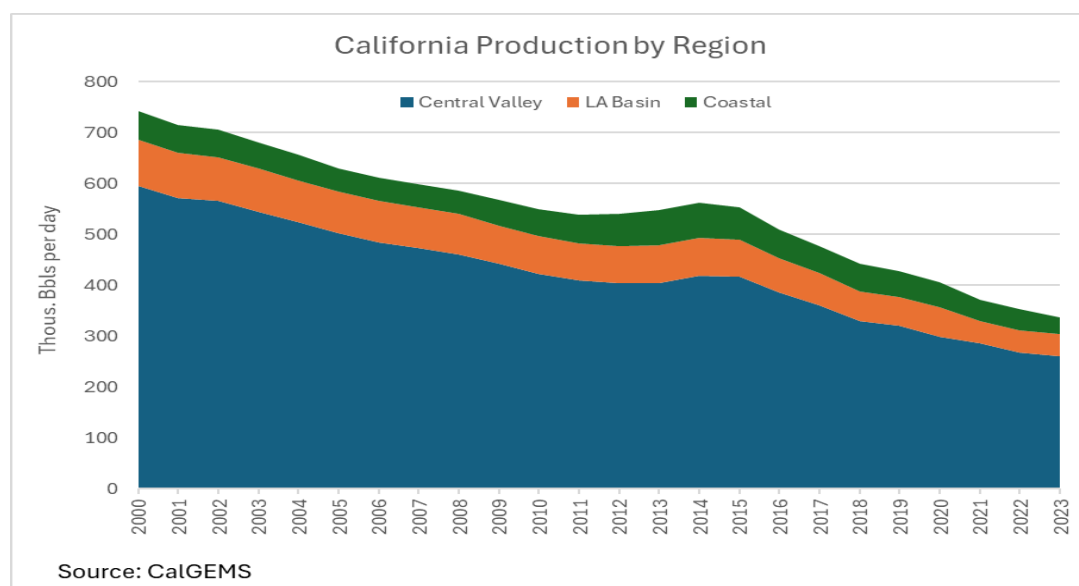
What is missing from the current Draft?

Crude Oil Production in California

SB X1-2 requires the first assessment to analyze the upstream (i.e., oil and gas extraction) and refining segments of the petroleum industry.⁷ California has historically produced a substantial portion of the total amount of crude oil that is locally processed and refined in the State, predominantly for consumption in California, but also to meet supply obligations in other states and markets.

⁷ PRC § 25371(a)(2)

Figure 4 - Crude Oil Produced in California by Region



California crude oil production has declined at an average annual rate of 3.4% since 2000. The decline rate has been accelerating and was close to 14% in the second half of 2023. The decline in California domestic crude oil production has more to do with difficulties in obtaining permits to drill than lack of oil reserves. As of December 2022, California held almost 1.5 billion barrels of proved and probable crude oil reserves, which ranked it sixth among the 50 states.⁸ The observable decline in production is not due to resource availability or the “natural decline” in production often cited in State reports. The actual decline in domestic oil production is due to highly constraining policies and a permitting environment with increasing barriers to oil and gas production. This is a more aggressive decline rate than was modeled in CARB’s 2022 Scoping Plan Update.⁹ Constraints on domestic production have put substantial pressure on other parts of the system, including pipelines that transport crude oil to key refining locations in the State.

Producers and Permitting

WSPA does not see any evidence in the Draft that information about production conditions or constraints was sought from domestic producers of California’s crude oil. This is worrisome given that SB X1-2 explicitly requires the State agencies to “consult with the state’s fuel producers and refiners”¹⁰ in preparing the Transportation Fuels Transition Plan, for which this Assessment is an

⁸ <https://www.statista.com/statistics/790790/us-oil-reserves-by-state/>.

⁹ CARB 2022. 2022 Scoping Plan Update. pp. 101-5. While the 2022 Scoping Plan Update does not specifically “model” future declines in oil production, it assumes that production will decline at an average annual rate of approximately 2%, based on a UC Santa Barbara study commissioned by the State (<https://zenodo.org/records/4707966>). The 2022 Scoping Plan Update also notes that shifting domestic production volumes to marine imports may also have GHG leakage effects, and “could require more infrastructure to store and move larger volumes of crude oil to the refineries in state” (p. 104).

¹⁰ SB X1-2, Section 25371.3.

essential foundation. Had the CEC and CARB sufficiently explored these key upstream parts of the fuel supply chain, they would have discovered what the industry knows quite well: California geographically has some of the largest and most accessible oil reserves in the world. California producers simply are not permitted to get to them due to State impediments.

It is well understood on the production side of the industry that development of reserves requires a program of continuous evaluation, investment, and development. It is almost never the case that a substantial reserve is developed in one phase and depleted through the first initial tranche of investment. Permits for drilling, whether for exploration or production, are an essential requirement of a properly functioning production sector. However, in the California case, new permits for drilling have been severely curtailed and many producers have been forced in the short term to rely on existing investments to be economically viable. This is only a short-term adaptive solution; extended denial of access to the resource means that operators must make hard decisions about the economic viability of their production enterprises.

Therefore, lack of new drilling permits is forcing producers to rely predominantly on existing permitted facilities to maintain production. To date, as of May 2024, the primary permitting agency responsible for production-oriented permitting, CalGEM, has approved only about 300 production-related permits.¹¹ Compared to “normal” periods of business, this level of performance is less than 20% of what producers in California have long recognized is needed to meet the requirements of a properly functioning permitting process required for production operations to in turn meet demand for crude oil in the state. A proper fuels assessment would go as far upstream as necessary to assess the availability of crude oil assets and the cost constraints on acquisition of the 1.4 million barrels per day required to supply the State’s refinery processing demands.

¹¹ CalGEM approves more than 18 different types of permits for subsurface activities, including injection wells, monitoring wells, testing wells, and other wells related to the overall operations of a producer. However, only five types directly relate to production of crude oil: new drills, reworks, sidetracks, well stimulation (fracking), and deepening. These five permit types have been stalled out at CalGEM since the Newsom administration began giving direction to CalGEM in 2019 to limit or halt the approval of permits for all manner of production activities, including well stimulation and high-pressure cycling steaming. Not only has permit approval declined precipitously, but the average time between submission and approval has increased over seven-fold in the five years since 2019. (Source: WSPA analysis submitted to CalGEM through various regulatory processes).

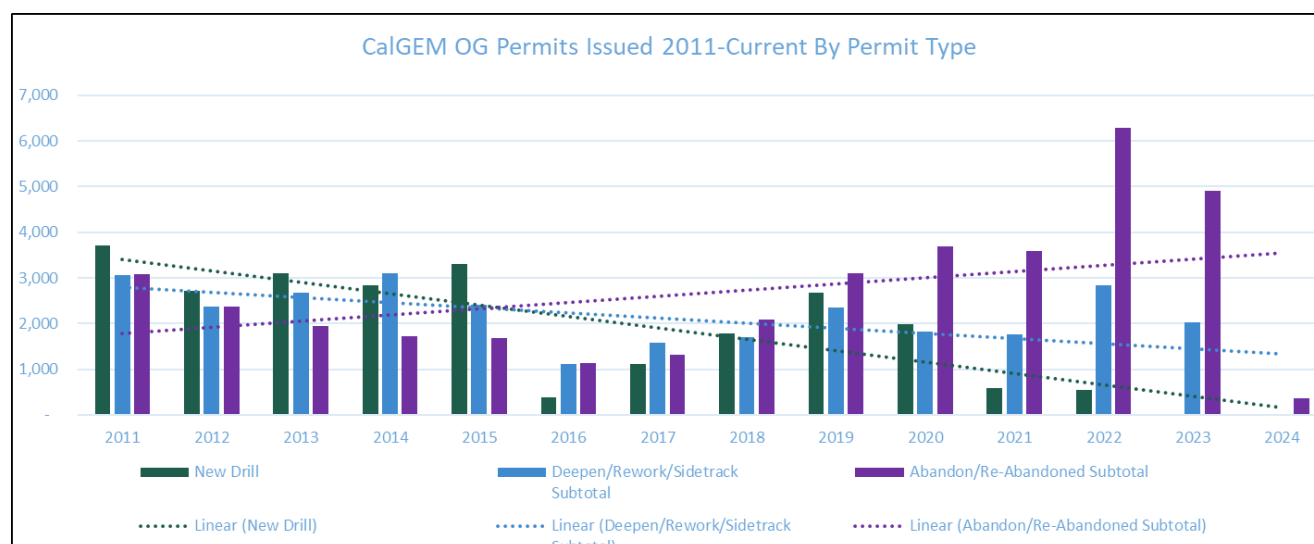
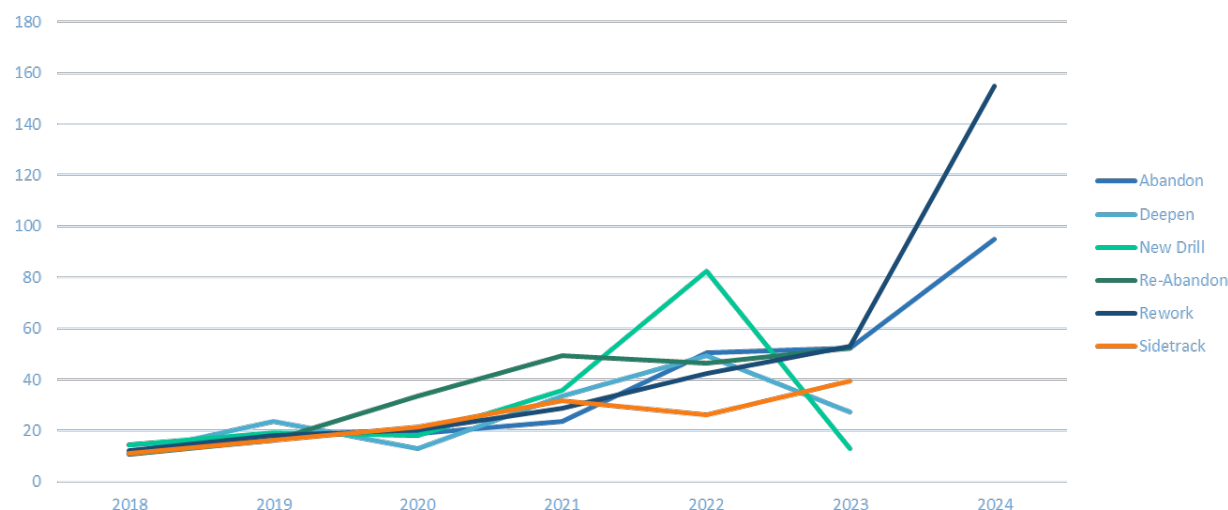
Figure 5 - CalGEM Oil and Gas Permits 2011-2024¹²

Figure 5 shows the decline in production-related permits approved since 2011. Historically, the agency has approved an average of 8,000-10,000 permits each year. Since 2019, the number of production-related permits has dropped to insignificance. The shift from production-related permitting to plugging and abandonment permits is dramatic, beginning with the upturn in global oil prices in 2017-18 and the increasingly politicized focus on shutting down and shutting-in production in California.

As a further impediment, the time that CalGEM takes to approve a production-related permit has expanded by over seven times in a mere five years, from an average of about 12 days to more than 185 days (see Figure 6, below). These are conditions that severely impact production in the state and explain a great deal of the decline in crude oil volume produced domestically.

¹² CalGEM WellSTAR data; Catalyst Environmental Solutions analysis, *unpub. reports*.

Figure 6 - Time to permit approval of oil and gas permits at CalGEM



Crude Oil Pipeline Capacities

As the Draft notes, “Kinder Morgan operates the only common carrier pipeline network within California.”¹³ However, the Draft only discusses the pipelines carrying refined product. Crude oil pipelines are a major component of California’s domestic refining supply and are not even mentioned in the Draft.

Pipeline entities play a key role in the supply chain that is critical to moving crude oil from domestic sources to the two regions (Los Angeles basin and San Francisco Bay Area) where domestic crude oil supply is essential to refinery performance. Were the CEC and/or CARB to have consulted the operators of these pipelines, they would have learned that this part of the supply chain is running at critically low volumes.

Figure 7 shows the alignment of several critical pipelines for crude oil and indicates their current design capacities. These design capacities were engineered with long-term production in view and took into account the reserves and likely future demand for transportation from oil fields to refineries dating from the 1980s onward.¹⁴

¹³ Draft, P. 31

¹⁴ Sources: Analysis of key company and government public websites. Turner Mason & Company, *unpub. analysis*.

Figure 7 - Location, alignment and carrying capacity of key crude oil pipeline infrastructure



Each crude oil producing area is connected to a given refining center by multiple pipelines of various diameters (capacities). While this can be good for redundancy, in the event of an interruption, it also creates challenges in keeping the system operational as local oil production continues to decline. A pipeline must maintain some minimum volume so the crude oil will continue to move. This minimum throughput volume is a function of the pipeline's design (e.g., diameter, length), operating conditions (e.g., pressure, temperature), geography (e.g., elevation changes), the age of the pipeline, the regulatory environment, and the characteristics of the crude oil itself

(e.g., gravity, viscosity). The vast majority of crude oil produced in California, and in the San Joaquin Valley in particular, is heavy oil (high specific gravity) and therefore requires lift and heating specifications to move the crude oil over long distances.

It is critical to understand that California's crude oil pipeline infrastructure was designed to support decades of growing demand, both in California and the other western states. They are also key elements of the national security infrastructure on the west coast, supporting strategic U.S. interests in the Pacific.

Marine Terminal Throughput Capacity

The Draft, and indeed much of the California policy direction on fuel supplies, appears to assume that reductions in domestic crude oil production can be easily compensated for by increasing imports of both crude oil and refined products. ***However, the Draft fails to adequately address the actual throughput capacity of the marine terminals that are assumed to be required by this substantial increase in imports, and also fails to address regulatory constraints that CARB has imposed on tanker vessel calls at California ports starting in 2025.*** We further elaborate on some of the impacts of the Ocean-Going At-Berth Regulation (At-Berth Regulation) in greater detail below.

Further, an adequate assessment of the realities of refining crude oil in the State, along with a proper assessment of the displacement of Ultra-Low Sulfur Diesel (ULSD) with Renewable Diesel (RD), would clearly show that the same marine terminals that the CEC and CARB assume will accommodate transfers of millions of barrels of refined fuel will already be busy hosting ever-increasing volumes of imported crude oil from foreign countries.

This Draft does not present a realistic assessment of these factors, nor does it examine the critical pinch point in the system that marine terminals represent, which could have major impacts on supplies and prices. The CEC and CARB must assess marine terminal constraints if they are to determine if or how additional refined fuel volume flows will be accommodated by existing marine terminals. There are four incremental marine terminal throughput flows that should be properly analyzed, critically including a sharp eye toward impacts of constraining policies such as the At-Berth Regulation:

1. Additional crude oil receipts to compensate for the continued and accelerated decline of in-state oil production.
2. ULSD export volume increases as a consequence of increasing RD use in California. This also includes RD movements from Northern CA and other domestic and international renewable fuels facilities into Southern CA (i.e., the Ports of Los Angeles and Long Beach).
3. Growth in biorefinery feedstock receipts to supply renewable diesel and sustainable aviation production facilities – other than rail imports that supply biofuel feedstocks directly to those biorefineries.
4. Changes in product flows associated with the likely closure of a refinery – such as the need to import gasoline and other refined products to maintain contractual supply obligations if a refiner elects to transition the facility to a fuel terminal.

Other Marine Logistical Constraints

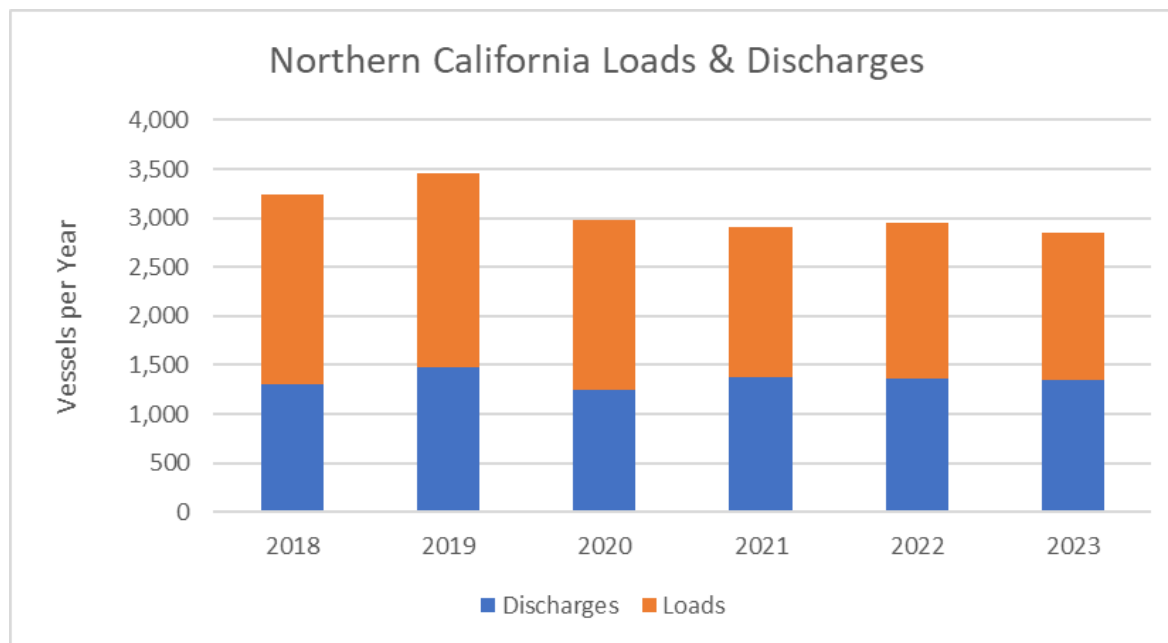
Vessel Traffic

The State Lands Commission (SLC) collects data on vessel movements (both barge and ship) for each marine facility in California. The CEC and CARB can analyze these data to assess how trends in California crude oil production and transportation fuel demand are impacting ship traffic.¹⁵ Under its recently adopted emergency regulation,¹⁶ the CEC will now be collecting this data as well. For example, Figure 8 below shows total vessel movements for loads (outbound) or discharges (inbound) cargoes in the North (greater San Francisco Bay Area).

A vessel “load” occurs when petroleum products are transferred from onshore storage tanks to compartments aboard the product tanker or barge. Some of these transfers can include multiple types of refined products or feedstocks segregated by compartments. Loaded vessels will then depart a marine terminal as an export (to foreign destinations or the Pacific Northwest) or intrastate movement to another California terminal.

A vessel “discharge” occurs when a petroleum product or refinery feedstock is transferred from the marine vessel to onshore tankage. The vessel’s cargo may have originated from outside the state, another California marine terminal, or in some cases from a ship-to-ship transfer. Details are contained in the SLC datasets (e.g., if the vessel is a barge or ship and whether the ship is an international or Jones Act tanker). Since 2018, there has been a decline in the number of loads, but the number of discharges has remained fairly constant.

Figure 8 - Northern California Loads and Discharges (Vessels per Year)



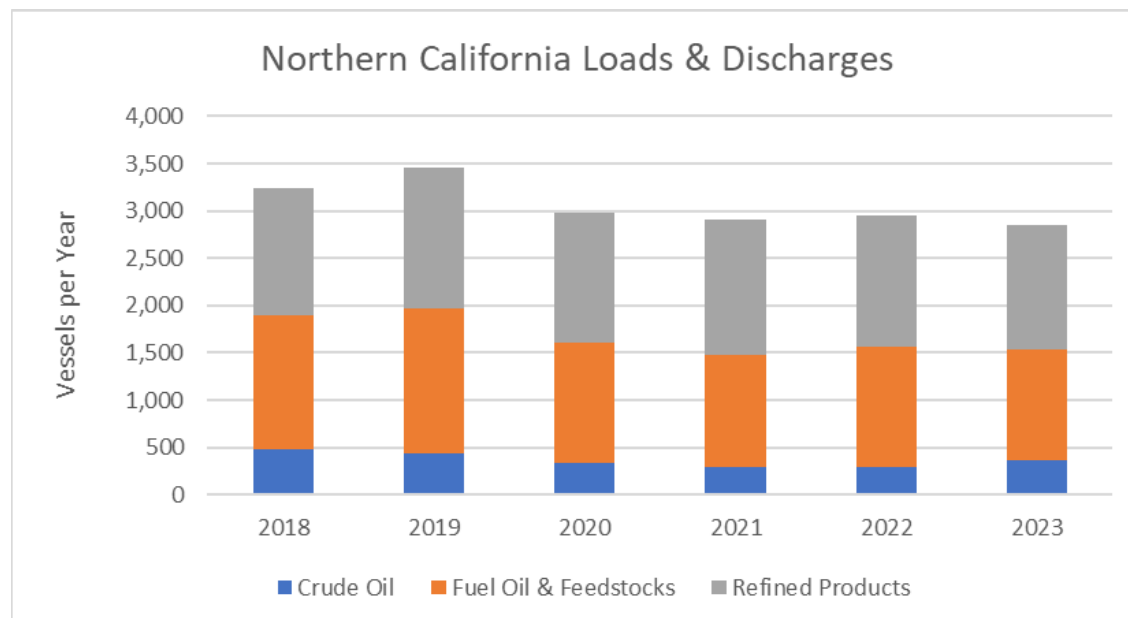
These data can also show what materials are moving across the docks. Figure 9 shows vessel movements in the North (i.e., San Francisco Bay Area) for crude oil, fuel oil and feedstocks, and refined products that consist of traditional transportation fuels (gasoline, diesel, and jet fuel) and

¹⁵ California State Lands Commission and Turner Mason & Company analysis, 2024.

¹⁶ Docket No. 23-OIR-03 under Resolution No. 24-0508-07, “General Rulemaking Proceeding for Developing Regulations, Guidelines, and Policies for Implementing SB X1-2 and SB 1322.”

renewable fuels (renewable diesel and sustainable aviation fuel).

