



June 21, 2024

Rajinder Sahota
Deputy Executive Officer for Climate and Research
California Air Resources Board
1001 I Street – P.O. Box 2815
Sacramento, CA 95812

Subject: SoCalGas Comments on the May 31, 2024, Workshop on Potential Amendments to the Cap-and-Trade Regulation

Dear Deputy Executive Officer Sahota:

SoCalGas appreciates the opportunity to provide comments on the California Air Resources Board's (CARB) May 31, 2024, Workshop on Potential Amendments to the Cap-and-Trade Program. SoCalGas supports the Program's mission to decarbonize California's economy and applauds CARB's outreach to engage stakeholders in this critical area of policymaking.

Cap-and-Trade policymaking should continue to incentivize natural gas utilities and other covered entities to invest in decarbonized energy sources that will complement electrification over the long term. SoCalGas's comments highlight the following: 1) Affordability and complementary energy sources are critical, intertwined issues for the clean energy transition; 2) Natural gas supplier (NGS) allowance allocations provide critical cost protections for Californians, supporting more equitable and affordable decarbonization; 3) Auction revenue flexibility for clean fuels investment is an important tool for decarbonization; 4) New emissions reporting for hydrogen should be crafted to generate accurate data for an emerging technology, and; 5) Fuel cell exemptions should adhere to CARB's Distributed Generation Program.

I. Affordability and complementary energy sources are critical, intertwined issues for the clean energy transition.

Californians already pay significantly more for electricity than residents of other states. Recent data shows that California residents pay over 32 cents per kilowatt hour, the highest figure in the continental United States and about double the national average.¹ Retail electricity prices have roughly doubled for Californians over the past decade.² While wildfire risk mitigation is a

¹ https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_5_6_a

² <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/skyrocketing-electricity-prices-test-california-s-energy-transition-80305308>

significant driver of this increase, increased energy use during summer heat waves and generational investments in transmission infrastructure to distribute vast new volumes of renewable energy have also played a major role.³ Increased energy costs are drawing more attention from the media and the public.⁴ Significant electricity cost increases are all but inevitable as temperatures rise due to global warming and California undertakes a challenging energy transition to carbon-neutrality. With this backdrop retail electricity prices will become more salient and must be addressed. While most Californians proudly support aggressive efforts to fight climate change, only 43% say they are willing to pay more for renewable energy sources.⁵

From an infrastructure standpoint operational reliability continues to be a key priority. To achieve this the State's gas and electric systems are interconnected and interdependent. The gas system provides a critical function to transport just-in-time fuel to meet the demand of electric generators when these resources are called upon to maintain electric grid reliability and particularly to meet its peak demand ramping needs. This synergistic relationship will only strengthen as the energy system becomes increasingly reliant on intermittent renewable resources and electric demand increases more broadly. To help achieve a decarbonized energy system while supporting affordability, SoCalGas transports renewable natural gas through its system and is developing a clean fuels network. By deploying hydrogen and other clean fuels in tandem with carbon management strategies (such as carbon capture and sequestration), a clean fuels network can help achieve California's economy wide carbon neutrality by supporting and complementing electrification.⁶ Our modeling, reviewed and validated by independent researchers, has found that a clean fuels network has the potential to help California achieve carbon neutrality by 2045 while saving an estimated \$45-\$75 billion when compared to scenarios in which no clean fuels are deployed. This approach could bolster system resilience while expanding the electric network by providing zero emissions fuels to power generation facilities.⁷

CARB's May 31 workshop raised concerns about affordability for ratepayers and complementary energy sources. When CARB asked whether allowance allocation policy was sufficiently aligned to electrification, it suggested a departure from the approach of the 2022 Scoping Plan. At that time CARB stated that electrification would play a key role across the economy while acknowledging that "we need to keep all options on the table, as it will take time to fully grow the electricity grid to be the backbone for a decarbonized economy. We also know that electrification is not possible in all situations."⁸ The need for reliability, affordability, and diversification in this great transition makes it imperative to bolster electrification with clean fuels.

³ <https://energyathaas.wordpress.com/2023/07/10/not-all-of-californias-electricity-prices-are-high/>

⁴ <https://www.latimes.com/opinion/story/2024-06-02/la-california-utilities-electric-bills-affordability-solutions>

⁵ <https://www.ppic.org/publication/ppic-statewide-survey-californians-and-the-environment-july-2023/>

⁶ <https://www.socalgas.com/sustainability/aspire2045>. Clean fuels are gases like clean hydrogen, renewable natural gas (also referred to as biogas and RNG), synthetic natural gas (also referred to as syngas and SNG), and biofuels, the production and combustion of which can be carbon-neutral or even carbon negative.

