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SoCalGas Comments on IEPR Commissioner Workshop

Additional submitted attachment is included below.



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California Energy Commission
Docket Unit, MS-4
Docket No. 21-IEPR-03
1516 Ninth Street
Sacramento, California 95814-5512

Subject: Comments on the IEPR Commissioner Workshop on California’s Evolving Economic & Demographic Landscape

Dear Commissioner J. Andrew McAllister:

Southern California Gas Company (SoCalGas) appreciates the opportunity to comment on the California Energy Commission (CEC) Workshop on “Transportation Future and California’s Post Covid-19 Business Economy” held on February 2, 2021. SoCalGas supports a transition from gasoline and diesel fueled vehicles to cleaner and less carbon intense fuels, such as electricity, hydrogen, and renewable gas. This transition would be in the public’s interest as the transportation sector is the leading contributor to California’s greenhouse gas and criteria pollution emissions. We commend the Energy Commission for providing informative panels with important discussions on transportation as we hope to emerge from the global pandemic that has impacted many Californians. SoCalGas offers the following comments for your consideration in developing future policies and/or programs for the transportation sector.

Attainment deadlines are fast approaching

The panels largely focused on longer term horizons with the transportation sector. Several panelists referenced the need to leverage the disruptions caused by the pandemic to modernize the transportation sector. We support the Energy Commission’s exploration of using the pandemic to leapfrog in technologies to the extent feasible and as an opportunity to modernize the transportation system. There are still imminent attainment deadlines that can only be achieved by early and mass action to replace diesel heavy-duty trucks with clean alternatives. The South Coast Air Basin and the San Joaquin Valley are designated as in extreme non-attainment and have federal Clean Air Act obligations to obtain the federal air quality standards by 2023 in the South Coast and 2024 and 2025 in the San Joaquin Valley. Both districts are relying heavily on the turnover of heavy-duty trucks to meet attainment, face sanctions or other penalties by the federal government. The South Coast Air Quality Management District is currently updating the Air Quality

Management Plan to reach 2031 attainment and is expected to continue to rely on the turnover of older heavy-duty trucks. Currently, the cleanest commercially available truck technology for heavy-duty applications is the 11.9-liter Low-NOx natural gas truck. The Low-NOx truck produces 90 percent less NOx than the cleanest available diesel truck.¹ When paired with renewable gas, further greenhouse gas emission reductions are attainable.

Though the Low-NOx natural gas trucks are available, older diesel heavy-duty fleets are often replaced with new diesel fleets to comply with the California Air Resource Board's (CARB) Clean Truck Rule.² These polluting diesel trucks will be used for at least a decade. There is an opportunity to cost-effectively replace these older diesel fleets with Low-NOx trucks, and communities will benefit from the immediate air quality improvements. Low-NOx trucks can provide an immediate, low emission option, both for criteria pollutants and greenhouse gases. This can help the State meet aggressive near-term and long-term emission reduction requirements in the hard to reach heavy-duty truck sector. In fact, CARB committed to funding the turnover of 33,000 heavy duty trucks to the Low-NOx standard of 0.02 grams of NOx per brake horsepower hour by 2024 to meet attainment in the San Joaquin Valley.³ We ask that the Transportation Demand Forecast include this committed turnover to give an accurate forecast of fleet turnover.

Carbon emission reductions must be achieved today to avoid irreversible impacts of climate change

According to the International Panel on Climate Change (IPCC), significant action to reduce carbon emissions needs to happen immediately to avoid the most severe and irreversible impacts of climate change. The IPCC study states “[w]ithout increased and urgent mitigation ambition in the coming years, leading to a sharp decline in greenhouse gas emissions by 2030, global warming will surpass 1.5°C in the following decades, leading to irreversible loss of the most fragile ecosystems, and crisis after crisis for the most vulnerable people and societies.” This gives us less than a decade to make improvements to mitigate climate change.

The IPCC study demonstrates that early action to reduce Short Lived Climate Pollutants (SLCP) is a vital near-term and long-term strategy to reduce global warming.⁴ In the 2017 Scoping Update, CARB prioritized SLCP as a key to achieve California's 2030 greenhouse gas emission reduction targets. The greatest opportunity identified was the capture of organic sources of methane for utilization in the transportation sector. The organic source of methane can be used to generate renewable gas, which can then be utilized as a fuel for the transportation sector. In fact, Second-quarter (Q2) 2020 data from CARB has confirmed that the energy weighted carbon intensity (CI)

¹ “How Can Renewable Natural Gas Provide a Negative Carbon Impact?” Available at: <https://www.act-news.com/news/how-can-renewable-natural-gas-provide-a-negative-carbon-impact/>.