Figure 9 - Northern California Loads and Discharges – Crudes, Fuels and Oil Feedstocks, & Refined Products



Most of the recent decline in loadings seen in Figure 8 has been fuel oil ships seen in Figure 9. What these data do not show are potential constraints to the marine logistics system. Those constraints can come in two forms: available dock space and regulatory constraints of the At-Berth Regulation, both of which we discuss below.

Dock space

Refineries have limited berths (some have only one) and can be limited by the length of the ship or its draft.¹⁷ The growth in containerized freight imports in the Ports of Los Angeles and Long Beach impacts the traffic patterns within the port and creates constraints on tanker movements within the port. All of these factors make the scheduling of ship traffic critical and increasingly more difficult as vessel traffic grows. The CEC and CARB should analyze the capacity for energy-related vessel traffic in ports in both the North and South in order to fully test its hypothesis that more vessels and port capacity can be made available to replace California's domestically produced crude oil.

- Regulations limiting the number of vessel calls and ships at dock.
- Another limitation to vessel traffic is whether the tanker originated from a domestic port, which requires it to be a Jones Act-flagged tanker. There are only 55 of these U.S.-flagged vessels and eight of them are dedicated to moving renewable diesel from the Gulf Coast to California.¹⁸ The market for Jones Act ships is extremely tight, especially for spot charters.¹⁹ Spot charter availability is critical to the CEC's transportation fuels assessment because it is the charter class used if ships need to be quickly contracted in the event of a

¹⁷ Draft is the distance from the waterline to the bottom or keel of the ship.

¹⁸ [Survey: Jones Act rates get renewable diesel boost | Latest Market News \(argusmedia.com\)](https://www.argusmedia.com/news/2023/05/16/survey-jones-act-rates-get-renewable-diesel-boost/)

¹⁹ A "spot charter" is a shipping industry term for one-off or short term duration shipping contracts. See, for example, <https://www.scorpiotankers.com/glossary/spot-charter/>. Last Accessed: May 16, 2024.

supply outage in California.

At-Berth Regulation

CARB's At-Berth Regulation will impose new requirements on marine terminal operations. It requires operators to reduce emissions from crude oil and product tankers by capturing stack emissions or by electrification of the marine vessel discharge operations by the use of shore-based power. Absent the ability to implement one of these options, most California tankers will be severely limited in the number of visits they will be legally permitted to make to California ports and marine terminals. At this time, the vast majority of the California tanker fleet, and the California ports and terminals that serve them, are not equipped to utilize shore power. Moreover, no stack emissions capture system has yet been developed, tested, or approved for use by tankers, and vendors will not be ready to provide such a system for many years to come.

WSPA submitted comments to the CEC on 4/25/2024 indicating our concerns about the impacts of implementing the new At-Berth regulations.²⁰ In that letter, we indicated that "CEC should take note that the California Air Resources Board's (CARB) recent amendments to the Ocean-Going Vessels At-Berth Regulation (At-Berth Regulation) will serve to further constrain refined products, renewable fuels, and crude oil supply into California. By requiring petroleum tankers to use emissions capture or shore power technology not yet developed, tested, or implemented on the vast majority of California's tanker fleet or tanker terminals, CARB's At-Berth Regulation will force many tankers to reduce visits to California ports starting in 2025 to meet the At-Berth Regulation's requirements. This is another example of a State policy that will further restrict the availability of gasoline in the State of California and will limit the State's ability to mitigate in-state shortages of gasoline supply with marine imports. And it is another policy that will likely hurt California consumers rather than helping them."

Given these concerns, we would urge the CEC and CARB to consider the following issues as the agencies seek to harmonize any future policy proposals with existing regulations that are already in place and will have near-future impacts that may conflict or exacerbate new or proposed policies.

- Marine terminal operators (refiners and port authorities) are unable to provide an accurate critical-path compliance schedule for the At-Berth Regulation, due to the inadequate number of commercially viable vendors of barge-mounted emission capture technologies that could be potentially modified and approved for use for the California tanker fleet.
- Similarly, shore power is unavailable for the vast majority of the California tanker fleet, as most tankers, ports, and terminals do not have appropriate shore power infrastructure for tanker use. Even if that hurdle could be overcome, the State grid currently lacks the electrical generation, transmission, and distribution capacity to electrify all vessels and terminals covered by the At-Berth Regulation.
- These realities put at risk the obligated parties' ability to comply with the At-Berth Regulation's deadline of January 1, 2025 for vessels visiting the Ports of Los Angeles and

²⁰ <https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessels-berth-regulation>; WSPA comments may be found at <https://content.govdelivery.com/accounts/CNRA/bulletins/398c8a0>, Docket 23-OIIP-01, Western States Petroleum Association Comments - WSPA Comments on April 11 SB X1-2 Margin Cap and Penalty

Long Beach, and further unlikely to be able to meet the January 1, 2027 compliance deadline for vessels visiting any other California marine terminal.

- Absent an extension of the current compliance deadline schedule, there is a risk that some marine terminal operators will have to significantly reduce the number of product tanker port calls to reach the exemption level of 20 per year until the required control technology is developed and implemented.
- This complex of challenges will create yet another constraint on refineries' marine throughput capacity for crude oil and products.

A Potentially Critical Scenario

According to CalGEM, California's domestic crude oil production averaged 338 Thousand Barrels per Day (TBD) in 2023. The U.S. Energy Information Administration (EIA) estimates that production fell to 293 TBD by February 2024. Meanwhile, California refiners processed an average of about 1,430 TBD of crude oil during 2023. Thus, in-state production in 2023 accounted for 25 percent of California's total crude oil feedstock needs.²¹ However, the recent continued decline for the month of February 2024 means that in-state oil production represented approximately 20% of California's total refining needs. California in-state oil production has been declining at an overall average annual rate of about 10% since 2015, but it is important to note that this rate of decline has been accelerating. Measured over the last four years, the average annual drop in production has been about 14%. No matter how the rate of decline is measured, it is still far steeper than any of the CEC or CARB planning and strategy documents project. For example, as mentioned above, the 2022 CARB Scoping Plan Update projects that annual California domestic oil production will decline at a gradual rate of approximately 2% per year, consistent with their demand projections. Clearly, reality has gone beyond the modeling and must be accounted for.

This higher-than-predicted rate of decline in California oil production is challenging some pipelines to maintain minimum flow rates. As mentioned earlier, pipelines must maintain some minimum throughput to remain commercially and operationally viable. When a pipeline is forced to close, the production it carried must find another pipeline, or another mode of transportation, such as rail or truck. The alternative is to cease production altogether in the oil fields that require pipelines to move crude oil to refineries. The Central Valley has multiple pipelines running north and south. While each corridor has a number of trunk pipeline options and destinations, declining production makes it difficult to keep all lines at minimum throughput. The risk of closure could be higher for northbound lines leaving the Central Valley because these pipelines tend to have larger capacity and must negotiate undulating terrain, with intermittent pump stations to boost flow.

The decline in California crude oil production is a challenge for California refiners as well. California crude oil has fallen to 25% of refinery crude oil supply, down from 50% in 2000, and 62% in the 1980s. In the future, if a pipeline shuts down and a refinery cannot find an alternative pipeline for California crude oil, it must source crude oil by another means, such as rail or ship. No California refineries have crude oil unit train²² transfer facilities, so they must rely on marine infrastructure to replace diminishing availability of California crude oil. Replacing California crude oil with waterborne sources increases vessel traffic, ship channel congestion, and emissions – and

²¹ <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCRFPCA2&f=M>

²² A unit train for crude oil consists of about 100 cars containing about 70k barrels of crude oil.

presents regulatory challenges, as discussed above.

Some refineries have limited access to marine facilities. If a refinery has only one berth, the refinery must choose between bringing in crude oil, refined product blendstocks, or finished products. They must also consider potentially exporting other products. For example, a refiner may need to increase waterborne crude oil imports and exports of fossil-based diesel (displaced by renewable diesel) and would face increasingly constrained marine terminal throughput with limited dock capacity. A refinery in such a scenario would be faced with serious decisions about whether to remain in business in California.

Depending on the size of the dock, onshore tank capacity, and pumping rates, it can take two to three days to unload a ship. Some refiners could only receive or load 10 to 15 vessels per month for all crude oil and refined product volumes. Based on an average refinery and average crude oil tanker delivering to California, this would not be enough crude oil to keep the refinery viable.

If a refinery were to convert to a product terminal, it would increase vessel traffic by 3 to 5 times to supply the market with same volume of product because clean product tankers are much smaller than typical crude oil tankers. In other words, it takes more time, investment, and space to replace crude oil imports with refined products.

Policy Options Presented in the Draft

WSPA appreciates that the CEC and CARB are trying to be as creative as possible in presenting policy options to mitigate fuel supply shortages. However, we believe that only some of the policy options presented in the Draft warrant serious further consideration, analysis, and development. WSPA also believes that each of the viable policy options not only deserves to be developed in detail, but that the CEC and CARB need to invest heavily in both public input and qualified industry expertise in order to vet them thoroughly and explore the potential unintended consequences on the fuel supply, as well as other potential effects of these policies on other sectors of the economy, and on California's consumers.

WSPA is aware that the CEC and CARB engaged other industry experts in developing the Draft. WSPA has also worked extensively with many of those experts and their organizations in the past, and we are fully aware of their capabilities. We do not believe that the current version of the Draft reflects the full suite of the capabilities of those experts, whose known expertise spans the entirety of the supply chain, from production to logistics, to refining, and to marketing and distribution.

For this reason, WSPA has engaged the expertise of Turner Mason & Company (TM&C) to perform detailed analyses of several elements of the supply chain. Seeing that the Draft clearly did not present analyses of the full range of transportation fuel supply scenarios, as we have observed above, our work with TM&C has examined a number of areas of vulnerability and risk in the supply chain. WSPA would be pleased to have an opportunity to engage in a meaningful collaboration with the CEC and CARB to share our expertise, as well as the findings of our industry experts.

WSPA further encourages the CEC and CARB to workshop key options for subsectors of the supply chain, to more completely understand the dynamics, business models, and capacities of the supply chain in more detail than was demonstrated in the Draft. For example, should the CEC and CARB wish to examine the effects of marine terminal complexities and limitations on imports and exports more carefully, we would hope that the agencies would use their convening power and resources to engage port facility managers, shippers, vessel leasing experts, and dock-to-refinery system managers to learn from their perspectives.

We would also encourage the CEC to convene a public hearing asking CARB to explain why it has chosen to significantly restrict tanker visits to California ports and terminals at a time of great need for the state, rather than considering amendments to the At-Berth Regulation to allow those visits to occur until emissions control technology is developed and implemented throughout the tanker fleet. Further, should the agencies wish to more fully understand the factors that go into spot market trading decisions, perhaps the CEC would be willing to engage with actual traders to gain some knowledge about their decision-making processes.

While we appreciate that the CEC and CARB have described 12 potential policy pathways in brief form, with pros and cons, decisions of such gravity and consequence cannot be made based on a few mere paragraphs and tables. Other similarly significant changes in California's energy policies have involved multiple studies and extensive analyses by experts that have taken months, if not years, of meaningful deliberations and consultation to explore, develop and implement. We firmly believe that the Transportation Fuels Assessment and the Transportation Fuels Transition Study proposals envisioned by SB X1-2 warrant at least the same level of engagement, analysis, development, and vetting before significant and consequential decisions are taken by State policymakers that could hurt Californians more than help them. These are decisions that could easily put the entire fuel supply chain at risk, not only for the State of California, but for our two neighboring states of Nevada and Arizona, whose fuel supplies are firmly dependent on the viability of California's petroleum supply chain and most notably, California's refiners.²³

Finally, the CEC has the resources and authorities under the Petroleum Industry Information Reporting Act of 1980 (PIIRA) and SB X1-2 to learn from the industry through the request for and analysis of confidential business information. This is the kind of information that WSPA and other entities are not allowed to either know or share, due to important antitrust protections. However, given the level of understanding of the industry revealed through the Draft, WSPA would strongly encourage the CEC to meet with individual companies under PIIRA protection and ask key questions in order to learn whether many of the assumptions the CEC and CARB have apparently based their Draft on have any substance or reality. For example, the presumption (perhaps based on an economic theory) that refiners have much more excess capacity, either in utilization percentages or storage, should be tested with each company rather than simply asserted as a public conclusion without sufficient evidence. Or, as another example, that the CEC appears to assume that refiners can be compelled to increase reserve capacities in order to mitigate supply shortages during planned and unplanned outages of refinery operations. However, without actual knowledge or evidence, or an analysis of the time or logistical steps this would require (including local permitting), this assumption cannot be tested as a viable policy option.

In the following sections, we comment on the policy options presented in the Draft that we believe warrant further development. WSPA believes that the policy options we are choosing not to comment on simply do not have any realistic place in the array of policy choices the agencies have before them, nor do they warrant serious further consideration or staff time. We suggest that these ideas be moved to an appendix in the final version of the Assessment to document that they were considered. However, we do not believe they warrant further time, energy, or resources from state agencies.

²³ According to the CEC, California's refineries provide most of Nevada's and nearly half of Arizona's transportation fuels. <https://www.energy.ca.gov/data-reports/energy-insights/what-drives-californias-gasoline-prices>. Last accessed: May 16, 2024.

Cost of Service (COS) Policy Option

We are addressing the COS model only because it has received so much attention by public members at CEC workshops and during recent State Legislature oversight hearings. We have very serious concerns about the viability of this model as it could be applied to a global multi-commodity market, such as petroleum, which is not a natural monopoly and has not traditionally been regulated in the United States as a utility.

A utility-based COS model for electricity and natural gas distribution is a regulatory oversight and control structure intended to address natural monopolies that provide a single type of energy commodity to customers in a specific geographic marketplace. Price controls and cost recovery for operating expenses and capital improvements at a profitable return-on-investment are primary elements of a utility model.

Such an approach does not easily lend itself to the transportation fuels market, which is neither a natural monopoly nor a single energy commodity. Exactly how a cost-of-service model could be applied to California refiners' operations and the other transportation fuel value chain segments (i.e., upstream producers and pipelines, storage providers, marine infrastructure, downstream distribution infrastructure, wholesalers, and retailers) has not been explained in the Draft. More concerning, the Draft does not discuss the potential benefits to consumers of a COS model, nor does it address the potentially deleterious unintended consequences associated with an inadequate fuel supply in that model. If the State were to continue to pursue such a policy option, we would strongly urge the agencies to develop a report that, at minimum, addresses the following critical questions:

- How would the California Public Utilities Commission (CPUC) regulate the prices of all output from refiners ranging from liquified petroleum gases (butane and propane), to refined products (gasoline, diesel, jet fuels), to other products (residual fuels, fuel oils, lubricants, asphalt, plastics, and petroleum coke)?
- If this policy were only intended to be applied to gasoline sold in California, how would a cost-of-service model be applied to only a single commodity for firms producing scores of other petroleum-based commodities? How would cost recovery be apportioned just to California gasoline output?
- How would the CPUC regulate all, some, or none of the domestic and international refinery feedstocks such as crude oil and gas oils?
- How would the CPUC regulate the other costs incurred by the refiners for operating expenses and necessary capital investments for planned refinery maintenance, unplanned outages, and compliance with myriad local state and federal regulations involving fuel regulations and emission limits?
- How would the CPUC regulate the cost of marine logistical services associated with imports, export, and intrastate movements of refinery feedstocks, refined products, and renewable fuels? We would ask the same question about truck transport services.
- If other refined products and refinery feedstock prices are regulated, how would the CPUC compel foreign suppliers to sell to California refiners at set price levels? Would the Federal Energy Regulatory Commission (FERC) or the U.S. State Department have authority to set these prices? Would the State cover the incremental costs refiners incur above the set values for imported crude oil, other refinery feedstocks, and refined products?
- How often, under what circumstances, and by what adjudicated process would the CPUC revise commodity prices?

- How would other prices be controlled downstream of the refiners by the CPUC to ensure that other market participants such as wholesalers and retailers would not take advantage of set price levels by increasing their margins to end-use customers? Does that mean the CPUC would set prices at all distribution terminal racks, and the 10,000-plus retail station outlets?
- How would the CPUC's role at the State level interface with the Commodity Futures Trading Commission (CFTC) role at the Federal level?
- How would a COS model for the California fuel supply chain affect contractual obligations that refiners currently have with other states, such as Arizona and Nevada? Does this require addressing legal issues, such as the commerce clause or other federal preemption questions?
- How does a COS model avoid or mitigate a loss of supply due to an unplanned outage?

Policy Options WSPA Recommends for More Complete Treatment

Recognizing that the CEC and CARB have already acknowledged California's structural fuel supply barriers as a key element in contributing to price spikes, WSPA recommends that the agencies invest additional energy and resources into any of the policy options that have the potential to increase inventory and stabilize in-state fuel supplies. We would discourage the agencies from spending further resources on the other policy options, as further development would only increase risk and potentially exacerbate the current policy impacts that are constraining local fuel supply. If the agencies feel obligated to keep all options open in their final Transportation Fuels Assessment, we recommend placing the remaining options in appendices that demonstrate that the agencies creatively considered even the most implausible options.

We do not discuss the demand-oriented policy options presented in the Draft because we feel that these kinds of programs are already under sufficiently robust development through CARB and the CEC, and reflect the State's other policies designed to reduce consumer demand. We only note, as mentioned above, that predictions or forecasts about future fuel demand in California must account for and compare scenarios beyond the State's preferred declining gasoline demand scenario. We further urge the agencies to avoid unrealistic expectations that lower income Californians will somehow be able or willing to transition to more expensive electric vehicles on the schedule the State prefers, rather than the schedule these consumers are able to accommodate financially.

The Draft offered brief descriptions of three inventory-related policy concepts that merit additional analysis and public discussion: a Strategic Fuels Reserve, Minimum Inventory Levels, and E15 Blending. We address each of these briefly below.

Strategic Fuel Reserve

The CEC previously studied the concept of creating a Strategic Fuels Reserve (SFR) in 2000 and 2001, at the direction of Assembly Bill 2076.²⁴ The purpose of the SFR concept was to reduce the magnitude and duration of fuel price spikes in California. Given the analogous situation cited in SB

²⁴ Assembly Bill No. 2076, Shelley, Chapter 936, Statutes of 2000, State of California, approved by the Governor September 29, 2000. Link: http://www.leginfo.ca.gov/pub/99-00/bill/asm/ab_2051-2100/ab_2076_bill_20000930_chaptered.pdf

X1-2, and the mandate to the CEC to explore all options, we recommend the agencies direct due attention to the work previously done.

During that process in 2000, the CEC assessed the concept of a strategic fuels reserve using a combination of consultant and internal technical staff resources. A revised consultant report was published in July 2002.²⁵ Over the following year, the CEC held workshops and conducted a hearing that concluded that "...the Governor and Legislature should not proceed with the strategic fuel reserve concept evaluated by the Commission. The Commission found that a strategic fuel reserve could have several unintended consequences, which could limit its effectiveness as a tool to moderate gasoline price spikes and could reduce the total supply of gasoline in the state. In addition, the Commission has determined that investment in private storage capacity is increasing, which reduces the need for SFR public storage."²⁶

The transportation fuels supply chain has continued to evolve since that initial assessment of an SFR concept, which merits a re-examination of this potential strategy to:

- Quantify the State's inventory capacity at both refinery locations and third-party facilities.
- Identify changes in storage capacity and types (leased versus community storage).
- Determine throughput limitations for marine terminals that could be used as part of the initial filling and subsequent restocking of the SFR.
- Reassess parameters of the original SFR concept to identify potential operational barriers or limitations to address price spikes, as well as potential negative consequences on private sector inventory holdings.

Minimum Inventory Levels

The other inventory-related policy concept identified in the Draft was related to a requirement for refiners to prevent their gasoline and component inventories from dropping below some yet-to-be-determined level, except under certain conditions. WSPA is concerned that such a concept could have unintended consequences for refinery operations, and constrain refiners' flexibility to meet changing market or operational conditions. If the CEC and CARB intend to pursue this course, we would urge the agencies to develop a report that would provide detailed responses to several critical questions about this concept, such as:

- How would the minimum inventory level be set?
- Would there be a different level for each refinery location?
- How would minimum inventories be managed through seasonal RVP transitions where inventory must be taken to minimum levels for tank turnover?

²⁵ California Strategic Fuels Reserve, Revised Contractor Report, California Energy Commission, P600-02-017D, July 2002. Link: <https://stillwaterassociates.com/wp-content/uploads/2023/03/Strategic-Fuel-Reserve-Study-Stillwater-Associates-7.3.02.pdf>

²⁶ Feasibility of a Strategic Fuels Reserve, Commission Report, California Energy Commission, P600-03-013CR, July 2003, page 2. Link: https://web.archive.org/web/20100607193136/https://www.energy.ca.gov/reports/2003-07-31_600-03-013.PDF

- Would minimum inventory levels be extended to include third-party terminals?
- Does setting a minimum inventory level include increasing total storage capacity in the state for gasoline and blending components? How does the State anticipate incentivizing investment and potentially sharing risk?
- What are the feasibility studies and permit timelines for constructing additional storage capacity at refineries?
- If no additional storage tanks are constructed as part of this concept, do minimum inventory level requirements constrain refinery operational flexibility by effectively increasing storage tank “heels” and reducing “working storage capacity?”
- The CEC should better understand product allocations, which are essentially minimum inventory levels set to conserve supply, for example, during hurricane events in the Gulf Coast region.

E15 Blending

The CEC noted E15 as a production enhancement strategy to allow increase blending of ethanol from 10% (E10) to 15% (E15) to augment existing CARBOB supply. WSPA believes that such a change should not be mandated because it can be invoked during times of tight supply. Existing infrastructure for ethanol, and ship and rail offload capacity exist for short-term increased blend percentages. To allow for blending up to E15, CARB must update the Predictive Model that is used to certify CARBOB emissions. Under current modeling assumptions, E15 blends could potentially put the State Implementation Plan (SIP) at risk for being out of compliance.

