

Comment Letter #63



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Submitted electronically: AQMPteam@aqmd.gov

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RE: Comments on Air Quality Management Plan (AQMP)

Dear AQMP Staff,

On behalf of the Associated General Contractors (AGC) of California, we are submitting comments to the South Coast Air Quality Management District (SCAQMD) in response to the Air Quality Management Plan (AQMP).

AGC of California is a member-driven organization that statewide consists of over 950 companies. Our members provide commercial construction services on a broad range of projects within vertical building, highway & transportation, and utility. We believe the construction industry is vital to the success of California. Together, our members actively create opportunities to build and strengthen our state. We are passionate about shaping policy, improving industry relationships, and developing our workforce.

Our members utilize strategies that produce some of the lowest carbon footprints in the United States. California's building codes result in construction that is more efficient than construction projects in other states. For instance, new homes come with solar panels and electric vehicle ready charging capabilities; they will also include heat pump water heaters and be prewired for all-electrical appliances. Additionally, water efficiency measures are utilized that save energy consumption and reduce water usage.

AGC of California appreciates the opportunities to submit a comment letter to address concerns and provide feedback. While AGC of California supports the efforts for cleaner air in California, there are several concerns we would like to address, such as the need for a reliable electrical grid, inequitable access to energy, and burden of increased costs on low-income communities and businesses. Please read below for more



1. Need for a prepared electrical grid to sustain increase in electrical energy demands.

AGC of California urges that South Coast AQMD provide assurances that the electrical grid in California will be able to supply the increased needs of electrical power that will be attributed to the AQMP. According to the CalMatter's article, "California's electric grid is not ready to meet climate goals," California's electrical grid was largely developed in the last century and was designed with natural gas fired generation located in urban areas, supplemented by remote hydro, nuclear, and geothermal energy (2022). The electrical grid was not designed to accommodate phasing out urban gas-fired generation and tripling the amount of energy delivered from remote wind and solar energy.

The National Renewable Energy Laboratory conducted a low carbon grid study that analyzed a 50% emission reduction in California and the associated impacts. They found that 3 million electric vehicles add 13 TWh of load and if half of the vehicles are assumed to be optimally charged it will create a potential for up to 3,000 MW of load during times of curtailment. They conclude that less flexible institutional frameworks and a less diverse generation portfolio could lead to higher curtailment (up to 10%), operational costs (up to \$800 million higher), and carbon emissions (up to 14% higher).

The peer-reviewed article, "Translating Climate Change and Heating System Electrification Impacts on Building Energy Use to Future Greenhouse Gas Emissions and Electric Grid Capacity Requirements in California," analyzed climate change and electrification impacts to system-wide endpoint impacts on future electric grid configurations (Tarroja, et al., 2018). They concluded that although electrification may decrease greenhouse gas emissions, it requires significant increases in electrical grid capacity. Specifically, that the large loads do not temporally align with daily renewable generation and therefore require increases in dispatchable electric grid capacity to support the electric grid configuration.

Additionally, the most recent 10-year plan developed from the Public Utilities Commission does not take shutting down gas power plants into account from now to 2031. This is concerning because rolling blackouts have been increasing over the years which will drastically impact Californians especially if they become even more dependent on electricity due to imposed regulations.

Bloom Energy released a California Power Outage Map based on data collected between 2017 and 2019. During that time there were over 50,000 significant power outages across the state that impacted approximately 51 million customers. Although it is commonly perceived that blackouts happen primarily in rural communities, they are becoming more common in cities as well. For instance, California's 5 largest cities including Los Angeles, San Diego, San Jose, San Francisco, and Fresno, experienced 10,417 outages impacting approximately 20% of the state's population. Additionally, San Bernadino alone experienced 1,208 backouts impacting 1.4 million customers. What is perhaps more concerning is that electrical power outages are steadily increasing. In October 2019, the blackout events increased by 80% compared to the year before and the individuals it impacted increased by 204%.

On January 13, 2021, the California Independent Systems Operator, California Public Utilities Commission, and California Energy Commission released a report regarding the root-cause analysis



of the mid-August extreme heat wave power blackouts. This report states that the root-cause was attributed to "extreme weather conditions, resource adequacy and planning processes, and market practices". Additionally, it states "[t]he energy markets can help fill the gap between planning and real-time conditions, but the West-wide nature of this extreme heat wave limited the energy markets' ability to do so". Therefore, it expresses the need to have a carefully thought-out AQMP that take California's current resources into consideration, as opposed to initiating a plan that may not practical.