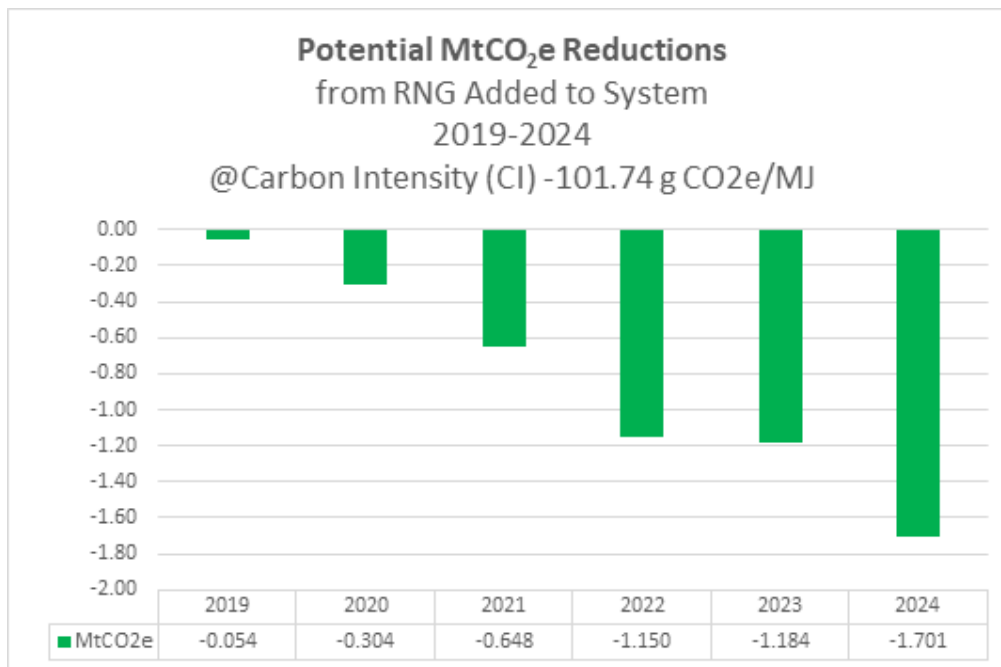
² The CARB Truck and Bus Rule requires all heavy-duty trucks to have a model year 2010 or later engine by 2023. There are roughly 300,000 trucks that must be turned over in the next two years.

³ San Joaquin Valley Supplement to the Revised 2016 State Strategy for the State Implementation Plan. Available at: https://ww3.arb.ca.gov/planning/sip/sjvpm25/2018plan/20180828_sjv_supplement_sip_strategy.pdf.

⁴ IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. In Press.

value of California’s compressed renewable gas in the Low Carbon Fuel Standard (LCFS) program was below zero—at (-) 0.85 grams of carbon dioxide equivalent units per mega joule (gCO₂e/MJ). This is the first that any low carbon fuel portfolio has achieved a carbon negative status in any three-month reporting period of the LCFS program. Therefore, trucks operating on renewable gas today have lower greenhouse gas emissions than battery electric trucks.

Further, it is expected that the CI of compressed renewable gas will continue to decrease. A recent study⁵ on the near-term supply of in-State renewable gas showed that by 2024, 160 new renewable gas production facilities will be operational. These facilities will add 119 million diesel gallon equivalent units of renewable gas by 2024. Most astonishing, the weighted average CI of the renewable gas produced will be (-)101.74 gCO₂e/MJ. For comparison, the electric grid currently has a CI of 82.92 gCO₂e/MJ. As shown in the graphic below,⁶ the use of renewable gas can significantly reduce carbon emissions. In 2024, renewable gas used in transportation will have a negative CI of (-) 101.74, which can reduce carbon emissions by over 1.7 million metric tons.⁷



The State cannot look past the emission reductions that can be achieved today by utilizing renewable gas. Together, we must leverage a portfolio of technologies to meet the challenge of climate change. In the near-term, low and negative carbon fuels can achieve significant emission

⁵ An Assessment: California's In-State RNG Supply for Transportation 2020-2024. A Survey of the existing and developing RNG production capacity in California for use in motor vehicles. Available at: <https://cdn.gladstein.org/pdfs/whitepapers/report-assesment-california-in-state-rng.pdf>

⁶ *Id.*

⁷ An Assessment: California's In-State RNG Supply for Transportation 2020-2024. A Survey of the existing and developing RNG production capacity in California for use in motor vehicles. pg. 19, Table 6. Converted Table 6 annualized energy production (MMBTU/YR) to million metric tons of CO₂e (MtCO₂) reduced at carbon intensity of -101.74 g CO₂e/MJ if all RNG displaces diesel consumption. Conversion factor = -0.11 metric tons of CO₂e per million British thermal units (MTCO₂e/MMBTU)

reductions as they are commercially available. SoCalGas recommends that the Energy Commission focus on both commercially available technologies in the near-term and advanced technologies in the longer-term.

Post-COVID efforts should consider employment equity

The pandemic has had significant impacts on employment in California. For instance, in April 2020 Californians had lost 2.6 million jobs according to the California Budget and Policy Center. While we commend the Energy Commission for tackling the complexities of modernizing the transportation section as an opportunity to modernize the transportation system, we urge the CEC to use caution in additional disruption to sectors that have been severely impacted by the pandemic. There should be extra efforts to not leave workers behind in not only this critical sector, but in others sector that are affected by transportation. This is particularly important as women and minority employment has been disproportionately impacted during the pandemic.⁸ A potential unintended consequence of transformational disruption is that the types of jobs may change within a sector. For example, a blue-collar job may be replaced by a white-collar job. We respectfully ask that the Energy Commission ensure that jobs of similar skillsets and of same geographic areas continue to be available as we recover from the pandemic and transition to new technologies.

We thank you again for the opportunity to provide comments on the important “Transportation Future and California’s Post Covid-19 Business Economy” workshop. If you have any questions, please do not hesitate to contact me.

Respectfully submitted,

/s/ Kevin Maggay

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⁸ According to the California Budget and Policy Center, unemployment rose higher for women in California and unemployment rates for Asian, Black, Lantinx, and other Californians of color had higher levels of peak unemployment than Caucasians. Available at: <https://calbudgetcenter.org/resources/californias-unemployment-remains-high/>.