Rail Supplies

The Draft listed a policy option concerning the capability to import transportation fuel by rail and transload to tanker trucks at various locations throughout the State. The CEC accurately characterized this potential policy as a strategy that could be deployed in response to a significant emergency, such as in the aftermath of a catastrophic earthquake. However, if the State were to develop such a capability, then transportation fuel market participants (refiners, importers, and large marketers) might take advantage of rail transloading infrastructure to bring in additional supplies of gasoline under certain market conditions. The agencies should conduct a detailed assessment that would include at minimum:

- Identification of existing rail transloading facilities for refined products, if any;
- Attributes required for a typical rail transloading site;
 - Rail siding;
 - Tanker truck access;
 - Transloading equipment;
 - Personnel;
 - Security;
 - Rail access agreements;
- Estimated range of investment required per site and rail transportation costs from specific domestic refining centers;
- Minimum number of locations and basis for making that determination;

- Timing for delivery from key points of domestic origin, compared to waterborne resupply; and
- Potential barriers to private sector operation related to rail car availability and availability out-of-state suppliers capable of producing CARB gasoline.

We also recommend that the agencies take care not to treat each of these options in isolation. Rather, once an assessment and analysis for each policy option has been completed, the agencies should examine whether market and fuel supply stability might be enhanced further by combining viable options into a more comprehensive suite of policy solutions.

Conclusion

WSPA appreciates the opportunity to comment on the Draft Transportation Fuels Assessment. We wish to reiterate that, while we believe this Draft is an important foundation to initiate serious public engagement, we firmly believe it is incomplete and not ready to become the basis of a comprehensive transportation fuels policy. Nor is it – in its current form – a sufficient foundation to underpin the Transportation Fuels Transition Plan mandated by SB X1-2.

Should the agencies wish to correct the deficiencies in the Draft that we have identified here, WSPA and its member companies are eagerly disposed to assist and collaborate in multiple venues to develop the information base and policy recommendations that one would expect any comprehensive strategic effort of this scope and gravity would require. WSPA has already invested heavily in analytical work on multiple subsectors of the entire fuel supply chain. We would be pleased to work with the agencies to share our information and analytical products. All of our analyses so far have been conducted using publicly available data (much of it published by the CEC and CARB themselves).

WSPA wishes to note that, throughout multiple hearings and workshops, CEC Commissioners have reiterated their commitment to full, good-faith engagement with industry to ensure the most comprehensive Transportation Fuels Assessment and Transportation Fuels Transition Study. This commitment, as we understand it, is not just to fulfill the Commission's specific obligations under SB X1-2. It is to ensure that the State and its citizens have reliable access to affordable, adequate, reliable, clean, and safe fuels from all sources for the energy needs of a thriving population and economy. We share that commitment, and we are ready and willing to work with the Air Resources Board and the Energy Commission to achieve those goals.

Sincerely,



Catherine Reheis-Boyd
President and CEO

CC: Liane Randolph, Chair, California Air Resources Board



Catherine Reheis-Boyd

President and CEO

Western States Petroleum Association

May 17, 2024

California Energy Commission

Docket Unit, MS-4

Docket No. 23-SB-02

715 P Street

Sacramento, California 95814

Uploaded to CEC Docket #23-SB-02

RE: SB X1-2 Draft Transportation Fuels Assessment

Thank you for the opportunity to comment on the California Energy Commission's (CEC) "Draft Transportation Fuels Assessment" (CEC-200-2024-003-D), published on April 12, 2024, and the focus of the CEC workshop on May 3, 2024.

WSPA is a non-profit trade association representing companies that import and export, explore, produce, refine, transport, and market petroleum, petroleum products, natural gas, and other energy supplies in California and four other western states, and has been an active participant in transportation fuels planning issues for over 30 years.

The CEC's Draft Transportation Fuels Assessment is a reasonable initial draft and recognizes California's fundamental structural gasoline supply challenges – but much work is left to be done.

With the Draft Transportation Fuels Assessment (herein referred to as Draft), the CEC, working with the California Air Resources Board (CARB), has provided the public with a useful primer on the California liquid transportation fuels system, focused primarily on gasoline. The description of the realities of the California transportation fuel system makes adequate reference to both the structure and the structural risks associated with refining and distributing liquid fuels in the State.

In the Draft's Executive Summary, the CEC acknowledges the basic reality of California's gasoline supply dynamics: California's constrained local refining capacity, limited number of available local suppliers, regionalized supply chains, reliance on marine transportation of fuel supplies, and stringent fuel specification requirements combine to make it a "fuel island" isolated from the rest of the nation's transportation fuels market. The limited number of spot market gasoline transactions in California also give the local spot market an outsized influence on California prices that is not seen elsewhere in the country. At the same time, the CEC emphasizes that "gasoline remains California's dominant transportation fuel" and demand will remain robust well beyond 2035. As the CEC correctly points out, "[t]hese vehicles will need fuel to operate, and many of the vehicles may be owned by lower income individuals and families, making it even more compelling to identify ways to ensure an affordable, reliable, equitable, and safe supply."¹

The first chapter describes the California "fuel landscape" and briefly dwells on market dynamics,

¹ Draft, p. ES-1

including price spikes and potential causes of disruption to the system. It emphasizes the mandate of Senate Bill (SB) X1-2 (2023) to the State agencies and explains how the CEC and CARB addressed this mandate in the Draft.

The chapter also focuses on anticipated changes to demand for fuels in the near future, and expectations of how the market will respond to declining demand. The declines in demand, according to the analysis, will be due in large part to the eventual electrification of the light duty vehicle fleet and anticipated reductions in vehicle miles traveled (VMTs) over time by gasoline engine powered vehicles. The chapter further explores pathways by which refiners might attempt to keep pace with declining demand and identifies “how the state might intervene to assure an affordable, reliable, equitable, and safe supply of gasoline for consumers who need it.”²

The second chapter undertakes a high-level “primer on petroleum” including crude oil sources and refining basics. The narrative attempts to give the public a very basic education on blendstocks, California gasoline requirements (such as California Reformulated Blendstocks for Oxygenate Blending (CARBOB)), and briefly explains the differences between summer and winter blends, based on Reid Vapor Pressure (RVP). The chapter concludes with another high-level discussion of the distribution system from refinery, to spot market, to retail, including brief discussions of spot markets and the differences between branded and unbranded gasoline sales at the pump.

Finally, a third chapter presents in very brief form about a dozen “policy options” for future consideration by the CEC for meeting the mandates in SB X1-2 to ensure market stability and benefits to consumers.

The Draft fails to address critical elements of the supply chain.

SB X1-2 directs the CEC to submit an assessment to the Legislature and to the Governor that “[i]dentifies methods to ensure a reliable supply of affordable and safe transportation fuels in California.”³ The statute further calls for “the evaluation of oil and gas extraction and refining”⁴, but this Draft only covers the supply of transportation fuels, primarily gasoline. A proper transportation fuels assessment must look at all current fuels, e.g., gasoline, diesel (petroleum and renewable), jet (petroleum and SAF), LPG, natural gas (CNG, LNG, and RNG), hydrogen (combustion and fuel cell), and electricity. Such an assessment should also review the entire value chain for each transportation fuel. For example, petroleum fuels segments would include upstream, pipelines, marine infrastructure, storage terminals, refineries, distribution, and retail service station networks, while a review of the electricity value chain would include generation, the grid (transmission and distribution), charging networks (industrial, commercial, single-family, multi-family), and zero-emission vehicle (ZEV) availability.

WSPA notes that the CEC had the resources in hand to include assessments for diesel and aviation fuel by using the same outlooks used for their gasoline assessment, as is reflected in the data presented in the 2023 Independent Energy Policy Report (IEPR).⁵ Each of these fuel sources

² Draft, page 17.

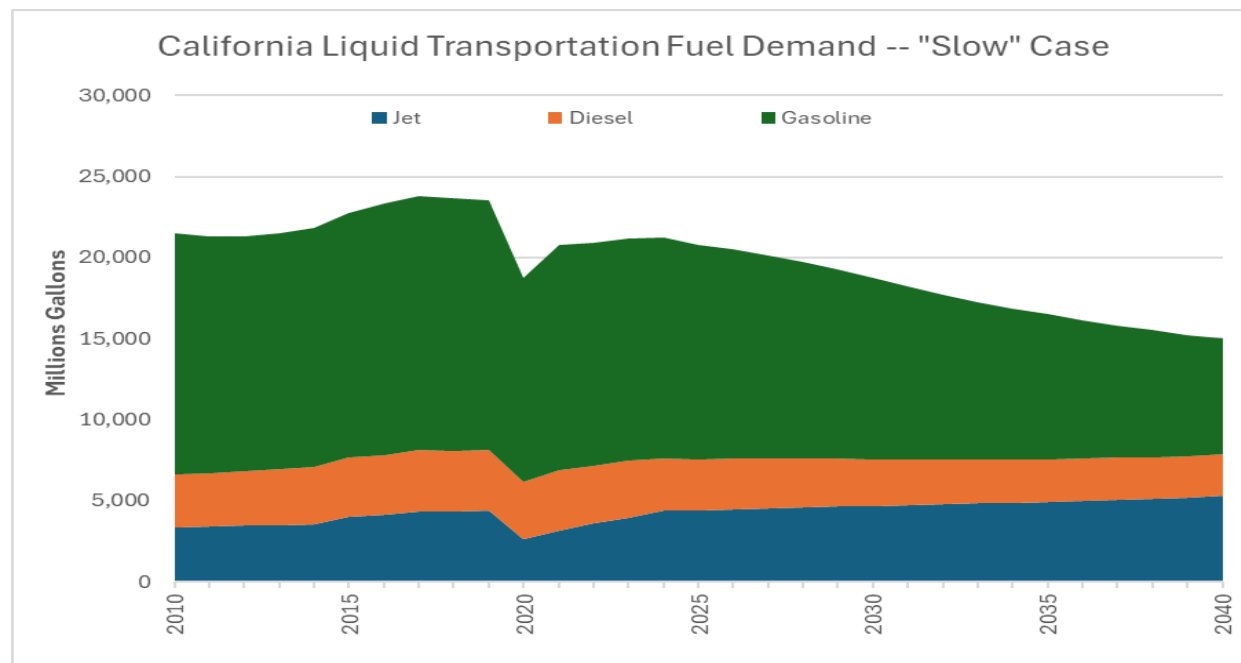
³ Cal. Pub. Res. Code (PRC) § 25371(a)(2)

⁴ PRC § 25371(a)(2)

⁵ Bailey, Stephanie, Jennifer Campagna, Mathew Cooper, Quentin Gee, Heidi Javanbakht, and Ben Wender. 2023. 2023 Integrated Energy Policy Report. California Energy Commission.

were analyzed under “slow”, “fast”, and “rapid” scenarios, in which key assumptions about declines in demand were made based on the CEC’s demand modeling. To remind the CEC of its earlier published work, we include graphs from the 2023 IEPR report and from the modeling data submitted as supplemental to the CARB 2022 Scoping Plan Update.⁶

Figure 1 - CA Liquid Transportation Fuel Demand - "Slow Case"



Publication Number: CEC-100-2023-001-CMF.

⁶ [2023 Statewide Fuel Demand Forecast - CA Energy Planning | California Energy Commission](https://www.energy.ca.gov/media/9574), last accessed May 14, 2024 at <https://www.energy.ca.gov/media/9574>. And from the Scoping Plan: [2022-sp-PATHWAYS-data-E3.xlsx \(live.com\)](#). Note: We concur with CEC’s aviation fuel assumption that it has the same demand profile as the IEPR baseline case.

Figure 2 - "Fast" = 2023 IEPR AATE3 Case

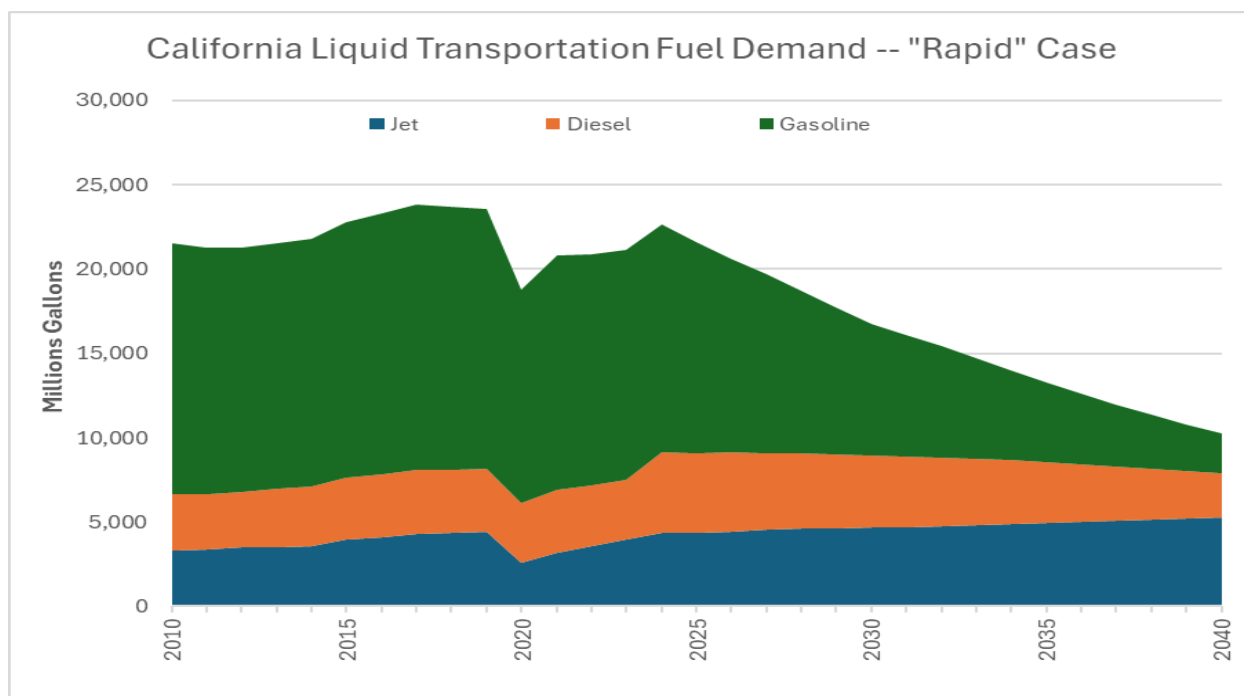
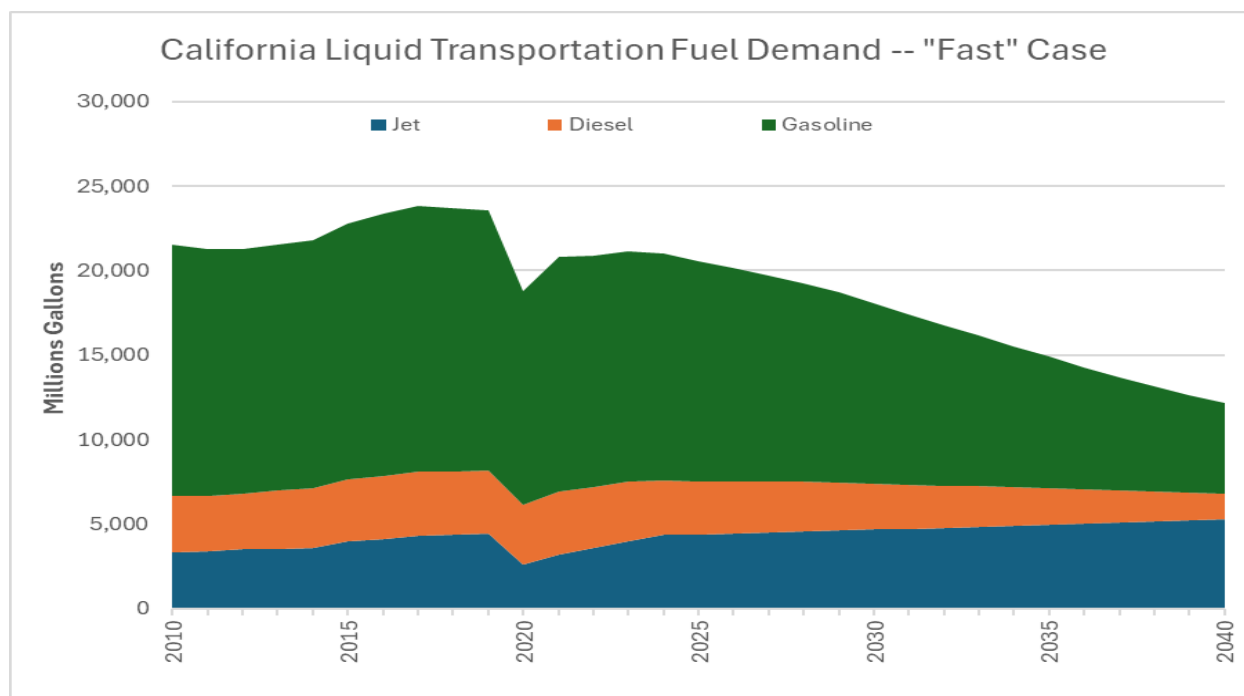


Figure 3 - "Rapid" = 2022 CARB Scoping Plan

The Draft is explicitly meant to underpin the CEC's and CARB's obligation under SB X1-2 to formulate a Transportation Fuels Transition Plan encompassing California's full range of transportation fuels and potential future demand scenarios for each. However, this Draft presents

just one preferred scenario (i.e., varying degrees of sustained declining gasoline demand) rather than evaluating other possible scenarios. The scenario in this Draft implicitly assumes that everything works as planned in terms of policy implementation and required investments. That is not a proper transportation fuels assessment that leaves the State agencies prepared to develop a robust transition plan and strategy for the transportation sector.

An assessment evaluating the status of the value chain of all transportation fuels as described above (and required by statute) would provide the State agencies with a range of fuel scenarios, which would enable them to develop a more robust transition plan. There are several potential demand pathways the various fuel supply chains could follow in the future, and not all of them involve perfect implementation of the State's current policies. One cannot simply assume that gasoline demand will fall off precipitously (as do the three scenarios above), nor that the gasoline (or for that matter, diesel or jet fuel) supply chain will smoothly adapt to the CEC and CARB's predicted declining market. ***A more robust assessment would explore several "failure points" (e.g., meeting a significant reduction in Vehicle Miles Traveled) or places in the system that are lacking resilience (e.g., port infrastructure or electric grid build-out), and would model scenarios that take into account those potential failures.*** The only vulnerabilities that are explored in this Draft are those related to the spot market and the vaguely defined potential for "manipulation", with several other key vulnerable elements left unexplored.

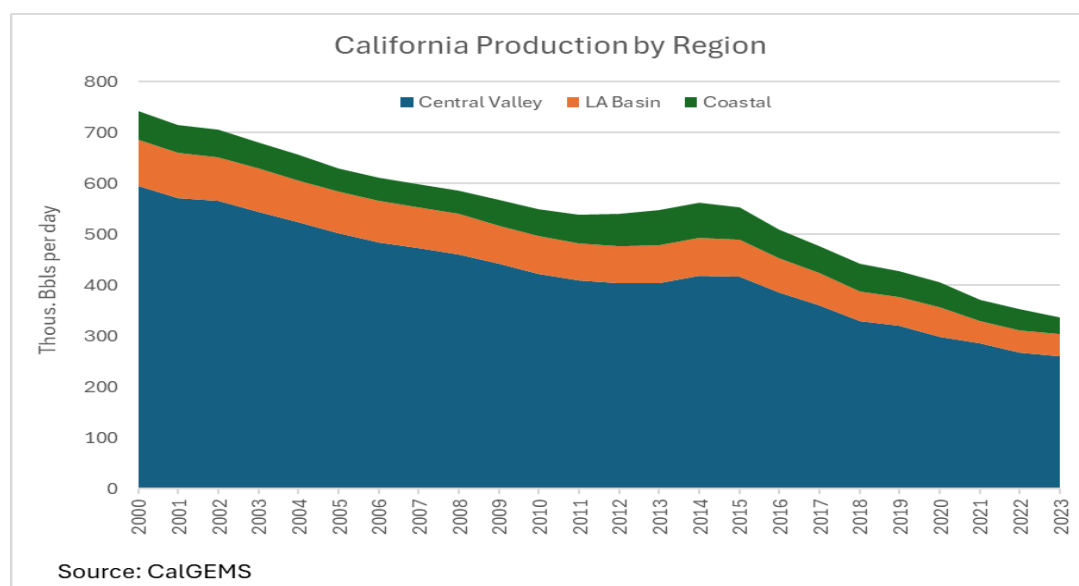
What is missing from the current Draft?

Crude Oil Production in California

SB X1-2 requires the first assessment to analyze the upstream (i.e., oil and gas extraction) and refining segments of the petroleum industry.⁷ California has historically produced a substantial portion of the total amount of crude oil that is locally processed and refined in the State, predominantly for consumption in California, but also to meet supply obligations in other states and markets.

⁷ PRC § 25371(a)(2)

Figure 4 - Crude Oil Produced in California by Region



California crude oil production has declined at an average annual rate of 3.4% since 2000. The decline rate has been accelerating and was close to 14% in the second half of 2023. The decline in California domestic crude oil production has more to do with difficulties in obtaining permits to drill than lack of oil reserves. As of December 2022, California held almost 1.5 billion barrels of proved and probable crude oil reserves, which ranked it sixth among the 50 states.⁸ The observable decline in production is not due to resource availability or the “natural decline” in production often cited in State reports. The actual decline in domestic oil production is due to highly constraining policies and a permitting environment with increasing barriers to oil and gas production. This is a more aggressive decline rate than was modeled in CARB’s 2022 Scoping Plan Update.⁹ Constraints on domestic production have put substantial pressure on other parts of the system, including pipelines that transport crude oil to key refining locations in the State.