⁷ SoCalGas published the Clean Fuels Report in 2021 and a subsequent Reliability Analysis in July 2023 that extensively modeled multiple scenarios for achieving carbon neutrality by 2045. Please find both reports here: <https://www.socalgas.com/sustainability/clean-fuels>. Findings for the Clean Fuels Report were verified by UC Davis, UC Irvine, and Columbia University. The Reliability Analysis finds that clean renewable hydrogen generation could expand fuel-based electric generation 35% by 2045. See also <https://www.socalgas.com/sustainability/aspire2045>

⁸ CARB 2022 Scoping Plan, p 9.

II. Natural gas supplier (NGS) allowance allocations provide critical cost protections for Californians, supporting more equitable and affordable decarbonization.

The sharp decline in the allowance allocation for natural gas utilities between 2025-2030 that CARB is considering would negatively impact the affordability of natural gas. In these early years of the clean fuels transition before projects reach maturity, preserving the natural gas allowance allocation and the resulting climate credits and program funding will shield gas customers from higher bills while investments in clean technologies take hold to advance decarbonization. Affordable natural gas particularly benefits low-income customers who pay a higher proportion of monthly household income on energy costs. This factor is especially impactful when compounded with high electricity costs, inflation, and other increases that ultimately impact Californians' cost of living.

Notably the reductions in natural gas utility allocation projected by CARB in recent workshops significantly outpace the decline in natural gas use projected by the California Energy Commission, and even outpace CARB's own estimates in the 2022 Scoping Plan for the natural gas industry.⁹ SoCalGas appreciates that CARB is looking for ways to reduce GHG emissions by 2030, and is aligned with our shared goal of achieving carbon-neutrality by 2045.¹⁰ However, utility allocations provide critical protection for ratepayers from high energy costs and should be preserved to the extent possible to ensure that the clean energy transition can be completed with reliability, affordability, and equity at top of mind.

SoCalGas aligns with the comments of the joint Gas Utilities Group (GUG), which provide additional detail on the recommendation that CARB consider modifying its approach to natural gas supplier allocations to align with the anticipated cost burden for natural gas customers, providing important customer protections.

III. Auction revenue flexibility for clean fuels investments is an important tool for decarbonization.

The long-term perspective remains important. Investments that are projected to achieve affordable decarbonization by midcentury must continue to receive support. At the workshop, CARB addressed how utilities can utilize the proceeds of allowances that are consigned to auction. CARB staff emphasized that NGS can deploy revenue to "a broad range of potential GHG reduction projects" that include building electrification, new efficient appliances, and biomethane pipeline interconnection. SoCalGas appreciates this public recognition for such investments, especially since natural gas suppliers must obtain approval for these projects from the California Public Utilities Commission (CPUC).

CARB staff also emphasized that eligible uses of allowance value for NGS must adhere to the 2022 Scoping Plan and asked if "additional limitations" should be imposed on utilities regarding their use of allowance value. SoCalGas strongly opposes limitations beyond those currently in place. Among the many strengths of the 2022 Scoping Plan is how it details numerous aspects of

⁹ Please see the Gas Utility Group letter SoCalGas has also co-submitted in response to this workshop for a more detailed discussion of the allowance allocation.

¹⁰ <https://www.socalgas.com/sustainability/aspire2045goals>

decarbonization in which NGS will play a critical role. These include the use of biomethane as a drop-in fuel in natural gas pipelines, hydrogen blending, production of clean hydrogen via electrolysis with renewable electricity or by steam methane reformation of biomethane, and deployment of carbon capture and sequestration (CCS) to abate hard-to-electrify industrial sectors, such as cement.¹¹ SoCalGas's Angeles Link Project proposes to bring such concepts to life by transporting clean, renewable hydrogen to decarbonize hard-to-electrify sectors such as dispatchable electric generation, heavy-duty transportation, and commercial (e.g., high value manufacturing) and industrial processes.¹²

The massive undertaking of decarbonizing California's economy in a few short decades requires investment in every promising technology to generate sufficient, affordable clean energy. The obstacles in this process are daunting, including expense, regulatory hurdles, need for greater electric transmission capacity, wildfire risk, and technological innovation. Limiting funds for decarbonization investment under a program designed to discourage carbon-intensive sources of energy while encouraging cleaner ones over the long term would contradict the goals outlined in the 2022 Scoping Plan. There should be no additional limits on the use of auction revenue for investments in decarbonization.

Relatedly, SoCalGas notes that “[a]llowance value, including any allocated allowance auction proceeds, obtained by a natural gas supplier must be used for the primary benefit of retail natural gas ratepayers of each natural gas supplier, consistent with the goals of AB 32, and may not be used for the benefit of entities or persons other than such ratepayers.”¹³ Accordingly, use of such funds must be for the primary benefit of retail natural gas ratepayers and programs such as those that are intended to develop clean fuels and improve gas appliance efficiencies, not broad electrification programs.