Producers and Permitting

WSPA does not see any evidence in the Draft that information about production conditions or constraints was sought from domestic producers of California’s crude oil. This is worrisome given that SB X1-2 explicitly requires the State agencies to “consult with the state’s fuel producers and refiners”¹⁰ in preparing the Transportation Fuels Transition Plan, for which this Assessment is an

⁸ <https://www.statista.com/statistics/790790/us-oil-reserves-by-state/>.

⁹ CARB 2022. 2022 Scoping Plan Update. pp. 101-5. While the 2022 Scoping Plan Update does not specifically “model” future declines in oil production, it assumes that production will decline at an average annual rate of approximately 2%, based on a UC Santa Barbara study commissioned by the State (<https://zenodo.org/records/4707966>). The 2022 Scoping Plan Update also notes that shifting domestic production volumes to marine imports may also have GHG leakage effects, and “could require more infrastructure to store and move larger volumes of crude oil to the refineries in state” (p. 104).

¹⁰ SB X1-2, Section 25371.3.

essential foundation. Had the CEC and CARB sufficiently explored these key upstream parts of the fuel supply chain, they would have discovered what the industry knows quite well: California geographically has some of the largest and most accessible oil reserves in the world. California producers simply are not permitted to get to them due to State impediments.

It is well understood on the production side of the industry that development of reserves requires a program of continuous evaluation, investment, and development. It is almost never the case that a substantial reserve is developed in one phase and depleted through the first initial tranche of investment. Permits for drilling, whether for exploration or production, are an essential requirement of a properly functioning production sector. However, in the California case, new permits for drilling have been severely curtailed and many producers have been forced in the short term to rely on existing investments to be economically viable. This is only a short-term adaptive solution; extended denial of access to the resource means that operators must make hard decisions about the economic viability of their production enterprises.

Therefore, lack of new drilling permits is forcing producers to rely predominantly on existing permitted facilities to maintain production. To date, as of May 2024, the primary permitting agency responsible for production-oriented permitting, CalGEM, has approved only about 300 production-related permits.¹¹ Compared to “normal” periods of business, this level of performance is less than 20% of what producers in California have long recognized is needed to meet the requirements of a properly functioning permitting process required for production operations to in turn meet demand for crude oil in the state. A proper fuels assessment would go as far upstream as necessary to assess the availability of crude oil assets and the cost constraints on acquisition of the 1.4 million barrels per day required to supply the State’s refinery processing demands.

¹¹ CalGEM approves more than 18 different types of permits for subsurface activities, including injection wells, monitoring wells, testing wells, and other wells related to the overall operations of a producer. However, only five types directly relate to production of crude oil: new drills, reworks, sidetracks, well stimulation (fracking), and deepening. These five permit types have been stalled out at CalGEM since the Newsom administration began giving direction to CalGEM in 2019 to limit or halt the approval of permits for all manner of production activities, including well stimulation and high-pressure cycling steaming. Not only has permit approval declined precipitously, but the average time between submission and approval has increased over seven-fold in the five years since 2019. (Source: WSPA analysis submitted to CalGEM through various regulatory processes).

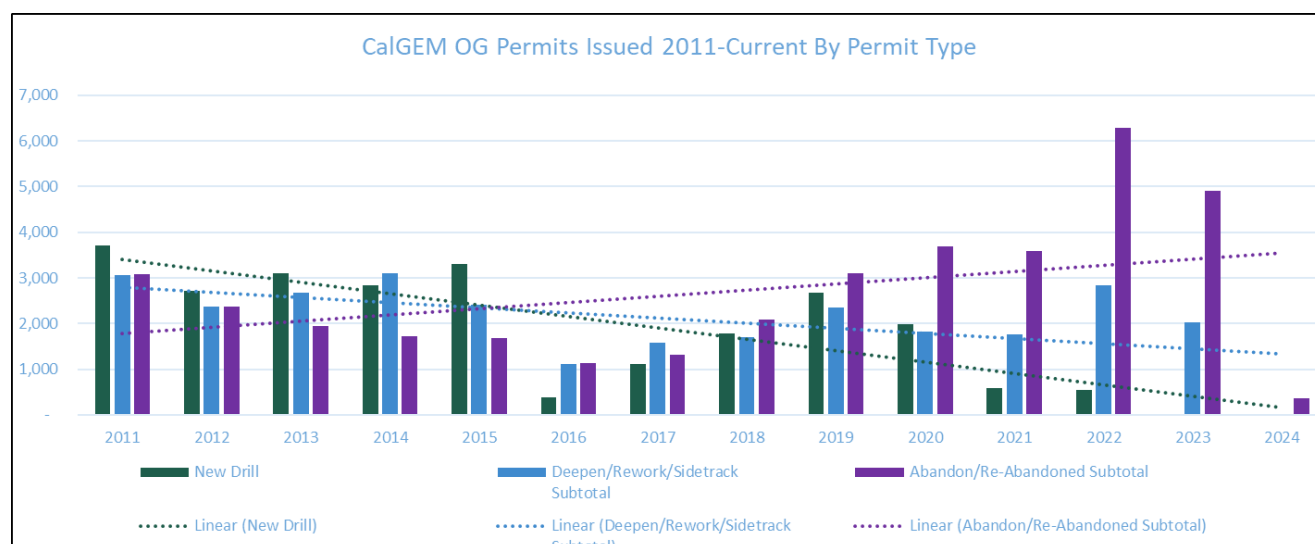
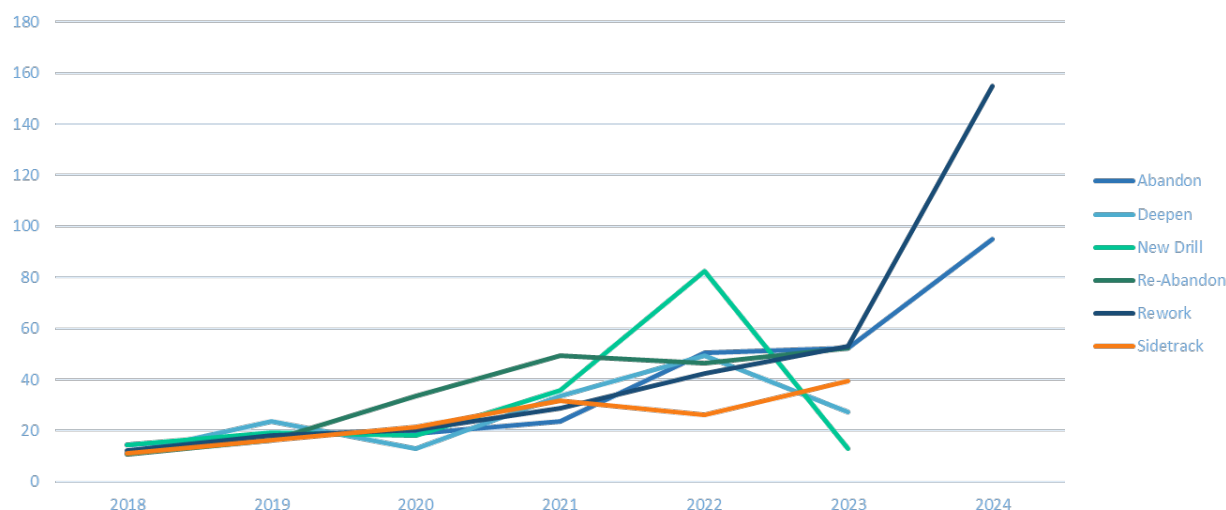
Figure 5 - CalGEM Oil and Gas Permits 2011-2024¹²

Figure 5 shows the decline in production-related permits approved since 2011. Historically, the agency has approved an average of 8,000-10,000 permits each year. Since 2019, the number of production-related permits has dropped to insignificance. The shift from production-related permitting to plugging and abandonment permits is dramatic, beginning with the upturn in global oil prices in 2017-18 and the increasingly politicized focus on shutting down and shutting-in production in California.

As a further impediment, the time that CalGEM takes to approve a production-related permit has expanded by over seven times in a mere five years, from an average of about 12 days to more than 185 days (see Figure 6, below). These are conditions that severely impact production in the state and explain a great deal of the decline in crude oil volume produced domestically.

¹² CalGEM WellSTAR data; Catalyst Environmental Solutions analysis, *unpub. reports*.

Figure 6 - Time to permit approval of oil and gas permits at CalGEM



Crude Oil Pipeline Capacities

As the Draft notes, “Kinder Morgan operates the only common carrier pipeline network within California.”¹³ However, the Draft only discusses the pipelines carrying refined product. Crude oil pipelines are a major component of California’s domestic refining supply and are not even mentioned in the Draft.

Pipeline entities play a key role in the supply chain that is critical to moving crude oil from domestic sources to the two regions (Los Angeles basin and San Francisco Bay Area) where domestic crude oil supply is essential to refinery performance. Were the CEC and/or CARB to have consulted the operators of these pipelines, they would have learned that this part of the supply chain is running at critically low volumes.

Figure 7 shows the alignment of several critical pipelines for crude oil and indicates their current design capacities. These design capacities were engineered with long-term production in view and took into account the reserves and likely future demand for transportation from oil fields to refineries dating from the 1980s onward.¹⁴

¹³ Draft, P. 31

¹⁴ Sources: Analysis of key company and government public websites. Turner Mason & Company, *unpub. analysis*.

Figure 7 - Location, alignment and carrying capacity of key crude oil pipeline infrastructure



Each crude oil producing area is connected to a given refining center by multiple pipelines of various diameters (capacities). While this can be good for redundancy, in the event of an interruption, it also creates challenges in keeping the system operational as local oil production continues to decline. A pipeline must maintain some minimum volume so the crude oil will continue to move. This minimum throughput volume is a function of the pipeline's design (e.g., diameter, length), operating conditions (e.g., pressure, temperature), geography (e.g., elevation changes), the age of the pipeline, the regulatory environment, and the characteristics of the crude oil itself

(e.g., gravity, viscosity). The vast majority of crude oil produced in California, and in the San Joaquin Valley in particular, is heavy oil (high specific gravity) and therefore requires lift and heating specifications to move the crude oil over long distances.

It is critical to understand that California's crude oil pipeline infrastructure was designed to support decades of growing demand, both in California and the other western states. They are also key elements of the national security infrastructure on the west coast, supporting strategic U.S. interests in the Pacific.

Marine Terminal Throughput Capacity

The Draft, and indeed much of the California policy direction on fuel supplies, appears to assume that reductions in domestic crude oil production can be easily compensated for by increasing imports of both crude oil and refined products. ***However, the Draft fails to adequately address the actual throughput capacity of the marine terminals that are assumed to be required by this substantial increase in imports, and also fails to address regulatory constraints that CARB has imposed on tanker vessel calls at California ports starting in 2025.*** We further elaborate on some of the impacts of the Ocean-Going At-Berth Regulation (At-Berth Regulation) in greater detail below.

Further, an adequate assessment of the realities of refining crude oil in the State, along with a proper assessment of the displacement of Ultra-Low Sulfur Diesel (ULSD) with Renewable Diesel (RD), would clearly show that the same marine terminals that the CEC and CARB assume will accommodate transfers of millions of barrels of refined fuel will already be busy hosting ever-increasing volumes of imported crude oil from foreign countries.

This Draft does not present a realistic assessment of these factors, nor does it examine the critical pinch point in the system that marine terminals represent, which could have major impacts on supplies and prices. The CEC and CARB must assess marine terminal constraints if they are to determine if or how additional refined fuel volume flows will be accommodated by existing marine terminals. There are four incremental marine terminal throughput flows that should be properly analyzed, critically including a sharp eye toward impacts of constraining policies such as the At-Berth Regulation:

1. Additional crude oil receipts to compensate for the continued and accelerated decline of in-state oil production.
2. ULSD export volume increases as a consequence of increasing RD use in California. This also includes RD movements from Northern CA and other domestic and international renewable fuels facilities into Southern CA (i.e., the Ports of Los Angeles and Long Beach).
3. Growth in biorefinery feedstock receipts to supply renewable diesel and sustainable aviation production facilities – other than rail imports that supply biofuel feedstocks directly to those biorefineries.
4. Changes in product flows associated with the likely closure of a refinery – such as the need to import gasoline and other refined products to maintain contractual supply obligations if a refiner elects to transition the facility to a fuel terminal.

Other Marine Logistical Constraints

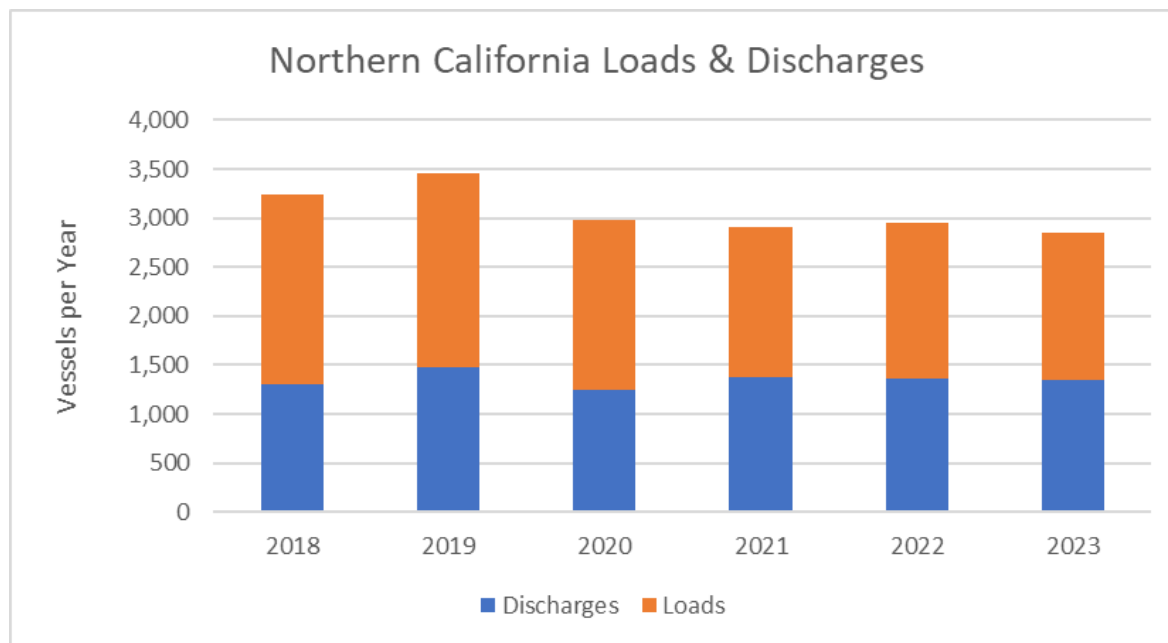
Vessel Traffic

The State Lands Commission (SLC) collects data on vessel movements (both barge and ship) for each marine facility in California. The CEC and CARB can analyze these data to assess how trends in California crude oil production and transportation fuel demand are impacting ship traffic.¹⁵ Under its recently adopted emergency regulation,¹⁶ the CEC will now be collecting this data as well. For example, Figure 8 below shows total vessel movements for loads (outbound) or discharges (inbound) cargoes in the North (greater San Francisco Bay Area).

A vessel “load” occurs when petroleum products are transferred from onshore storage tanks to compartments aboard the product tanker or barge. Some of these transfers can include multiple types of refined products or feedstocks segregated by compartments. Loaded vessels will then depart a marine terminal as an export (to foreign destinations or the Pacific Northwest) or intrastate movement to another California terminal.

A vessel “discharge” occurs when a petroleum product or refinery feedstock is transferred from the marine vessel to onshore tankage. The vessel’s cargo may have originated from outside the state, another California marine terminal, or in some cases from a ship-to-ship transfer. Details are contained in the SLC datasets (e.g., if the vessel is a barge or ship and whether the ship is an international or Jones Act tanker). Since 2018, there has been a decline in the number of loads, but the number of discharges has remained fairly constant.

Figure 8 - Northern California Loads and Discharges (Vessels per Year)



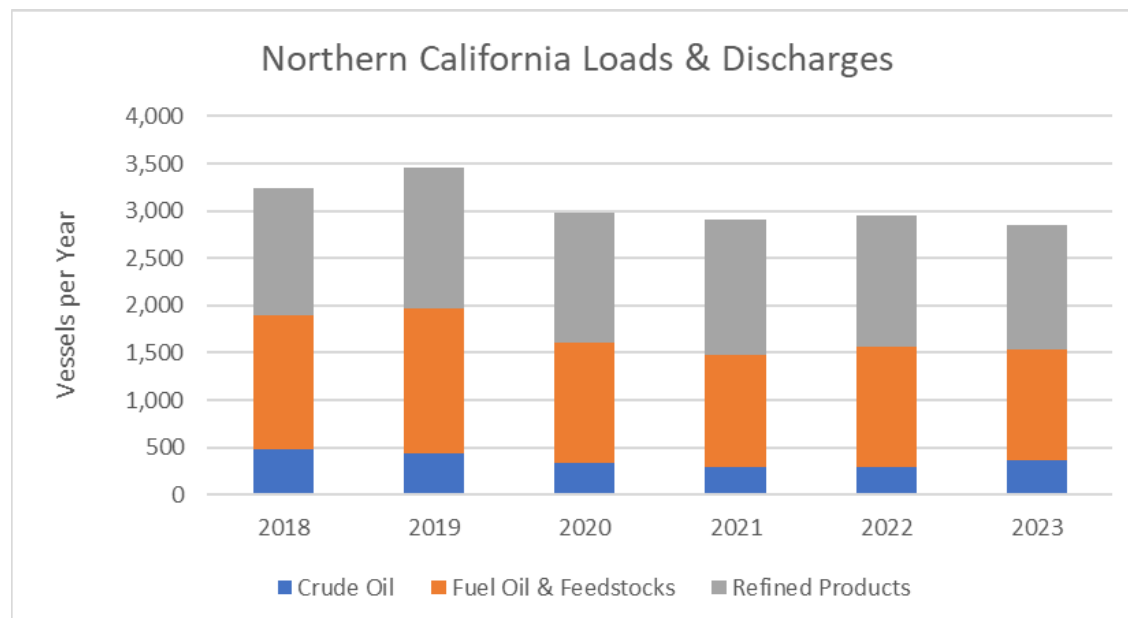
These data can also show what materials are moving across the docks. Figure 9 shows vessel movements in the North (i.e., San Francisco Bay Area) for crude oil, fuel oil and feedstocks, and refined products that consist of traditional transportation fuels (gasoline, diesel, and jet fuel) and

¹⁵ California State Lands Commission and Turner Mason & Company analysis, 2024.

¹⁶ Docket No. 23-OIR-03 under Resolution No. 24-0508-07, “General Rulemaking Proceeding for Developing Regulations, Guidelines, and Policies for Implementing SB X1-2 and SB 1322.”

renewable fuels (renewable diesel and sustainable aviation fuel).

Figure 9 - Northern California Loads and Discharges – Crudes, Fuels and Oil Feedstocks, & Refined Products



Most of the recent decline in loadings seen in Figure 8 has been fuel oil ships seen in Figure 9. What these data do not show are potential constraints to the marine logistics system. Those constraints can come in two forms: available dock space and regulatory constraints of the At-Berth Regulation, both of which we discuss below.

Dock space

Refineries have limited berths (some have only one) and can be limited by the length of the ship or its draft.¹⁷ The growth in containerized freight imports in the Ports of Los Angeles and Long Beach impacts the traffic patterns within the port and creates constraints on tanker movements within the port. All of these factors make the scheduling of ship traffic critical and increasingly more difficult as vessel traffic grows. The CEC and CARB should analyze the capacity for energy-related vessel traffic in ports in both the North and South in order to fully test its hypothesis that more vessels and port capacity can be made available to replace California's domestically produced crude oil.

- Regulations limiting the number of vessel calls and ships at dock.
- Another limitation to vessel traffic is whether the tanker originated from a domestic port, which requires it to be a Jones Act-flagged tanker. There are only 55 of these U.S.-flagged vessels and eight of them are dedicated to moving renewable diesel from the Gulf Coast to California.¹⁸ The market for Jones Act ships is extremely tight, especially for spot charters.¹⁹ Spot charter availability is critical to the CEC's transportation fuels assessment because it is the charter class used if ships need to be quickly contracted in the event of a

¹⁷ Draft is the distance from the waterline to the bottom or keel of the ship.

¹⁸ [Survey: Jones Act rates get renewable diesel boost | Latest Market News \(argusmedia.com\)](https://www.argusmedia.com/news/2023/05/16/survey-jones-act-rates-get-renewable-diesel-boost/)

¹⁹ A "spot charter" is a shipping industry term for one-off or short term duration shipping contracts. See, for example, <https://www.scorpiotankers.com/glossary/spot-charter/>. Last Accessed: May 16, 2024.

supply outage in California.

At-Berth Regulation

CARB's At-Berth Regulation will impose new requirements on marine terminal operations. It requires operators to reduce emissions from crude oil and product tankers by capturing stack emissions or by electrification of the marine vessel discharge operations by the use of shore-based power. Absent the ability to implement one of these options, most California tankers will be severely limited in the number of visits they will be legally permitted to make to California ports and marine terminals. At this time, the vast majority of the California tanker fleet, and the California ports and terminals that serve them, are not equipped to utilize shore power. Moreover, no stack emissions capture system has yet been developed, tested, or approved for use by tankers, and vendors will not be ready to provide such a system for many years to come.

WSPA submitted comments to the CEC on 4/25/2024 indicating our concerns about the impacts of implementing the new At-Berth regulations.²⁰ In that letter, we indicated that "CEC should take note that the California Air Resources Board's (CARB) recent amendments to the Ocean-Going Vessels At-Berth Regulation (At-Berth Regulation) will serve to further constrain refined products, renewable fuels, and crude oil supply into California. By requiring petroleum tankers to use emissions capture or shore power technology not yet developed, tested, or implemented on the vast majority of California's tanker fleet or tanker terminals, CARB's At-Berth Regulation will force many tankers to reduce visits to California ports starting in 2025 to meet the At-Berth Regulation's requirements. This is another example of a State policy that will further restrict the availability of gasoline in the State of California and will limit the State's ability to mitigate in-state shortages of gasoline supply with marine imports. And it is another policy that will likely hurt California consumers rather than helping them."