IV. New emissions reporting for hydrogen should be crafted to generate accurate data for an emerging technology.

At the workshop, CARB said it was considering expanding Mandatory Reporting Regulation (MRR) reporting for hydrogen fuel production. SoCalGas offers three high-level comments:

- Because hydrogen is a nascent technology, any new reporting requirements should foster market growth and data integrity without stifling innovation. Emissions reporting could be useful to better understand the technology and build confidence in hydrogen's decarbonization attributes.
- Reporting standards must be certified reliably to be effective. Industry will need either a common framework of emissions accounting applied at both the state and federal level or tools for reconciliation between those two levels to ease the burden of reporting.

¹¹ CARB 2022 Scoping Plan, 83-89; 207-211.

¹² Angeles Link could also significantly decrease demand for natural gas, diesel, and other fossil fuels in the LA Basin, helping to accelerate California and regional climate and clean air goals. Please see <https://www.socalgas.com/sustainability/hydrogen/angeles-link>. The CPUC resource for Angeles Link is here: <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-acts-to-advanceunderstanding-of-hydrogen-role-as-decarbonization-strategy>.

¹³ California Code of Regulations (“CCR”) Section 95893(d)(3).

- Initial reporting requirements should be flexible or voluntary as the reporting methodology is refined and participants build confidence in the new reporting structure.

V. Fuel cell exemptions should adhere to CARB’s Distributed Generation Program.

At the workshop, CARB sought feedback on how to implement Board Resolution 18-51, which requested a reporting exemption through 2030 for fuel cells connected to existing natural gas infrastructure where there are demonstrated local air quality benefits. This exemption is beneficial to the deployment of fuel cells to help offset capital, installation, and maintenance costs of this technology.¹⁴ Reducing costs associated with the fuels running through the cell can help improve fuel cell market penetration and reduce GHG emissions by displacing more carbon intensive technologies.¹⁵

The best way to implement this exemption is to exempt emissions from fuel cells certified through CARB’s Distributed Generation (DG) Certification Program. The state legislature established the DG certification program with SB 1298 in 2000 precisely for electrical generation technologies that are exempt from local air district permits. This program covers not just fuel cells but also engines, turbines, photovoltaic cells, and other means to generate electricity off the grid. SB 1298 mandated that the criteria pollutant emission standards be made equivalent to the level determined by CARB to be the best available control technology for permitted central station power plants in California. CARB staff proposed interim standards for 2003 and finalized the program in 2007 because that was the earliest practicable date for DG applications to meet central power plant emission standards. The DG Certification Regulation also included testing protocols, calculation procedures, and other requirements that manufacturers must satisfy.¹⁶

Certifying the Resolution 18-51 exemption through the DG Certification Program will ensure robust protections for local air quality without the effort and expense involved in crafting a new reporting regime. There is no reason to negate the exemption for use of fossil gas because the fuel cells run at the same cleanliness level for criteria pollutants.¹⁷ Many of the original 2007 DGs were certified with fossil gas. Most of the current registrants run on natural gas, but some also use landfill gas or digester gas.¹⁸ CARB should also consider extending this exemption to linear generators. Linear generators can be designed to operate at high efficiencies and with low emissions, making them suitable for distributed energy applications where they can provide on-site power generation and be load following. Linear generators can thus serve a similar function to fuel cells at a reduced cost while still providing local air quality benefits.¹⁹

Conclusion

SoCalGas appreciates the opportunity to provide comments and participate as a stakeholder regarding amendments to the Cap-and-Trade Program. SoCalGas is committed to a decarbonized

¹⁴ <https://www.sciencedirect.com/science/article/pii/S2352484722022995>

¹⁵ https://www.nfrc.uci.edu/PDF/CaSFCC_Roadmap_12Pgs_NFCRC_022820_344pm.pdf

¹⁶ <https://ww2.arb.ca.gov/our-work/programs/dgcert/about>

¹⁷ <https://sepup.lawrencehallofscience.org/curricula/high/hydrogen-fuel-cells/hydrogen-fuel-cells-science-behind-fuel-cells/>

¹⁸ <https://ww2.arb.ca.gov/our-work/programs/dgcert/exec-orders>

¹⁹ <https://www.energy.ca.gov/publications/2024/high-efficiency-and-ultra-low-emissions-linear-generator-demonstration-project>

energy system that is affordable for all Californians. We look forward to continued engagement in CARB's regulatory process.

Respectfully,

/s/ Jessi Davis

Jessi Davis
Energy and Environmental Affairs Manager
Energy and Environmental Policy