Given these concerns, we would urge the CEC and CARB to consider the following issues as the agencies seek to harmonize any future policy proposals with existing regulations that are already in place and will have near-future impacts that may conflict or exacerbate new or proposed policies.

- Marine terminal operators (refiners and port authorities) are unable to provide an accurate critical-path compliance schedule for the At-Berth Regulation, due to the inadequate number of commercially viable vendors of barge-mounted emission capture technologies that could be potentially modified and approved for use for the California tanker fleet.
- Similarly, shore power is unavailable for the vast majority of the California tanker fleet, as most tankers, ports, and terminals do not have appropriate shore power infrastructure for tanker use. Even if that hurdle could be overcome, the State grid currently lacks the electrical generation, transmission, and distribution capacity to electrify all vessels and terminals covered by the At-Berth Regulation.
- These realities put at risk the obligated parties' ability to comply with the At-Berth Regulation's deadline of January 1, 2025 for vessels visiting the Ports of Los Angeles and

²⁰ <https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessels-berth-regulation>; WSPA comments may be found at <https://content.govdelivery.com/accounts/CNRA/bulletins/398c8a0>, Docket 23-OIIP-01, Western States Petroleum Association Comments - WSPA Comments on April 11 SB X1-2 Margin Cap and Penalty

Long Beach, and further unlikely to be able to meet the January 1, 2027 compliance deadline for vessels visiting any other California marine terminal.

- Absent an extension of the current compliance deadline schedule, there is a risk that some marine terminal operators will have to significantly reduce the number of product tanker port calls to reach the exemption level of 20 per year until the required control technology is developed and implemented.
- This complex of challenges will create yet another constraint on refineries' marine throughput capacity for crude oil and products.

A Potentially Critical Scenario

According to CalGEM, California's domestic crude oil production averaged 338 Thousand Barrels per Day (TBD) in 2023. The U.S. Energy Information Administration (EIA) estimates that production fell to 293 TBD by February 2024. Meanwhile, California refiners processed an average of about 1,430 TBD of crude oil during 2023. Thus, in-state production in 2023 accounted for 25 percent of California's total crude oil feedstock needs.²¹ However, the recent continued decline for the month of February 2024 means that in-state oil production represented approximately 20% of California's total refining needs. California in-state oil production has been declining at an overall average annual rate of about 10% since 2015, but it is important to note that this rate of decline has been accelerating. Measured over the last four years, the average annual drop in production has been about 14%. No matter how the rate of decline is measured, it is still far steeper than any of the CEC or CARB planning and strategy documents project. For example, as mentioned above, the 2022 CARB Scoping Plan Update projects that annual California domestic oil production will decline at a gradual rate of approximately 2% per year, consistent with their demand projections. Clearly, reality has gone beyond the modeling and must be accounted for.

This higher-than-predicted rate of decline in California oil production is challenging some pipelines to maintain minimum flow rates. As mentioned earlier, pipelines must maintain some minimum throughput to remain commercially and operationally viable. When a pipeline is forced to close, the production it carried must find another pipeline, or another mode of transportation, such as rail or truck. The alternative is to cease production altogether in the oil fields that require pipelines to move crude oil to refineries. The Central Valley has multiple pipelines running north and south. While each corridor has a number of trunk pipeline options and destinations, declining production makes it difficult to keep all lines at minimum throughput. The risk of closure could be higher for northbound lines leaving the Central Valley because these pipelines tend to have larger capacity and must negotiate undulating terrain, with intermittent pump stations to boost flow.

The decline in California crude oil production is a challenge for California refiners as well. California crude oil has fallen to 25% of refinery crude oil supply, down from 50% in 2000, and 62% in the 1980s. In the future, if a pipeline shuts down and a refinery cannot find an alternative pipeline for California crude oil, it must source crude oil by another means, such as rail or ship. No California refineries have crude oil unit train²² transfer facilities, so they must rely on marine infrastructure to replace diminishing availability of California crude oil. Replacing California crude oil with waterborne sources increases vessel traffic, ship channel congestion, and emissions – and

²¹ <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCRFPCA2&f=M>

²² A unit train for crude oil consists of about 100 cars containing about 70k barrels of crude oil.

presents regulatory challenges, as discussed above.

Some refineries have limited access to marine facilities. If a refinery has only one berth, the refinery must choose between bringing in crude oil, refined product blendstocks, or finished products. They must also consider potentially exporting other products. For example, a refiner may need to increase waterborne crude oil imports and exports of fossil-based diesel (displaced by renewable diesel) and would face increasingly constrained marine terminal throughput with limited dock capacity. A refinery in such a scenario would be faced with serious decisions about whether to remain in business in California.

Depending on the size of the dock, onshore tank capacity, and pumping rates, it can take two to three days to unload a ship. Some refiners could only receive or load 10 to 15 vessels per month for all crude oil and refined product volumes. Based on an average refinery and average crude oil tanker delivering to California, this would not be enough crude oil to keep the refinery viable.

If a refinery were to convert to a product terminal, it would increase vessel traffic by 3 to 5 times to supply the market with same volume of product because clean product tankers are much smaller than typical crude oil tankers. In other words, it takes more time, investment, and space to replace crude oil imports with refined products.

Policy Options Presented in the Draft

WSPA appreciates that the CEC and CARB are trying to be as creative as possible in presenting policy options to mitigate fuel supply shortages. However, we believe that only some of the policy options presented in the Draft warrant serious further consideration, analysis, and development. WSPA also believes that each of the viable policy options not only deserves to be developed in detail, but that the CEC and CARB need to invest heavily in both public input and qualified industry expertise in order to vet them thoroughly and explore the potential unintended consequences on the fuel supply, as well as other potential effects of these policies on other sectors of the economy, and on California's consumers.

WSPA is aware that the CEC and CARB engaged other industry experts in developing the Draft. WSPA has also worked extensively with many of those experts and their organizations in the past, and we are fully aware of their capabilities. We do not believe that the current version of the Draft reflects the full suite of the capabilities of those experts, whose known expertise spans the entirety of the supply chain, from production to logistics, to refining, and to marketing and distribution.

For this reason, WSPA has engaged the expertise of Turner Mason & Company (TM&C) to perform detailed analyses of several elements of the supply chain. Seeing that the Draft clearly did not present analyses of the full range of transportation fuel supply scenarios, as we have observed above, our work with TM&C has examined a number of areas of vulnerability and risk in the supply chain. WSPA would be pleased to have an opportunity to engage in a meaningful collaboration with the CEC and CARB to share our expertise, as well as the findings of our industry experts.

WSPA further encourages the CEC and CARB to workshop key options for subsectors of the supply chain, to more completely understand the dynamics, business models, and capacities of the supply chain in more detail than was demonstrated in the Draft. For example, should the CEC and CARB wish to examine the effects of marine terminal complexities and limitations on imports and exports more carefully, we would hope that the agencies would use their convening power and resources to engage port facility managers, shippers, vessel leasing experts, and dock-to-refinery system managers to learn from their perspectives.

We would also encourage the CEC to convene a public hearing asking CARB to explain why it has chosen to significantly restrict tanker visits to California ports and terminals at a time of great need for the state, rather than considering amendments to the At-Berth Regulation to allow those visits to occur until emissions control technology is developed and implemented throughout the tanker fleet. Further, should the agencies wish to more fully understand the factors that go into spot market trading decisions, perhaps the CEC would be willing to engage with actual traders to gain some knowledge about their decision-making processes.

While we appreciate that the CEC and CARB have described 12 potential policy pathways in brief form, with pros and cons, decisions of such gravity and consequence cannot be made based on a few mere paragraphs and tables. Other similarly significant changes in California's energy policies have involved multiple studies and extensive analyses by experts that have taken months, if not years, of meaningful deliberations and consultation to explore, develop and implement. We firmly believe that the Transportation Fuels Assessment and the Transportation Fuels Transition Study proposals envisioned by SB X1-2 warrant at least the same level of engagement, analysis, development, and vetting before significant and consequential decisions are taken by State policymakers that could hurt Californians more than help them. These are decisions that could easily put the entire fuel supply chain at risk, not only for the State of California, but for our two neighboring states of Nevada and Arizona, whose fuel supplies are firmly dependent on the viability of California's petroleum supply chain and most notably, California's refiners.²³

Finally, the CEC has the resources and authorities under the Petroleum Industry Information Reporting Act of 1980 (PIIRA) and SB X1-2 to learn from the industry through the request for and analysis of confidential business information. This is the kind of information that WSPA and other entities are not allowed to either know or share, due to important antitrust protections. However, given the level of understanding of the industry revealed through the Draft, WSPA would strongly encourage the CEC to meet with individual companies under PIIRA protection and ask key questions in order to learn whether many of the assumptions the CEC and CARB have apparently based their Draft on have any substance or reality. For example, the presumption (perhaps based on an economic theory) that refiners have much more excess capacity, either in utilization percentages or storage, should be tested with each company rather than simply asserted as a public conclusion without sufficient evidence. Or, as another example, that the CEC appears to assume that refiners can be compelled to increase reserve capacities in order to mitigate supply shortages during planned and unplanned outages of refinery operations. However, without actual knowledge or evidence, or an analysis of the time or logistical steps this would require (including local permitting), this assumption cannot be tested as a viable policy option.

In the following sections, we comment on the policy options presented in the Draft that we believe warrant further development. WSPA believes that the policy options we are choosing not to comment on simply do not have any realistic place in the array of policy choices the agencies have before them, nor do they warrant serious further consideration or staff time. We suggest that these ideas be moved to an appendix in the final version of the Assessment to document that they were considered. However, we do not believe they warrant further time, energy, or resources from state agencies.

²³ According to the CEC, California's refineries provide most of Nevada's and nearly half of Arizona's transportation fuels. <https://www.energy.ca.gov/data-reports/energy-insights/what-drives-californias-gasoline-prices>. Last accessed: May 16, 2024.

Cost of Service (COS) Policy Option

We are addressing the COS model only because it has received so much attention by public members at CEC workshops and during recent State Legislature oversight hearings. We have very serious concerns about the viability of this model as it could be applied to a global multi-commodity market, such as petroleum, which is not a natural monopoly and has not traditionally been regulated in the United States as a utility.

A utility-based COS model for electricity and natural gas distribution is a regulatory oversight and control structure intended to address natural monopolies that provide a single type of energy commodity to customers in a specific geographic marketplace. Price controls and cost recovery for operating expenses and capital improvements at a profitable return-on-investment are primary elements of a utility model.

Such an approach does not easily lend itself to the transportation fuels market, which is neither a natural monopoly nor a single energy commodity. Exactly how a cost-of-service model could be applied to California refiners' operations and the other transportation fuel value chain segments (i.e., upstream producers and pipelines, storage providers, marine infrastructure, downstream distribution infrastructure, wholesalers, and retailers) has not been explained in the Draft. More concerning, the Draft does not discuss the potential benefits to consumers of a COS model, nor does it address the potentially deleterious unintended consequences associated with an inadequate fuel supply in that model. If the State were to continue to pursue such a policy option, we would strongly urge the agencies to develop a report that, at minimum, addresses the following critical questions:

- How would the California Public Utilities Commission (CPUC) regulate the prices of all output from refiners ranging from liquified petroleum gases (butane and propane), to refined products (gasoline, diesel, jet fuels), to other products (residual fuels, fuel oils, lubricants, asphalt, plastics, and petroleum coke)?
- If this policy were only intended to be applied to gasoline sold in California, how would a cost-of-service model be applied to only a single commodity for firms producing scores of other petroleum-based commodities? How would cost recovery be apportioned just to California gasoline output?
- How would the CPUC regulate all, some, or none of the domestic and international refinery feedstocks such as crude oil and gas oils?
- How would the CPUC regulate the other costs incurred by the refiners for operating expenses and necessary capital investments for planned refinery maintenance, unplanned outages, and compliance with myriad local state and federal regulations involving fuel regulations and emission limits?
- How would the CPUC regulate the cost of marine logistical services associated with imports, export, and intrastate movements of refinery feedstocks, refined products, and renewable fuels? We would ask the same question about truck transport services.
- If other refined products and refinery feedstock prices are regulated, how would the CPUC compel foreign suppliers to sell to California refiners at set price levels? Would the Federal Energy Regulatory Commission (FERC) or the U.S. State Department have authority to set these prices? Would the State cover the incremental costs refiners incur above the set values for imported crude oil, other refinery feedstocks, and refined products?
- How often, under what circumstances, and by what adjudicated process would the CPUC revise commodity prices?

- How would other prices be controlled downstream of the refiners by the CPUC to ensure that other market participants such as wholesalers and retailers would not take advantage of set price levels by increasing their margins to end-use customers? Does that mean the CPUC would set prices at all distribution terminal racks, and the 10,000-plus retail station outlets?
- How would the CPUC's role at the State level interface with the Commodity Futures Trading Commission (CFTC) role at the Federal level?
- How would a COS model for the California fuel supply chain affect contractual obligations that refiners currently have with other states, such as Arizona and Nevada? Does this require addressing legal issues, such as the commerce clause or other federal preemption questions?
- How does a COS model avoid or mitigate a loss of supply due to an unplanned outage?

Policy Options WSPA Recommends for More Complete Treatment

Recognizing that the CEC and CARB have already acknowledged California's structural fuel supply barriers as a key element in contributing to price spikes, WSPA recommends that the agencies invest additional energy and resources into any of the policy options that have the potential to increase inventory and stabilize in-state fuel supplies. We would discourage the agencies from spending further resources on the other policy options, as further development would only increase risk and potentially exacerbate the current policy impacts that are constraining local fuel supply. If the agencies feel obligated to keep all options open in their final Transportation Fuels Assessment, we recommend placing the remaining options in appendices that demonstrate that the agencies creatively considered even the most implausible options.

We do not discuss the demand-oriented policy options presented in the Draft because we feel that these kinds of programs are already under sufficiently robust development through CARB and the CEC, and reflect the State's other policies designed to reduce consumer demand. We only note, as mentioned above, that predictions or forecasts about future fuel demand in California must account for and compare scenarios beyond the State's preferred declining gasoline demand scenario. We further urge the agencies to avoid unrealistic expectations that lower income Californians will somehow be able or willing to transition to more expensive electric vehicles on the schedule the State prefers, rather than the schedule these consumers are able to accommodate financially.

The Draft offered brief descriptions of three inventory-related policy concepts that merit additional analysis and public discussion: a Strategic Fuels Reserve, Minimum Inventory Levels, and E15 Blending. We address each of these briefly below.

Strategic Fuel Reserve

The CEC previously studied the concept of creating a Strategic Fuels Reserve (SFR) in 2000 and 2001, at the direction of Assembly Bill 2076.²⁴ The purpose of the SFR concept was to reduce the magnitude and duration of fuel price spikes in California. Given the analogous situation cited in SB

²⁴ Assembly Bill No. 2076, Shelley, Chapter 936, Statutes of 2000, State of California, approved by the Governor September 29, 2000. Link: http://www.leginfo.ca.gov/pub/99-00/bill/asm/ab_2051-2100/ab_2076_bill_20000930_chaptered.pdf

X1-2, and the mandate to the CEC to explore all options, we recommend the agencies direct due attention to the work previously done.

During that process in 2000, the CEC assessed the concept of a strategic fuels reserve using a combination of consultant and internal technical staff resources. A revised consultant report was published in July 2002.²⁵ Over the following year, the CEC held workshops and conducted a hearing that concluded that "...the Governor and Legislature should not proceed with the strategic fuel reserve concept evaluated by the Commission. The Commission found that a strategic fuel reserve could have several unintended consequences, which could limit its effectiveness as a tool to moderate gasoline price spikes and could reduce the total supply of gasoline in the state. In addition, the Commission has determined that investment in private storage capacity is increasing, which reduces the need for SFR public storage."²⁶

The transportation fuels supply chain has continued to evolve since that initial assessment of an SFR concept, which merits a re-examination of this potential strategy to:

- Quantify the State's inventory capacity at both refinery locations and third-party facilities.
- Identify changes in storage capacity and types (leased versus community storage).
- Determine throughput limitations for marine terminals that could be used as part of the initial filling and subsequent restocking of the SFR.
- Reassess parameters of the original SFR concept to identify potential operational barriers or limitations to address price spikes, as well as potential negative consequences on private sector inventory holdings.

Minimum Inventory Levels

The other inventory-related policy concept identified in the Draft was related to a requirement for refiners to prevent their gasoline and component inventories from dropping below some yet-to-be-determined level, except under certain conditions. WSPA is concerned that such a concept could have unintended consequences for refinery operations, and constrain refiners' flexibility to meet changing market or operational conditions. If the CEC and CARB intend to pursue this course, we would urge the agencies to develop a report that would provide detailed responses to several critical questions about this concept, such as:

- How would the minimum inventory level be set?
- Would there be a different level for each refinery location?
- How would minimum inventories be managed through seasonal RVP transitions where inventory must be taken to minimum levels for tank turnover?

²⁵ California Strategic Fuels Reserve, Revised Contractor Report, California Energy Commission, P600-02-017D, July 2002. Link: <https://stillwaterassociates.com/wp-content/uploads/2023/03/Strategic-Fuel-Reserve-Study-Stillwater-Associates-7.3.02.pdf>

²⁶ Feasibility of a Strategic Fuels Reserve, Commission Report, California Energy Commission, P600-03-013CR, July 2003, page 2. Link: https://web.archive.org/web/20100607193136/https://www.energy.ca.gov/reports/2003-07-31_600-03-013.PDF

- Would minimum inventory levels be extended to include third-party terminals?
- Does setting a minimum inventory level include increasing total storage capacity in the state for gasoline and blending components? How does the State anticipate incentivizing investment and potentially sharing risk?
- What are the feasibility studies and permit timelines for constructing additional storage capacity at refineries?
- If no additional storage tanks are constructed as part of this concept, do minimum inventory level requirements constrain refinery operational flexibility by effectively increasing storage tank “heels” and reducing “working storage capacity?”
- The CEC should better understand product allocations, which are essentially minimum inventory levels set to conserve supply, for example, during hurricane events in the Gulf Coast region.

E15 Blending

The CEC noted E15 as a production enhancement strategy to allow increase blending of ethanol from 10% (E10) to 15% (E15) to augment existing CARBOB supply. WSPA believes that such a change should not be mandated because it can be invoked during times of tight supply. Existing infrastructure for ethanol, and ship and rail offload capacity exist for short-term increased blend percentages. To allow for blending up to E15, CARB must update the Predictive Model that is used to certify CARBOB emissions. Under current modeling assumptions, E15 blends could potentially put the State Implementation Plan (SIP) at risk for being out of compliance.

Rail Supplies

The Draft listed a policy option concerning the capability to import transportation fuel by rail and transload to tanker trucks at various locations throughout the State. The CEC accurately characterized this potential policy as a strategy that could be deployed in response to a significant emergency, such as in the aftermath of a catastrophic earthquake. However, if the State were to develop such a capability, then transportation fuel market participants (refiners, importers, and large marketers) might take advantage of rail transloading infrastructure to bring in additional supplies of gasoline under certain market conditions. The agencies should conduct a detailed assessment that would include at minimum:

- Identification of existing rail transloading facilities for refined products, if any;
- Attributes required for a typical rail transloading site;
 - Rail siding;
 - Tanker truck access;
 - Transloading equipment;
 - Personnel;
 - Security;
 - Rail access agreements;
- Estimated range of investment required per site and rail transportation costs from specific domestic refining centers;
- Minimum number of locations and basis for making that determination;

- Timing for delivery from key points of domestic origin, compared to waterborne resupply; and
- Potential barriers to private sector operation related to rail car availability and availability out-of-state suppliers capable of producing CARB gasoline.

We also recommend that the agencies take care not to treat each of these options in isolation. Rather, once an assessment and analysis for each policy option has been completed, the agencies should examine whether market and fuel supply stability might be enhanced further by combining viable options into a more comprehensive suite of policy solutions.

Conclusion

WSPA appreciates the opportunity to comment on the Draft Transportation Fuels Assessment. We wish to reiterate that, while we believe this Draft is an important foundation to initiate serious public engagement, we firmly believe it is incomplete and not ready to become the basis of a comprehensive transportation fuels policy. Nor is it – in its current form – a sufficient foundation to underpin the Transportation Fuels Transition Plan mandated by SB X1-2.

Should the agencies wish to correct the deficiencies in the Draft that we have identified here, WSPA and its member companies are eagerly disposed to assist and collaborate in multiple venues to develop the information base and policy recommendations that one would expect any comprehensive strategic effort of this scope and gravity would require. WSPA has already invested heavily in analytical work on multiple subsectors of the entire fuel supply chain. We would be pleased to work with the agencies to share our information and analytical products. All of our analyses so far have been conducted using publicly available data (much of it published by the CEC and CARB themselves).

WSPA wishes to note that, throughout multiple hearings and workshops, CEC Commissioners have reiterated their commitment to full, good-faith engagement with industry to ensure the most comprehensive Transportation Fuels Assessment and Transportation Fuels Transition Study. This commitment, as we understand it, is not just to fulfill the Commission's specific obligations under SB X1-2. It is to ensure that the State and its citizens have reliable access to affordable, adequate, reliable, clean, and safe fuels from all sources for the energy needs of a thriving population and economy. We share that commitment, and we are ready and willing to work with the Air Resources Board and the Energy Commission to achieve those goals.

Sincerely,



Catherine Reheis-Boyd
President and CEO

CC: Liane Randolph, Chair, California Air Resources Board


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AB-32 Air pollution: greenhouse gases: California Global Warming Solutions Act of 2006. (2005-2006)

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Assembly Bill No. 32

CHAPTER 488

An act to add Division 25.5 (commencing with Section 38500) to the Health and Safety Code, relating to air pollution.

[Approved by Governor September 27, 2006. Filed with Secretary of State September 27, 2006.]

LEGISLATIVE COUNSEL'S DIGEST

AB 32, Nunez. Air pollution: greenhouse gases: California Global Warming Solutions Act of 2006.

Under existing law, the State Air Resources Board (state board), the State Energy Resources Conservation and Development Commission (Energy Commission), and the California Climate Action Registry all have responsibilities with respect to the control of emissions of greenhouse gases, as defined, and the Secretary for Environmental Protection is required to coordinate emission reductions of greenhouse gases and climate change activity in state government.

This bill would require the state board to adopt regulations to require the reporting and verification of statewide greenhouse gas emissions and to monitor and enforce compliance with this program, as specified. The bill would require the state board to adopt a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions levels in 1990 to be achieved by 2020, as specified. The bill would require the state board to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective greenhouse gas emission reductions, as specified. The bill would authorize the state board to adopt market-based compliance mechanisms, as defined, meeting specified requirements. The bill would require the state board to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism adopted by the state board, pursuant to specified provisions of existing law. The bill would authorize the state board to adopt a schedule of fees to be paid by regulated sources of greenhouse gas emissions, as specified.

Because the bill would require the state board to establish emissions limits and other requirements, the violation of which would be a crime, this bill would create a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: yes

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Division 25.5 (commencing with Section 38500) is added to the Health and Safety Code, to read:

DIVISION 25.5. CALIFORNIA GLOBAL WARMING SOLUTIONS ACT OF 2006

PART 1. GENERAL PROVISIONS

CHAPTER 1. Title of Division

38500. This division shall be known, and may be cited, as the California Global Warming Solutions Act of 2006.

CHAPTER 2. Findings and Declarations

38501. The Legislature finds and declares all of the following:

(a) Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

(b) Global warming will have detrimental effects on some of California's largest industries, including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry. It will also increase the strain on electricity supplies necessary to meet the demand for summer air-conditioning in the hottest parts of the state.

(c) California has long been a national and international leader on energy conservation and environmental stewardship efforts, including the areas of air quality protections, energy efficiency requirements, renewable energy standards, natural resource conservation, and greenhouse gas emission standards for passenger vehicles. The program established by this division will continue this tradition of environmental leadership by placing California at the forefront of national and international efforts to reduce emissions of greenhouse gases.

(d) National and international actions are necessary to fully address the issue of global warming. However, action taken by California to reduce emissions of greenhouse gases will have far-reaching effects by encouraging other states, the federal government, and other countries to act.

(e) By exercising a global leadership role, California will also position its economy, technology centers, financial institutions, and businesses to benefit from national and international efforts to reduce emissions of greenhouse gases. More importantly, investing in the development of innovative and pioneering technologies will assist California in achieving the 2020 statewide limit on emissions of greenhouse gases established by this division and will provide an opportunity for the state to take a global economic and technological leadership role in reducing emissions of greenhouse gases.

(f) It is the intent of the Legislature that the State Air Resources Board coordinate with state agencies, as well as consult with the environmental justice community, industry sectors, business groups, academic institutions, environmental organizations, and other stakeholders in implementing this division.

(g) It is the intent of the Legislature that the State Air Resources Board consult with the Public Utilities Commission in the development of emissions reduction measures, including limits on emissions of greenhouse gases applied to electricity and natural gas providers regulated by the Public Utilities Commission in order to ensure that electricity and natural gas providers are not required to meet duplicative or inconsistent regulatory requirements.

(h) It is the intent of the Legislature that the State Air Resources Board design emissions reduction measures to meet the statewide emissions limits for greenhouse gases established pursuant to this division in a manner that minimizes costs and maximizes benefits for California's economy, improves and modernizes California's energy infrastructure and maintains electric system reliability, maximizes additional environmental and economic co-benefits for California, and complements the state's efforts to improve air quality.

(i) It is the intent of the Legislature that the Climate Action Team established by the Governor to coordinate the efforts set forth under Executive Order S-3-05 continue its role in coordinating overall climate policy.

CHAPTER 3. Definitions

38505. For the purposes of this division, the following terms have the following meanings:

(a) "Allowance" means an authorization to emit, during a specified year, up to one ton of carbon dioxide equivalent.

(b) "Alternative compliance mechanism" means an action undertaken by a greenhouse gas emission source that achieves the equivalent reduction of greenhouse gas emissions over the same time period as a direct emission reduction, and that is approved by the state board. "Alternative compliance mechanism" includes, but is not limited to, a flexible compliance schedule, alternative control technology, a process change, or a product substitution.

(c) "Carbon dioxide equivalent" means the amount of carbon dioxide by weight that would produce the same global warming impact as a given weight of another greenhouse gas, based on the best available science, including from the Intergovernmental Panel on Climate Change.

(d) "Cost-effective" or "cost-effectiveness" means the cost per unit of reduced emissions of greenhouse gases adjusted for its global warming potential.

(e) "Direct emission reduction" means a greenhouse gas emission reduction action made by a greenhouse gas emission source at that source.

(f) "Emissions reduction measure" means programs, measures, standards, and alternative compliance mechanisms authorized pursuant to this division, applicable to sources or categories of sources, that are designed to reduce emissions of greenhouse gases.

(g) "Greenhouse gas" or "greenhouse gases" includes all of the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

(h) "Greenhouse gas emissions limit" means an authorization, during a specified year, to emit up to a level of greenhouse gases specified by the state board, expressed in tons of carbon dioxide equivalents.

(i) "Greenhouse gas emission source" or "source" means any source, or category of sources, of greenhouse gas emissions whose emissions are at a level of significance, as determined by the state board, that its participation in the program established under this division will enable the state board to effectively reduce greenhouse gas emissions and monitor compliance with the statewide greenhouse gas emissions limit.

(j) "Leakage" means a reduction in emissions of greenhouse gases within the state that is offset by an increase in emissions of greenhouse gases outside the state.

(k) "Market-based compliance mechanism" means either of the following:

(1) A system of market-based declining annual aggregate emissions limitations for sources or categories of sources that emit greenhouse gases.

(2) Greenhouse gas emissions exchanges, banking, credits, and other transactions, governed by rules and protocols established by the state board, that result in the same greenhouse gas emission reduction, over the same time period, as direct compliance with a greenhouse gas emission limit or emission reduction measure adopted by the state board pursuant to this division.

(l) "State board" means the State Air Resources Board.

(m) "Statewide greenhouse gas emissions" means the total annual emissions of greenhouse gases in the state, including all emissions of greenhouse gases from the generation of electricity delivered to and consumed in California, accounting for transmission and distribution line losses, whether the electricity is generated in state or imported. Statewide emissions shall be expressed in tons of carbon dioxide equivalents.

(n) "Statewide greenhouse gas emissions limit" or "statewide emissions limit" means the maximum allowable level of statewide greenhouse gas emissions in 2020, as determined by the state board pursuant to Part 3 (commencing with Section 38850).

CHAPTER 4. Role of State Board

38510. The State Air Resources Board is the state agency charged with monitoring and regulating sources of emissions of greenhouse gases that cause global warming in order to reduce emissions of greenhouse gases.

PART 2. MANDATORY GREENHOUSE GAS EMISSIONS REPORTING

38530. (a) On or before January 1, 2008, the state board shall adopt regulations to require the reporting and verification of statewide greenhouse gas emissions and to monitor and enforce compliance with this program.

(b) The regulations shall do all of the following:

(1) Require the monitoring and annual reporting of greenhouse gas emissions from greenhouse gas emission sources beginning with the sources or categories of sources that contribute the most to statewide emissions.

(2) Account for greenhouse gas emissions from all electricity consumed in the state, including transmission and distribution line losses from electricity generated within the state or imported from outside the state. This requirement applies to all retail sellers of electricity, including load-serving entities as defined in subdivision (j) of Section 380 of the Public Utilities Code and local publicly owned electric utilities as defined in Section 9604 of the Public Utilities Code.

(3) Where appropriate and to the maximum extent feasible, incorporate the standards and protocols developed by the California Climate Action Registry, established pursuant to Chapter 6 (commencing with Section 42800) of Part 4 of Division 26. Entities that voluntarily participated in the California Climate Action Registry prior to December 31, 2006, and have developed a greenhouse gas emission reporting program, shall not be required to significantly alter their reporting or verification program except as necessary to ensure that reporting is complete and verifiable for the purposes of compliance with this division as determined by the state board.

(4) Ensure rigorous and consistent accounting of emissions, and provide reporting tools and formats to ensure collection of necessary data.

(5) Ensure that greenhouse gas emission sources maintain comprehensive records of all reported greenhouse gas emissions.

(c) The state board shall do both of the following:

(1) Periodically review and update its emission reporting requirements, as necessary.

(2) Review existing and proposed international, federal, and state greenhouse gas emission reporting programs and make reasonable efforts to promote consistency among the programs established pursuant to this part and other programs, and to streamline reporting requirements on greenhouse gas emission sources.

PART 3. STATEWIDE GREENHOUSE GAS EMISSIONS LIMIT

38550. By January 1, 2008, the state board shall, after one or more public workshops, with public notice, and an opportunity for all interested parties to comment, determine what the statewide greenhouse gas emissions level was in 1990, and approve in a public hearing, a statewide greenhouse gas emissions limit that is equivalent to that level, to be achieved by 2020. In order to ensure the most accurate determination feasible, the state board shall evaluate the best available scientific, technological, and economic information on greenhouse gas emissions to determine the 1990 level of greenhouse gas emissions.

38551. (a) The statewide greenhouse gas emissions limit shall remain in effect unless otherwise amended or repealed.

(b) It is the intent of the Legislature that the statewide greenhouse gas emissions limit continue in existence and be used to maintain and continue reductions in emissions of greenhouse gases beyond 2020.

(c) The state board shall make recommendations to the Governor and the Legislature on how to continue reductions of greenhouse gas emissions beyond 2020.

PART 4. GREENHOUSE GAS EMISSIONS REDUCTIONS

38560. The state board shall adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective greenhouse gas emission reductions from sources or categories of sources, subject to the criteria and schedules set forth in this part.

38560.5. (a) On or before June 30, 2007, the state board shall publish and make available to the public a list of discrete early action greenhouse gas emission reduction measures that can be implemented prior to the

measures and limits adopted pursuant to Section 38562.

(b) On or before January 1, 2010, the state board shall adopt regulations to implement the measures identified on the list published pursuant to subdivision (a).

(c) The regulations adopted by the state board pursuant to this section shall achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions from those sources or categories of sources, in furtherance of achieving the statewide greenhouse gas emissions limit.

(d) The regulations adopted pursuant to this section shall be enforceable no later than January 1, 2010.

38561. (a) On or before January 1, 2009, the state board shall prepare and approve a scoping plan, as that term is understood by the state board, for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions from sources or categories of sources of greenhouse gases by 2020 under this division. The state board shall consult with all state agencies with jurisdiction over sources of greenhouse gases, including the Public Utilities Commission and the State Energy Resources Conservation and Development Commission, on all elements of its plan that pertain to energy related matters including, but not limited to, electrical generation, load based-standards or requirements, the provision of reliable and affordable electrical service, petroleum refining, and statewide fuel supplies to ensure the greenhouse gas emissions reduction activities to be adopted and implemented by the state board are complementary, nonduplicative, and can be implemented in an efficient and cost-effective manner.

(b) The plan shall identify and make recommendations on direct emission reduction measures, alternative compliance mechanisms, market-based compliance mechanisms, and potential monetary and nonmonetary incentives for sources and categories of sources that the state board finds are necessary or desirable to facilitate the achievement of the maximum feasible and cost-effective reductions of greenhouse gas emissions by 2020.

(c) In making the determinations required by subdivision (b), the state board shall consider all relevant information pertaining to greenhouse gas emissions reduction programs in other states, localities, and nations, including the northeastern states of the United States, Canada, and the European Union.

(d) The state board shall evaluate the total potential costs and total potential economic and noneconomic benefits of the plan for reducing greenhouse gases to California's economy, environment, and public health, using the best available economic models, emission estimation techniques, and other scientific methods.

(e) In developing its plan, the state board shall take into account the relative contribution of each source or source category to statewide greenhouse gas emissions, and the potential for adverse effects on small businesses, and shall recommend a de minimis threshold of greenhouse gas emissions below which emission reduction requirements will not apply.

(f) In developing its plan, the state board shall identify opportunities for emission reductions measures from all verifiable and enforceable voluntary actions, including, but not limited to, carbon sequestration projects and best management practices.

(g) The state board shall conduct a series of public workshops to give interested parties an opportunity to comment on the plan. The state board shall conduct a portion of these workshops in regions of the state that have the most significant exposure to air pollutants, including, but not limited to, communities with minority populations, communities with low-income populations, or both.

(h) The state board shall update its plan for achieving the maximum technologically feasible and cost-effective reductions of greenhouse gas emissions at least once every five years.

38562. (a) On or before January 1, 2011, the state board shall adopt greenhouse gas emission limits and emission reduction measures by regulation to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions in furtherance of achieving the statewide greenhouse gas emissions limit, to become operative beginning on January 1, 2012.

(b) In adopting regulations pursuant to this section and Part 5 (commencing with Section 38570), to the extent feasible and in furtherance of achieving the statewide greenhouse gas emissions limit, the state board shall do all of the following:

(1) Design the regulations, including distribution of emissions allowances where appropriate, in a manner that is equitable, seeks to minimize costs and maximize the total benefits to California, and encourages early action

to reduce greenhouse gas emissions.

(2) Ensure that activities undertaken to comply with the regulations do not disproportionately impact low-income communities.

(3) Ensure that entities that have voluntarily reduced their greenhouse gas emissions prior to the implementation of this section receive appropriate credit for early voluntary reductions.

(4) Ensure that activities undertaken pursuant to the regulations complement, and do not interfere with, efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions.

(5) Consider cost-effectiveness of these regulations.

(6) Consider overall societal benefits, including reductions in other air pollutants, diversification of energy sources, and other benefits to the economy, environment, and public health.

(7) Minimize the administrative burden of implementing and complying with these regulations.

(8) Minimize leakage.

(9) Consider the significance of the contribution of each source or category of sources to statewide emissions of greenhouse gases.

(c) In furtherance of achieving the statewide greenhouse gas emissions limit, by January 1, 2011, the state board may adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit greenhouse gas emissions, applicable from January 1, 2012, to December 31, 2020, inclusive, that the state board determines will achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions, in the aggregate, from those sources or categories of sources.

(d) Any regulation adopted by the state board pursuant to this part or Part 5 (commencing with Section 38570) shall ensure all of the following:

(1) The greenhouse gas emission reductions achieved are real, permanent, quantifiable, verifiable, and enforceable by the state board.

(2) For regulations pursuant to Part 5 (commencing with Section 38570), the reduction is in addition to any greenhouse gas emission reduction otherwise required by law or regulation, and any other greenhouse gas emission reduction that otherwise would occur.

(3) If applicable, the greenhouse gas emission reduction occurs over the same time period and is equivalent in amount to any direct emission reduction required pursuant to this division.

(e) The state board shall rely upon the best available economic and scientific information and its assessment of existing and projected technological capabilities when adopting the regulations required by this section.

(f) The state board shall consult with the Public Utilities Commission in the development of the regulations as they affect electricity and natural gas providers in order to minimize duplicative or inconsistent regulatory requirements.

(g) After January 1, 2011, the state board may revise regulations adopted pursuant to this section and adopt additional regulations to further the provisions of this division.

38563. Nothing in this division restricts the state board from adopting greenhouse gas emission limits or emission reduction measures prior to January 1, 2011, imposing those limits or measures prior to January 1, 2012, or providing early reduction credit where appropriate.

38564. The state board shall consult with other states, and the federal government, and other nations to identify the most effective strategies and methods to reduce greenhouse gases, manage greenhouse gas control programs, and to facilitate the development of integrated and cost-effective regional, national, and international greenhouse gas reduction programs.

38565. The state board shall ensure that the greenhouse gas emission reduction rules, regulations, programs, mechanisms, and incentives under its jurisdiction, where applicable and to the extent feasible, direct public and

private investment toward the most disadvantaged communities in California and provide an opportunity for small businesses, schools, affordable housing associations, and other community institutions to participate in and benefit from statewide efforts to reduce greenhouse gas emissions.

PART 5. MARKET-BASED COMPLIANCE MECHANISMS

38570. (a) The state board may include in the regulations adopted pursuant to Section 38562 the use of market-based compliance mechanisms to comply with the regulations.

(b) Prior to the inclusion of any market-based compliance mechanism in the regulations, to the extent feasible and in furtherance of achieving the statewide greenhouse gas emissions limit, the state board shall do all of the following:

(1) Consider the potential for direct, indirect, and cumulative emission impacts from these mechanisms, including localized impacts in communities that are already adversely impacted by air pollution.

(2) Design any market-based compliance mechanism to prevent any increase in the emissions of toxic air contaminants or criteria air pollutants.

(3) Maximize additional environmental and economic benefits for California, as appropriate.

(c) The state board shall adopt regulations governing how market-based compliance mechanisms may be used by regulated entities subject to greenhouse gas emission limits and mandatory emission reporting requirements to achieve compliance with their greenhouse gas emissions limits.

38571. The state board shall adopt methodologies for the quantification of voluntary greenhouse gas emission reductions. The state board shall adopt regulations to verify and enforce any voluntary greenhouse gas emission reductions that are authorized by the state board for use to comply with greenhouse gas emission limits established by the state board. The adoption of methodologies is exempt from the rulemaking provisions of the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code).

38574. Nothing in this part or Part 4 (commencing with Section 38560) confers any authority on the state board to alter any programs administered by other state agencies for the reduction of greenhouse gas emissions.

PART 6. ENFORCEMENT

38580. (a) The state board shall monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism adopted by the state board pursuant to this division.

(b) (1) Any violation of any rule, regulation, order, emission limitation, emissions reduction measure, or other measure adopted by the state board pursuant to this division may be enjoined pursuant to Section 41513, and the violation is subject to those penalties set forth in Article 3 (commencing with Section 42400) of Chapter 4 of Part 4 of, and Chapter 1.5 (commencing with Section 43025) of Part 5 of, Division 26.

(2) Any violation of any rule, regulation, order, emission limitation, emissions reduction measure, or other measure adopted by the state board pursuant to this division shall be deemed to result in an emission of an air contaminant for the purposes of the penalty provisions of Article 3 (commencing with Section 42400) of Chapter 4 of Part 4 of, and Chapter 1.5 (commencing with Section 43025) of Part 5 of, Division 26.

(3) The state board may develop a method to convert a violation of any rule, regulation, order, emission limitation, or other emissions reduction measure adopted by the state board pursuant to this division into the number of days in violation, where appropriate, for the purposes of the penalty provisions of Article 3 (commencing with Section 42400) of Chapter 4 of Part 4 of, and Chapter 1.5 (commencing with Section 43025) of Part 5 of, Division 26.

(c) Section 42407 and subdivision (i) of Section 42410 shall not apply to this part.

PART 7. Miscellaneous Provisions

38590. If the regulations adopted pursuant to Section 43018.5 do not remain in effect, the state board shall implement alternative regulations to control mobile sources of greenhouse gas emissions to achieve equivalent

or greater reductions.

38591. (a) The state board, by July 1, 2007, shall convene an environmental justice advisory committee, of at least three members, to advise it in developing the scoping plan pursuant to Section 38561 and any other pertinent matter in implementing this division. The advisory committee shall be comprised of representatives from communities in the state with the most significant exposure to air pollution, including, but not limited to, communities with minority populations or low-income populations, or both.

(b) The state board shall appoint the advisory committee members from nominations received from environmental justice organizations and community groups.

(c) The state board shall provide reasonable per diem for attendance at advisory committee meetings by advisory committee members from nonprofit organizations.

(d) The state board shall appoint an Economic and Technology Advancement Advisory Committee to advise the state board on activities that will facilitate investment in and implementation of technological research and development opportunities, including, but not limited to, identifying new technologies, research, demonstration projects, funding opportunities, developing state, national, and international partnerships and technology transfer opportunities, and identifying and assessing research and advanced technology investment and incentive opportunities that will assist in the reduction of greenhouse gas emissions. The committee may also advise the state board on state, regional, national, and international economic and technological developments related to greenhouse gas emission reductions.

38592. (a) All state agencies shall consider and implement strategies to reduce their greenhouse gas emissions.

(b) Nothing in this division shall relieve any person, entity, or public agency of compliance with other applicable federal, state, or local laws or regulations, including state air and water quality requirements, and other requirements for protecting public health or the environment.

(a) Nothing in this division affects the authority of the Public Utilities Commission.

38593. (b) Nothing in this division affects the obligation of an electrical corporation to provide customers with safe and reliable electric service.

38594. Nothing in this division shall limit or expand the existing authority of any district, as defined in Section 39025.

38595. Nothing in this division shall preclude, prohibit, or restrict the construction of any new facility or the expansion of an existing facility subject to regulation under this division, if all applicable requirements are met and the facility is in compliance with regulations adopted pursuant to this division.

38596. The provisions of this division are severable. If any provision of this division or its application is held invalid, that invalidity shall not affect other provisions or applications that can be given effect without the invalid provision or application.

38597. The state board may adopt by regulation, after a public workshop, a schedule of fees to be paid by the sources of greenhouse gas emissions regulated pursuant to this division, consistent with Section 57001. The revenues collected pursuant to this section, shall be deposited into the Air Pollution Control Fund and are available upon appropriation, by the Legislature, for purposes of carrying out this division.

38598. (a) Nothing in this division shall limit the existing authority of a state entity to adopt and implement greenhouse gas emissions reduction measures.

(b) Nothing in this division shall relieve any state entity of its legal obligations to comply with existing law or regulation.

38599. (a) In the event of extraordinary circumstances, catastrophic events, or threat of significant economic harm, the Governor may adjust the applicable deadlines for individual regulations, or for the state in the aggregate, to the earliest feasible date after that deadline.

(b) The adjustment period may not exceed one year unless the Governor makes an additional adjustment pursuant to subdivision (a).

(c) Nothing in this section affects the powers and duties established in the California Emergency Services Act (Chapter 7 (commencing with Section 8550) of Division 1 of Title 2 of the Government Code).

(d) The Governor shall, within 10 days of invoking subdivision (a), provide written notification to the Legislature of the action undertaken.

SEC. 2 No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.


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SB-32 California Global Warming Solutions Act of 2006: emissions limit. (2015-2016)

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Senate Bill No. 32

CHAPTER 249

An act to add Section 38566 to the Health and Safety Code, relating to greenhouse gases.

[Approved by Governor September 08, 2016. Filed with Secretary of State September 08, 2016.]

LEGISLATIVE COUNSEL'S DIGEST

SB 32, Pavley. California Global Warming Solutions Act of 2006: emissions limit.

(1) The California Global Warming Solutions Act of 2006 designates the State Air Resources Board as the state agency charged with monitoring and regulating sources of emissions of greenhouse gases. The state board is required to approve a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions level in 1990 to be achieved by 2020 and to adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective greenhouse gas emissions reductions.

This bill would require the state board to ensure that statewide greenhouse gas emissions are reduced to 40% below the 1990 level by 2030.

(2) This bill would become operative only if AB 197 of the 2015–16 Regular Session is enacted and becomes effective on or before January 1, 2017.

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: no

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. The Legislature finds and declares all of the following:

(a) The California Global Warming Solutions Act of 2006 (Division 25.5 (commencing with Section 38500) of the Health and Safety Code) authorizes the State Air Resources Board to adopt regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions.

(b) The California Global Warming Solutions Act of 2006 (Division 25.5 (commencing with Section 38500) of the Health and Safety Code) requires the State Air Resources Board to reduce statewide emissions of greenhouse gases to at least the 1990 emissions level by 2020 and to maintain and continue reductions thereafter.

(c) Continuing to reduce greenhouse gas emissions is critical for the protection of all areas of the state, but especially for the state's most disadvantaged communities, as those communities are affected first, and, most frequently, by the adverse impacts of climate change, including an increased frequency of extreme weather

events, such as drought, heat, and flooding. The state's most disadvantaged communities also are disproportionately impacted by the deleterious effects of climate change on public health.

(d) The State Air Resources Board shall achieve the state's more stringent greenhouse gas emission reductions in a manner that benefits the state's most disadvantaged communities and is transparent and accountable to the public and the Legislature.

SEC. 2. Section 38566 is added to the Health and Safety Code, to read:

38566. In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the state board shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030.

SEC. 3. This act shall become operative only if Assembly Bill 197 of the 2015–16 Regular Session is enacted and becomes effective on or before January 1, 2017.


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AB-1207 Climate change: market-based compliance mechanism: extension. (2025-2026)

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Date Published: 09/22/2025 10:00 AM

Assembly Bill No. 1207

CHAPTER 117

An act to amend Sections 38501, 38562, 38590.1, 38591.1, 38591.2, 38592.5, 38592.6, and 38594 of, and to add and repeal Section 38562.1 of, the Health and Safety Code, and to amend Section 748.5 of, and to add Section 748.5.5 to, the Public Utilities Code, relating to climate change, making an appropriation therefor, and declaring the urgency thereof, to take effect immediately.

[Approved by Governor September 19, 2025. Filed with Secretary of State September 19, 2025.]

LEGISLATIVE COUNSEL'S DIGEST

AB 1207, Irwin. Climate change: market-based compliance mechanism: extension.

The California Global Warming Solutions Act of 2006 requires the State Air Resources Board to adopt regulations for greenhouse gas emissions limits and emissions reduction measures to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions in furtherance of achieving the statewide greenhouse gas emissions limit, as defined. The act authorizes the state board to revise regulations or adopt additional regulations to further the act. The act authorizes that state board to include in those regulations the use of a market-based compliance mechanism to comply with those regulations.

This bill would require the state board to adopt regulations for greenhouse gas emissions limits and emissions reduction measures to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions to instead achieve certain emissions reductions goals and the purposes of the act. The bill would require the state board, in adopting regulations, to design the regulations in a manner that transitions support from gas corporations to electrical distribution utilities to minimize ratepayer impacts and meet the emissions reduction goals of the act. The bill would require the state board to consider the effects of the regulations on affordability, cost-effectiveness, minimization of leakage in California, and achieving the emissions reduction goals of the act. The bill would state the intent of the Legislature that the market-based compliance mechanism be known as the California Cap-and-Invest Program.

The act, until January 1, 2031, authorizes the state board to adopt a regulation establishing a market-based compliance mechanism that is a system of market-based declining aggregate emissions limits for sources or categories of sources that emit greenhouse gases meeting certain requirements, including the establishment of a price ceiling, as provide, the allowance price containment reserve, and a requirement for state board, if the allowance from the allowance price containment reserve is exhausted, to offer covered entities additional allowances at the price ceiling if need for compliance. The act requires that moneys generated by the sale of those additional allowances be expended by the state board to achieve emissions reductions, as provided. The act, until January 1, 2031, establishes the Compliance Offsets Protocol Task Force to provide guidance to the

state board in approving new offset protocols for the market-based compliance mechanism for purposes of increasing offset projects, as provided. The act, until January 1, 2031, establishes the Independent Emissions Market Advisory Committee within the California Environmental Protection Agency and requires the committee to annually report to the state board and the Joint Legislative Committee on Climate Change Policies on the environmental and economic performance of the regulation establishing the market-based compliance mechanism and other relevant climate change policies. The act, until January 1, 2031, requires the state board to designate the market-based compliance mechanism as the rule for petroleum refineries and oil and gas production facilities to achieve their greenhouse gas emissions reductions. The act provides that a violation of any rule, regulation, order, emissions limitation, emissions reduction measure, or other measure adopted by the state board under the act is a crime.

Existing law requires moneys collected by the state board from the auction or sale of allowances as part of a market-based compliance mechanism to be deposited in the Greenhouse Gas Reduction Fund and continuously appropriates a portion of the moneys in the fund for various purposes.

This bill would extend the above-described provisions until January 1, 2046. The bill would require the state board, in adopting those regulations, to additionally do certain things, including establish offset credit limits from January 1, 2026, to December 31, 2045, inclusive, as provided. The bill would require that moneys generated from the sale of additional allowances at the price ceiling be deposited into the California Climate Mitigation Fund, which the bill would create in the State Treasury. The bill would require moneys in the California Climate Mitigation Fund be available, upon appropriation by the Legislature, for purposes of providing direct rebates and investments to reduce household energy costs. Because a violation of the market-based compliance mechanism whose operation would be extended by the bill would be a crime, the bill would impose a state-mandated local program. By extending the operation of the market-based compliance mechanism, thereby extending the deposit of moneys from that market-based compliance mechanism into the fund, the bill would make an appropriation. This bill would specify that the members of the Independent Emissions Market Advisory Committee are to be considered designated employees of the California Environmental Protection Agency for purposes of the Political Reform Act of 1974.

This bill would, if the state board initiates a regulatory process to update those regulations that is expected to be a major regulation for purposes of the Administrative Procedure Act, require the chairperson of the state board, until January 1, 2046, to present to the Joint Legislative Committee on Climate Change Policies and other relevant policy committees of the Legislature on the current state of the market-based compliance mechanism and provide the rationale for updating the regulations, as provided, and to transmit certain information to the joint legislative committee and the relevant budget subcommittees, including the economic analysis required by the Administrative Procedure Act of the proposed amendments to the regulations. The bill would require the state board and other state agencies implementing programs that are funded by the Greenhouse Gas Reduction Fund, upon request, to appear annually before the Joint Legislative Committee on Climate Change Policies and the relevant budget subcommittees to give a presentation on the expenditures of those moneys.

The act requires the state board, on or before January 1, 2009, to prepare and adopt a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions and to update the scoping plan at least once every 5 years.

This bill would require the state board, until January 1, 2046, to include in the updates to the scoping plan the progress towards meeting certain greenhouse gas emissions reduction targets and recommendations to the Legislature on necessary statutory changes to the market-based compliance mechanism to further cost-effectively reduce emissions of greenhouse gases.

Existing law authorizes the Public Utilities Commission to allocate 15% of the revenues received by electrical corporations as a result of the direct allocation of greenhouse gas allowances to electric corporations for clean energy and energy efficiency projects that are administered by the electrical corporations or a qualified third-party administrator and that are not otherwise funded by other funding sources. Existing law requires the commission to require the balance of those revenues to be credited directly to the residential, small business, and emissions-intensive, trade-exposed retail customers of the electrical corporations. Existing law requires the commission to require the adoption and implementation of a customer outreach plan for each electrical corporation for purposes of obtaining the maximum feasible public awareness of the crediting of greenhouse gas allowance revenues.

This bill would require the credits provided to residential customers to be provided on the bills of those customers in no more than 4 high-billed months of each year to maximize customer electric bill affordability or as otherwise directed by the commission to address extreme, unforeseen, and temporary circumstances. The bill

would instead authorize the commission to require those revenues to be credited to small businesses and emission-intensive trade-exposed retail customers of the electrical corporations. The bill would require the commission, not later than January 1, 2027, to require each electrical corporation to update its customer outreach plan, as provided.

This bill would make the 15% allocation for clean energy and energy efficiency projects inoperative on July 1, 2026. The bill would require, from July 1, 2026, to January 1, 2031, inclusive, 5% of those revenues be remitted to the State Treasury for deposit into the California Transmission Accelerator Revolving Fund and be available to California Infrastructure and Economic Development Bank for purposes of the California Transmission Accelerator Revolving Fund Program.

Under existing law, a violation of the Public Utilities Act or an order, decision, rule, direction, demand, or requirement of the commission is a crime.

Because certain provisions of the bill would be part of the Public Utilities Act and a violation of a commission action implementing the bill's requirements would be a crime, this bill would impose a state-mandated local program.

This bill would require local publicly owned electric utilities receiving a direct allocation of greenhouse gas allowances in addition to the greenhouse gas allowance totals specified in the regulations implementing the market-based compliance mechanism to provide a credit, as provided. The bill would require local publicly owned electric utilities to report to the state board on the uses of all revenues received by those utilities as a result of the direct allocation of greenhouse gas allowances under those regulations and would require the state board to annually submit a report to the Legislature on the uses of those revenues. By imposing additional duties on local publicly owned electric utilities, the bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for specified reasons.

This bill would declare that it is to take effect immediately as an urgency statute.

Vote: 2/3 Appropriation: yes Fiscal Committee: yes Local Program: yes

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 38501 of the Health and Safety Code, as amended by Section 1 of Chapter 135 of the Statutes of 2017, is amended to read:

38501. (a) The Legislature finds and declares all of the following:

(1) Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

(2) Global warming will have detrimental effects on some of California's largest industries, including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry. It will also increase the strain on electricity supplies necessary to meet the demand for summer air-conditioning in the hottest parts of the state.

(3) California has long been a national and international leader on energy conservation and environmental stewardship efforts, including the areas of air quality protections, energy efficiency requirements, renewable and clean energy standards, natural resource conservation, and greenhouse gas emission standards for vehicles. The program established by this division will continue this tradition of environmental leadership by placing California at the forefront of national and international efforts to reduce emissions of greenhouse gases.

(4) National and international actions are necessary to fully address the issue of global warming. However, action taken by California to reduce emissions of greenhouse gases will have far-reaching effects by

encouraging other states, the federal government, and other countries to act.

(5) California has positioned its economy, technology centers, financial institutions, and businesses to benefit from national and international efforts to reduce emissions of greenhouse gases. More importantly, investing in the development of innovative and pioneering technologies will continue to assist California in achieving statewide greenhouse gas emissions targets established by this division and will continue to provide an opportunity for the state to take a global economic and technological leadership role in reducing emissions of greenhouse gases.

(b) (1) It is the intent of the Legislature that the State Air Resources Board coordinate with state agencies, as well as consult with the environmental justice community, industry sectors, business groups, academic institutions, environmental organizations, and other stakeholders in implementing this division.

(2) It is the intent of the Legislature that the State Air Resources Board consult with the Public Utilities Commission in the development of emissions reduction measures, including limits on emissions of greenhouse gases applied to electricity and natural gas providers regulated by the Public Utilities Commission, in order to ensure that electricity and natural gas providers are not required to meet duplicative or inconsistent regulatory requirements.

(3) It is the intent of the Legislature that the State Air Resources Board design emissions reduction measures to meet the statewide emissions limits for greenhouse gases established pursuant to this division in a manner that minimizes costs and maximizes benefits for California's economy, improves and modernizes California's energy infrastructure and maintains a safe, clean, affordable, resilient, and reliable electric system, maximizes additional environmental and economic cobenefits for California, and complements the state's efforts to improve air quality.

(4) It is the intent of the Legislature that the State Air Resources Board extend the market-based compliance mechanism adopted pursuant to subdivision (c) of Section 38562 from January 1, 2021, to December 31, 2045, inclusive, in a manner that effectively reduces greenhouse gas emissions; minimizes any adverse impacts on state consumers, businesses, and the economy; and continues elements of the current program that protect state utility ratepayers, encourages decarbonization of the state's economic sectors, and further enables Californians to affordably decarbonize and power their end uses.

(5) It is the intent of the Legislature that the Climate Action Team established by the Governor to coordinate the efforts set forth under Executive Order No. S-3-05 continue its role in coordinating overall climate policy.

(6) It is the intent of the Legislature that the market-based compliance mechanism be known as the California Cap-and-Invest Program in recognition of its cost-effective, market-based approach to reduce emissions of greenhouse gases and the direct and indirect investments the mechanism has demonstrated, and should continue to demonstrate, in cost-effective emission reduction measures.

(c) This section shall remain in effect only until January 1, 2046, and as of that date is repealed.

SEC. 2. Section 38501 of the Health and Safety Code, as added by Section 2 of Chapter 135 of the Statutes of 2017, is amended to read:

38501. (a) The Legislature finds and declares all of the following:

(1) Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

(2) Global warming will have detrimental effects on some of California's largest industries, including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry. It will also increase the strain on electricity supplies necessary to meet the demand for summer air-conditioning in the hottest parts of the state.

(3) California has long been a national and international leader on energy conservation and environmental stewardship efforts, including the areas of air quality protections, energy efficiency requirements, renewable energy standards, natural resource conservation, and greenhouse gas emission standards for passenger

vehicles. The program established by this division will continue this tradition of environmental leadership by placing California at the forefront of national and international efforts to reduce emissions of greenhouse gases.

(4) National and international actions are necessary to fully address the issue of global warming. However, action taken by California to reduce emissions of greenhouse gases will have far-reaching effects by encouraging other states, the federal government, and other countries to act.

(5) California has positioned its economy, technology centers, financial institutions, and businesses to benefit from national and international efforts to reduce emissions of greenhouse gases. More importantly, investing in the development of innovative and pioneering technologies will continue to assist California in achieving the 2020 statewide limit on emissions of greenhouse gases established by this division and will continue to provide an opportunity for the state to take a global economic and technological leadership role in reducing emissions of greenhouse gases.

(b) (1) It is the intent of the Legislature that the State Air Resources Board coordinate with state agencies, as well as consult with the environmental justice community, industry sectors, business groups, academic institutions, environmental organizations, and other stakeholders in implementing this division.

(2) It is the intent of the Legislature that the State Air Resources Board consult with the Public Utilities Commission in the development of emissions reduction measures, including limits on emissions of greenhouse gases applied to electricity and natural gas providers regulated by the Public Utilities Commission, in order to ensure that electricity and natural gas providers are not required to meet duplicative or inconsistent regulatory requirements.

(3) It is the intent of the Legislature that the State Air Resources Board design emissions reduction measures to meet the statewide emissions limits for greenhouse gases established pursuant to this division in a manner that minimizes costs and maximizes benefits for California's economy, improves and modernizes California's energy infrastructure and maintains a clean, safe, affordable, resilient, and reliable electric system, maximizes additional environmental and economic cobenefits for California, and complements the state's efforts to improve air quality.

(4) It is the intent of the Legislature that the Climate Action Team established by the Governor to coordinate the efforts set forth under Executive Order No. S-3-05 continue its role in coordinating overall climate policy.

(5) It is the intent of the Legislature that the market-based compliance mechanism be known as the California Cap-and-Invest Program in recognition of its cost-effective, market-based approach to reduce emissions of greenhouse gases and the direct and indirect investments the mechanism has demonstrated, and should continue to demonstrate, in cost-effective emission reduction measures.

(c) This section shall become operative on January 1, 2046.

SEC. 3. Section 38562 of the Health and Safety Code, as amended by Section 4 of Chapter 135 of the Statutes of 2017, is amended to read:

38562. (a) The state board shall adopt greenhouse gas emissions limits and emissions reduction measures by regulation to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions to achieve the requirements of Sections 38562.2 and 38566 and the purposes of this division.

(b) In adopting regulations pursuant to this section and Part 5 (commencing with Section 38570), to the extent feasible, to achieve the requirements of Sections 38562.2 and 38566 and the purposes of this division, the state board shall do all of the following:

(1) (A) Design the regulations, including distribution of emissions allowances where appropriate, in a manner that is equitable, seeks to minimize costs and maximize the total benefits to California, and encourages early action to reduce greenhouse gas emissions.

(B) (i) Design the regulations, including distribution of emissions allowances where appropriate, in a manner that transitions support from gas corporations to electrical distribution utilities, as defined in Section 95802 of Title 17 of the California Code of Regulations, on or before January 1, 2031, to minimize ratepayer impacts and achieve the requirements of Sections 38562.2 and 38566 and the purposes of this division.

(ii) For purposes of this subparagraph, "gas corporation" has the same meaning as set forth in Section 222 of the Public Utilities Code.

(iii) Except as provided in clause (i), this subparagraph shall not be construed to impact the distribution of emissions allowances to emissions-intensive, trade-exposed industrial sectors.

(2) Ensure that activities undertaken to comply with the regulations do not disproportionately impact low-income communities.

(3) Ensure that entities that have voluntarily reduced their greenhouse gas emissions before the implementation of this section receive appropriate credit for early voluntary reductions.

(4) Ensure that activities undertaken pursuant to the regulations complement, and do not interfere with, efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions.

(5) Consider cost-effectiveness of these regulations.

(6) Consider overall societal benefits, including reductions in other air pollutants, diversification of energy sources, and other benefits to the economy, environment, and public health.

(7) Consider the effect of these regulations on affordability, cost effectiveness, minimization of leakage in California, and achieving the requirements of Sections 38562.2 and 38566 and the purposes of this division.

(8) Minimize the administrative burden of implementing and complying with these regulations.

(9) Minimize leakage.

(10) Consider the significance of the contribution of each source or category of sources to statewide emissions of greenhouse gases.

(c) (1) Unless otherwise required by context, terms in this subdivision shall have the definitions that apply pursuant to Section 95802 of Title 17 of the California Code of Regulations, as they read on January 1, 2017.

(2) To achieve the requirements of Sections 38562.2 and 38566 and the purposes of this division, the state board shall adopt a regulation that establishes a system of market-based declining annual aggregate emissions limits for sources or categories of sources that emit greenhouse gases, applicable from January 1, 2012, to December 31, 2045, inclusive, that the state board determines will achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions, in the aggregate, from those sources or categories of sources, and ensures that programwide aggregate emissions from covered sources, at a minimum, decline with the requirements of Sections 38562.2 and 38566. In adopting a regulation applicable from January 1, 2021, to December 31, 2045, inclusive, pursuant to this subdivision, the state board shall do all of the following:

(A) (i) Establish a price ceiling. In establishing the price ceiling, the state board shall consider, using the best available science, all of the following:

(I) The need to avoid adverse impacts on resident households, businesses, and the state's economy.

(II) The 2020 tier prices of the allowance price containment reserve.

(III) The full social cost associated with emitting a metric ton of greenhouse gases.

(IV) The auction reserve price.

(V) The potential for environmental and economic leakage.

(VI) The cost per metric ton of greenhouse gas emissions reductions to achieve the statewide emissions targets established in Sections 38550 and 38566.

(ii) To implement the price ceiling, the state board shall develop a mechanism that consists of both of the following:

(I) Allowances remaining in the allowance price containment reserve as of December 31, 2020, shall be used solely for the purpose of sale at the price ceiling established by this section.

(II) If the allowances from the allowance price containment reserve are exhausted, the state board shall offer covered entities additional metric tons at the price ceiling if needed for compliance. Notwithstanding any other law, all moneys generated pursuant to this clause shall be deposited into the California Climate Mitigation Fund, which is hereby created in the State Treasury. Moneys in that fund shall be available, upon appropriation by the Legislature, for purposes, including, but not limited to, providing direct rebates and investments to reduce household energy costs, including incentives to transition to zero-emission vehicles and energy efficient housing.

(iii) If the state board finds that the price containment reserve or the price ceiling, or both the price containment reserve and price ceiling do not adequately protect California consumers, the state board shall consider additional actions to ensure consumers are protected. Those actions may include, but are not limited to, adjustment to the allowance price containment reserve or the price ceiling, or both the allowance price containment reserve and the price ceiling.

(B) Establish two price containment points at levels below the price ceiling. The state board shall offer to covered entities nontradable allowances for sale at these price containment points. The price containment points shall be established using two-thirds, divided equally, of the allowances in the allowance price containment reserve as of December 31, 2017.

(C) Require that current vintage allowances designated by the state board for auction that remain unsold in the auction holding account for more than 24 months to be transferred to the allowance price containment reserve.

(D) Evaluate and address concerns related to overallocation in the state board's determination of the number of available allowances for years 2021 to 2030, inclusive, as appropriate.

(E) (i) Establish offset credit limits according to the following:

(I) From January 1, 2021, to December 31, 2025, inclusive, a total of 4 percent of a covered entity's compliance obligation may be met by surrendering offset credits of which no more than one-half may be sourced from projects that do not provide direct environmental benefits in state.

(II) From January 1, 2026, to December 31, 2045, inclusive, no greater than a total of 6 percent of a covered entity's compliance obligation may be met by surrendering offset credits of which no more than one-half may be sourced from projects that do not provide direct environmental benefits in the state.

(ii) For purposes of this subparagraph, "direct environmental benefits in the state" are the reduction or avoidance of emissions of any air pollutant in the state or the reduction or avoidance of any pollutant that could have an adverse impact on waters of the state.

(iii) A number of allowances equal to the total number of offset credits used for compliance obligations in the prior year shall be removed from the next year's annual allowance budget and retired.

(F) Develop approaches to increase offset projects in the state considering guidance provided by the Compliance Offsets Protocol Task Force, established pursuant to Section 38591.1.

(G) Set industry assistance factors for allowance allocation commencing in 2021 through 2030 at the levels applicable in the compliance period of 2015 to 2017, inclusive. Commencing January 1, 2031, the state board shall distribute industrial sector allowances in a manner that minimizes emissions leakage risk to cost-effectively achieve the requirements of Sections 38562.2 and 38566 and the purposes of this division.

(H) Consider developing additional compliance offset protocols to address sectors that are not covered by the market-based compliance mechanism but are identified in the scoping plan prepared pursuant to Section 38561, including carbon dioxide removal, or the targets established pursuant to Section 38561.5.

(I) Establish allowance banking rules that discourage speculation, avoid financial windfalls, and consider the impact on complying entities and volatility in the market.

(J) Report to the Legislature, by December 31, 2025, on the progress toward meeting the greenhouse gas emissions reduction targets established pursuant to Sections 38550 and 38566 and the leakage risk posed by the regulation. The state board shall include recommendations to the Legislature on necessary statutory changes to the program to reduce leakage, including the potential for a border carbon adjustment, while maintaining the state's ability to reach its targets.

(K) (i) Report to the Legislature, in consultation with the Independent Emissions Market Advisory Committee, established pursuant to Section 38591.2, if two consecutive auctions exceed the lower of the price containment levels established pursuant to subparagraph (B). The report shall assess the potential for allowance prices to reach the price ceiling for multiple auctions.

(ii) A report submitted to the Legislature pursuant to this section shall be submitted in compliance with Section 9795 of the Government Code.

(L) Report to the relevant fiscal and policy committees of the Legislature, including the Joint Committee on Climate Change Policies, on all of the following:

(i) Updates to the scoping plan prepared pursuant to Section 38561 before adopting the update.

(ii) Updates on the implementation of the scoping plan prepared pursuant to Section 38561.

(iii) Updates on the implementation of the market-based compliance mechanism adopted pursuant to this subdivision.

(d) Any regulation adopted by the state board pursuant to this part or Part 5 (commencing with Section 38570) shall ensure all of the following:

(1) The greenhouse gas emission reductions achieved are real, permanent, quantifiable, verifiable, and enforceable by the state board.

(2) For regulations pursuant to Part 5 (commencing with Section 38570), the reduction is in addition to any greenhouse gas emission reduction otherwise required by law or regulation, and any other greenhouse gas emission reduction that otherwise would occur.

(3) If applicable, the greenhouse gas emission reduction occurs over the same time period and is equivalent in amount to any direct emission reduction required pursuant to this division.

(e) The state board shall rely upon the best available economic and scientific information and its assessment of existing and projected technological capabilities when adopting the regulations required by this section.

(f) The state board shall consult with the Public Utilities Commission in the development of the regulations as they affect electricity and natural gas providers in order to minimize duplicative or inconsistent regulatory requirements.

(g) The state board may revise regulations adopted pursuant to this section and adopt additional regulations to further the provisions of this division.

(h) In the updates to the scoping plan prepared pursuant to Section 38561, the state board shall include the progress toward meeting the greenhouse gas emissions reduction targets established pursuant to Section 38562.2. The state board shall include recommendations to the Legislature on necessary statutory changes to the market-based compliance mechanism to further cost-effectively reduce emissions.

(i) The state board shall evaluate the cost impact of the market-based compliance mechanism on California consumers when it revises regulations implementing that mechanism pursuant to this section.

(j) This section shall remain in effect only until January 1, 2046, and as of that date is repealed.

SEC. 4. Section 38562 of the Health and Safety Code, as added by Section 5 of Chapter 135 of the Statutes of 2017, is amended to read:

38562. (a) The state board shall adopt greenhouse gas emissions limits and emissions reduction measures by regulation to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions to achieve the purposes of this division.

(b) In adopting regulations pursuant to this section and Part 5 (commencing with Section 38570), to the extent feasible, to achieve the purposes of this division, the state board shall do all of the following:

(1) (A) Design the regulations, including distribution of emissions allowances where appropriate, in a manner that is equitable, seeks to minimize costs and maximize the total benefits to California, and encourages early action to reduce greenhouse gas emissions.

(B) (i) Design the regulations, including distribution of emissions allowances where appropriate, in a manner that transitions support from gas corporations to electrical distribution utilities, as defined in Section 95802 of Title 17 of the California Code of Regulations, on or before January 1, 2031, to minimize ratepayer impacts and achieve the purposes of this division.

(ii) For purposes of this subparagraph, "gas corporation" has the same meaning as set forth in Section 222 of the Public Utilities Code.

(iii) Except as provided in clause (i), this subparagraph shall not be construed to impact the distribution of emissions allowances to emissions-intensive, trade-exposed industrial sectors.

(2) Ensure that activities undertaken to comply with the regulations do not disproportionately impact low-income communities.

(3) Ensure that entities that have voluntarily reduced their greenhouse gas emissions before the implementation of this section receive appropriate credit for early voluntary reductions.

(4) Ensure that activities undertaken pursuant to the regulations complement, and do not interfere with, efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions.

(5) Consider cost-effectiveness of these regulations.

(6) Consider overall societal benefits, including reductions in other air pollutants, diversification of energy sources, and other benefits to the economy, environment, and public health.

(7) Consider the effect of these regulations on affordability, cost-effectiveness, minimization of leakage in California, and achieving the purposes of this division.

(8) Minimize the administrative burden of implementing and complying with these regulations.

(9) Minimize leakage.

(10) Consider the significance of the contribution of each source or category of sources to statewide emissions of greenhouse gases.

(c) To achieve the purposes of this division, the state board shall adopt a regulation that establishes a system of market-based declining annual aggregate emissions limits for sources or categories of sources that emit greenhouse gases, applicable from January 1, 2012, to December 31, 2045, inclusive, that the state board determines will achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions, in the aggregate, from those sources or categories of sources, and ensures that programwide aggregate emissions from covered sources, at a minimum, decline in line with the purposes of this division.

(d) Any regulation adopted by the state board pursuant to this part or Part 5 (commencing with Section 38570) shall ensure all of the following:

(1) The greenhouse gas emission reductions achieved are real, permanent, quantifiable, verifiable, and enforceable by the state board.

(2) For regulations pursuant to Part 5 (commencing with Section 38570), the reduction is in addition to any greenhouse gas emission reduction otherwise required by law or regulation, and any other greenhouse gas emission reduction that otherwise would occur.

(3) If applicable, the greenhouse gas emission reduction occurs over the same time period and is equivalent in amount to any direct emission reduction required pursuant to this division.

(e) The state board shall rely upon the best available economic and scientific information and its assessment of existing and projected technological capabilities when adopting the regulations required by this section.

(f) The state board shall consult with the Public Utilities Commission in the development of the regulations as they affect electricity and natural gas providers in order to minimize duplicative or inconsistent regulatory requirements.

(g) The state board may revise regulations adopted pursuant to this section and adopt additional regulations to further the provisions of this division.

(h) This section shall become operative on January 1, 2046.

SEC. 5. Section 38562.1 is added to the Health and Safety Code, to read:

38562.1. (a) If the state board initiates a regulatory process to update the market-based compliance mechanism, consistent with Section 38562, that is expected to be a major regulation as defined in Section 11342.548 of the Government Code, the chairperson of the state board shall present to the Joint Legislative Committee on Climate Change Policies and other relevant policy committees of the Legislature on the current state of the market-based compliance mechanism and provide the rationale for updating the market-based compliance mechanism, including the specific issues that the update is meant to address. The presentation by the chairperson of the state board pursuant to this section shall satisfy the requirements of subdivision (b) of Section 9147.10 of the Government Code and subdivision (b) of Section 38531 of this code for the year in which the presentation occurs.

(b) The state board shall transmit the economic analyses required by Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code for a regulatory process subject to subdivision (a) to the Joint Legislative Committee on Climate Change Policies and the relevant budget subcommittees. Within 30 days of that transmittal, if requested by the chair of the Joint Legislative Committee on Climate Change Policies or the chairs of the relevant policy committees or budget subcommittees of the Legislature, the chairperson of the state board shall make themselves available for a hearing on the proposed regulatory amendments.

(c) The state board shall transmit to the Joint Legislative Committee on Climate Change Policies and other relevant policy committees of the Legislature the public agenda, when it is available, for the board meeting at which the amendments for a rulemaking under the regulatory process subject to subdivision (a) will be considered by the state board. If requested by the chair of the Joint Legislative Committee on Climate Change Policies or the chairs of the relevant policy committees or budget subcommittees of the Legislature, the chairperson of the state board shall make themselves available for a hearing on the amendments.

(d) The legislative hearings and notifications in this section shall not delay the state board's rulemaking process pursuant to Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code.

(e) This section shall remain in effect only until January 1, 2046, and as of that date is repealed.

SEC. 6. Section 38590.1 of the Health and Safety Code is amended to read:

38590.1. (a) It is the intent of the Legislature that moneys collected from the auction or sale of allowances pursuant to a market-based compliance mechanism established pursuant to this division shall be appropriated to include, but need not be limited to, the following priorities at the time an expenditure plan is adopted:

- (1) Air toxic and criteria air pollutants from stationary and mobile sources.
- (2) Low- and zero-carbon transportation alternatives.
- (3) Sustainable agricultural practices that promote the transitions to clean technology, water efficiency, and improved air quality.
- (4) Healthy forests and urban greening.
- (5) Nature-based climate solutions, as defined in Section 38561.5.
- (6) Short-lived climate pollutants.
- (7) Climate adaptation and resiliency.
- (8) Climate and clean energy research.

(b) Upon request of the chair of the Joint Legislative Committee on Climate Change Policies or the chair of the relevant budget subcommittees, the state board and any other agencies that have implemented programs funded using moneys collected from the auction or sale of allowances pursuant to a market-based compliance mechanism established pursuant to this division shall annually appear before the Joint Legislative Committee on Climate Change Policies and the relevant budget subcommittees of the Legislature to give a presentation on the expenditures of those moneys.

(c) This section shall remain in effect only until January 1, 2046, and as of that date is repealed.

SEC. 7. Section 38591.1 of the Health and Safety Code is amended to read:

38591.1. (a) The Compliance Offsets Protocol Task Force is hereby established to provide guidance to the state board in approving new offset protocols for a market-based compliance mechanism for the purposes of increasing offset projects with direct environmental benefits in the state while prioritizing disadvantaged communities, Native American or tribal lands, and rural and agricultural regions. The state board shall appoint members to the Compliance Offsets Protocol Task Force to include a representative from each stakeholder group, including, but not limited to, all of the following:

- (1) Scientists.
- (2) Air pollution control and air quality management districts.
- (3) Carbon market experts.
- (4) Tribal representatives.
- (5) Environmental justice advocates.
- (6) Labor and workforce representatives.
- (7) Forestry experts.
- (8) Agriculture experts.
- (9) Environmental advocates.
- (10) Conservation advocates.
- (11) Dairy experts.

(b) The Compliance Offsets Protocol Task Force shall consider the development of additional offset protocols, including, but not limited to, protocols for the enhanced management or conservation of agricultural and natural lands, and for the enhancement and restoration of wetlands.

(c) The Compliance Offsets Protocol Task Force shall develop recommendations for the state board on the inclusion of methodologies to allow groups of landowners to jointly develop natural and working lands offset projects under the approved offset protocols. The recommendations shall address how to lower project transaction costs for participants and enable a greater number of landowners to participate in those projects while protecting the integrity and transparency of those projects.

(d) This section shall remain in effect only until January 1, 2046, and as of that date is repealed.

SEC. 8. Section 38591.2 of the Health and Safety Code is amended to read:

38591.2. (a) The Independent Emissions Market Advisory Committee is hereby established within the California Environmental Protection Agency.

(b) (1) (A) The committee shall be composed of at least five experts on emissions trading market design appointed according to the following:

- (i) Three members appointed by the Governor.
- (ii) One member appointed by the Senate Committee on Rules.
- (iii) One member appointed by the Speaker of the Assembly.

(B) (i) The committee shall include a representative from the Legislative Analyst's Office.

(ii) The representative from the Legislative Analyst's Office shall be a nonvoting committee member.

(2) The committee members shall meet all of the following requirements:

- (A) Have academic, nonprofit, and other relevant backgrounds.

(B) Lack financial conflicts of interest with entities subject to the regulation adopted by the state board pursuant to subdivision (c) of Section 38562.

(3) Notwithstanding any other law, committee members shall be considered designated employees, as defined in Section 82019 of the Government Code, of the California Environmental Protection Agency for the purposes of Section 82019 of the Government Code.

(c) The committee, at least annually, shall hold a public meeting and report to both the state board and the Joint Legislative Committee on Climate Change Policies on the environmental and economic performance of the regulation adopted by the state board pursuant to subdivision (c) of Section 38562 and other relevant climate policies.

(d) The activities of the committee pursuant to this section shall not be subject to subdivision (b) of Section 11122.5 of the Government Code.

(e) This section shall remain in effect only until January 1, 2046, and as of that date is repealed.

SEC. 9. Section 38592.5 of the Health and Safety Code is amended to read:

38592.5. (a) (1) No later than January 1, 2018, the state board shall update the scoping plan, prepared pursuant to Section 38561, to achieve the greenhouse gas emissions reductions required pursuant to Section 38562.2 or 38566. The state board shall designate the market-based compliance mechanism adopted pursuant to subdivision (c) of Section 38562 as the rule for petroleum refineries and oil and gas production facilities to achieve their greenhouse gas emissions reductions.

(2) All greenhouse gas rules and regulations adopted by the state board shall be consistent with the updated scoping plan.

(3) This section does not limit the state board's authority to adopt, maintain, or revise any other measure, including, but not limited to, any of the following:

(A) Measures governing methane and fugitive emissions at refineries and oil and gas facilities.

(B) Advanced clean cars program adopted by the state board.

(C) Low-Carbon Fuel Standard regulations (Subarticle 7 (commencing with Section 95480) of Article 4 of Subchapter 10 of Chapter 1 of Division 3 of Title 17 of the California Code of Regulations).

(D) Regulations addressing short-lived climate pollutants.

(E) Implementation of the sustainable freight action plan released in July 2015 pursuant to Executive Order B-32-15.

(b) This section shall remain in effect only until January 1, 2046, and as of that date is repealed.

SEC. 10. Section 38592.6 of the Health and Safety Code is amended to read:

38592.6. (a) The Legislative Analyst's Office shall, until January 1, 2046, annually report to the Legislature on the economic impacts and benefits of the greenhouse gas emissions targets established pursuant to Sections 38550, 38562.2, and 38566.

(b) This section shall remain in effect only until January 1, 2046, and as of that date is repealed.

SEC. 11. Section 38594 of the Health and Safety Code, as amended by Section 12 of Chapter 135 of the Statutes of 2017, is amended to read:

38594. (a) Except as provided in subdivision (b), nothing in this division shall limit or expand the existing authority of any district.

(b) A district shall not adopt or implement an emission reduction rule for carbon dioxide from stationary sources that are also subject to a market-based compliance mechanism adopted by the state board pursuant to subdivision (c) of Section 38562.

(c) Nothing in this section affects in any manner the authority of a district to adopt or implement, as applicable, any of the following:

(1) A rule, regulation, standard, or requirement authorized or required for a district to adopt under Division 26 (commencing with Section 39000) for purposes other than to reduce carbon dioxide from sources subject to a market-based compliance mechanism adopted by the state board pursuant to subdivision (c) of Section 38562.

(2) A rule, regulation, standard, or requirement authorized pursuant to a law affecting emissions associated with landfills, refrigerants, natural gas or methane, volatile organic compounds, or a rule required to comply with the federal Clean Air Act (42 U.S.C. Sec. 7401 et seq.) or regulations implementing that act.

(3) A rule, regulation, standard, or requirement authorized pursuant to a law to reduce vehicle trips, vehicle miles traveled, parking, or vehicular air emissions, including, but not limited to, a rule adopted pursuant to Chapter 728 of the Statutes of 2008.

(4) A rule, regulation, standard, or requirement established pursuant to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code).

(5) A rule, regulation, standard, or requirement adopted by any state agency.

(d) This section shall become inoperative if the state board repeals the market-based compliance mechanism adopted by the state board pursuant to subdivision (c) of Section 38562. The state board shall notify the Secretary of State if this section becomes inoperative.

(e) This section shall remain in effect only until January 1, 2046, and as of that date is repealed.

SEC. 12. Section 38594 of the Health and Safety Code, as added by Section 13 of Chapter 135 of the Statutes of 2017, is amended to read:

38594. (a) Nothing in this division shall limit or expand the existing authority of any district, as defined in Section 39025.

(b) This section shall become operative on January 1, 2046.

SEC. 13. Section 748.5 of the Public Utilities Code is amended to read:

748.5. (a) (1) Except as provided in subdivisions (c), (d), and (e), the commission shall require revenues, including any accrued interest, received by an electrical corporation as a result of the direct allocation of greenhouse gas allowances to electric utilities pursuant to subdivision (b) of Section 95890 of Title 17 of the California Code of Regulations to be credited directly to the residential customers of the electrical corporation.

(2) Small business, emissions-intensive, trade-exposed retail customers of the electrical corporation that are covered entities under the regulations adopted pursuant to Section 38562 of the Health and Safety Code, and emissions-intensive, trade-exposed retail customers of the electrical corporation that are not covered entities under the regulations adopted pursuant to Section 38562 of the Health and Safety Code, may also be credited from the revenues in paragraph (1), as determined by the commission.

(3) The credits provided to residential customers of an electrical corporation shall be provided on the bills of those customers in no more than four high-billed months of each year to maximize customer electric bill affordability, or as otherwise directed by the commission to address extreme, unforeseen, and temporary circumstances.

(b) (1) Not later than January 1, 2013, the commission shall require the adoption and implementation of a customer outreach plan for each electrical corporation, including, but not limited to, such measures as notices in bills and through media outlets, for purposes of obtaining the maximum feasible public awareness of the crediting of greenhouse gas allowance revenues. Costs associated with the implementation of this plan are subject to recovery in rates pursuant to Section 454.

(2) Not later than January 1, 2027, the commission shall require each electrical corporation to update the customer outreach plan developed pursuant to paragraph (1) to include a statement at the top of customer bills in applicable months specifying the amount of money saved on a utility bill in that month and attributing those savings to the climate credit and the California Cap-and-Invest Program.

(c) The commission may allocate up to 15 percent of the revenues, including any accrued interest, received by an electrical corporation as a result of the direct allocation of greenhouse gas allowances to electrical distribution utilities pursuant to subdivision (b) of Section 95890 of Title 17 of the California Code of Regulations, for clean energy and energy efficiency projects established pursuant to statute that are administered by the electrical corporation, or a qualified third-party administrator as approved by the commission, and that are not otherwise funded by another funding source. This subdivision shall become inoperative on July 1, 2026.

(d) (1) The commission shall require an electrical corporation to annually remit to the State Treasury 5 percent of the revenues, including any accrued interest, received by the electrical corporation as a result of the direct allocation of greenhouse gas allowances to electrical distribution utilities pursuant to subdivision (b) of Section 95890 of Title 17 of the California Code of Regulations for deposit in the California Transmission Accelerator Revolving Fund, pursuant to Section 63049.72 of the Government Code. This paragraph shall become operative on July 1, 2026, and shall become inoperative on July 1, 2031.

(2) The revenues deposited in the fund shall be available to the California Infrastructure and Economic Development Bank for purposes of the California Transmission Accelerator Revolving Fund Program established pursuant to Sections 63049.71 to 63049.73, inclusive, of the Government Code.

SEC. 14. Section 748.5.5 is added to the Public Utilities Code, to read:

748.5.5. (a) A local publicly owned electric utility that receives an allowance allocation in addition to the allowance totals specified in Section 95892 of Title 17 of the California Code of Regulations pursuant to subparagraph (B) of paragraph (1) of subdivision (b) of Section 38562 of the Health and Safety Code shall provide a credit in an amount equal to the total value of that additional allocation directly to ratepayers. This section does not limit the acceptable uses, as specified in paragraph (3) of subdivision (d) of Section 95892 of Title 17 of the California Code of Regulations, of other allowances allocated to local publicly owned electric utilities.

(b) A local publicly owned electric utility shall report to the State Air Resources Board on the uses of all revenues, including any accrued interest, received by that local publicly owned electric utility as a result of the direct allocation of greenhouse gas allowances to electric utilities pursuant to subdivision (b) of Section 95890 of Title 17 of the California Code of Regulations.

(c) Notwithstanding Section 10231.5 of the Government Code, the State Air Resources Board shall annually submit a report to the Legislature on the uses of revenues specified in subdivision (b) in accordance with Section 9795 of the Government Code.

SEC. 15. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because a local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act or because costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

SEC. 16. This act is an urgency statute necessary for the immediate preservation of the public peace, health, or safety within the meaning of Article IV of the California Constitution and shall go into immediate effect. The facts constituting the necessity are:

To secure a greater reduction in greenhouse gas emissions to prevent catastrophic climate change, it is necessary for this act to take effect immediately.