The sustainability of power drastically impacts the construction industry. Without reliable access to power, this will interfere with projects being completed on time and on budget. Since the construction industry is the foundation of California's infrastructure, this will have negative repercussions on everyone throughout the state. These detrimental impacts should be considered in the development of the AQMP.

2. Inequitable access to energy.

While AGC of California understands the need for renewable energy, it is important that it is readily available for everyone, not just a select few. UC Berkley published the peer-reviewed article, "Inequitable access to distributed energy resources due to grid infrastructure limits in California," where the authors analyzed grid limits to new distributed energy resources integration across California's two largest utility territories (Brockway, Conde, & Callaway, 2021). They found that "grid limits reduce access to solar photovoltaics to less than half of households served by these two utilities and may hinder California's electric vehicle adoption and residential load electrification goals." This stresses the need to address the limits of the electrical grid prior to implementing a plan that imposes unrealistic goals. Furthermore, they evaluated the relationship between demographic characteristics and access. They found that the grid limits exacerbate existing inequities, particularly that disadvantaged census block groups have disproportionately less access to new solar photovoltaic capacity based on circuit hosting capacity.

Additionally, rural job sites may not have adequate access to electric charging stations that may be necessary for the adoption of electrical vehicles. There are several factors that are contributing to the scarcity of vital charging stations, such as the global shortage of essential EV charger components and precious metals (i.e. lithium). Many construction sites are in rural areas that may have reduced access to charging stations. That would result in the vehicles going back and forth between the job site and charging stations which would prolong the duration of the project. It would also increase miles on the vehicle, requiring the need for a replacement battery that much sooner. Lastly, the increased vehicle miles traveled would also influence tire wear emissions, thereby contradicting the goals of this plan.

All in all, AGC of California urges South Coast AQMD to consider upgrading the electrical grid prior to implementing the Scoping Plan so that energy can reliably get to all consumers that would make this plan obtainable.

3. Burden of increased costs on low-income communities and businesses.

The California Public Utilities Commission (CPUC) released a report in May 2021 that evaluated



electric costs, rates, and equity issues. CPUC expresses the importance of carefully thought-out policy: “[i]f handled incorrectly, California’s policy goals could result in rate and bill increases that would make other policy goals more difficult to achieve and could result in overall energy bills becoming unaffordable for some Californians. Electrification goals [...] are among the near-term needs, for example, that place upward pressure on rates and bills.” Additionally, they explain that without proper subsidies and low-cost financing options, this may create equity concerns for low- to moderate-income households and exacerbate existing disparities in electricity affordability.

ACEEE’s research report, “How High Are Household Energy Burdens? An Assessment of National and Metropolitan Energy Burdens across the U.S.” demonstrate a persistent challenge especially across all metro areas, low-income, Black, Hispanic, Native American, and older adult households (Drehobl & Ayala, 2020). Specifically, that they have disproportionately higher energy burdens than the average household. Therefore, it is possible that the regulations that South Coast AQMD seeks to implement may harm the very communities they swore to protect.

In the Foundation for Research on Equal Opportunity (FREOPP) article, “The High Cost of California Electricity Is Increasing Poverty,” Robert Bryce explains that 18.1% of California residents are experiencing poverty and that the cost of electricity largely contributes to that (Bryce, 2020). Even though the average Californian household uses less than half the energy of the average American household, Californians are paying some of the highest energy bills in the nation. Restrictions on the use of natural gas will increase the cost of electric bills which will put already disadvantaged communities even more at a disadvantage. Since South Coast AQMD is an organization that values equity, AGC of California encourages this to be taken under consideration in the development of this AQMP.

Although there may be some incentive programs, such as California’s net energy metering (NEM) program, there are additional equity concerns associated with such programs historically. For instance, in comparison to California’s general population, NEM customers were found to be disproportionately older, located in high-income areas, likely to own their home, and less likely to live in a disadvantaged community (CPUC, 2021). Furthermore, non-NEM customers shoulder an additional rate burden because of the cost shift from NEM customers. While incentive programs are well-intentioned, it is important that they are performing in the way that it was intended for: to assist low to medium-income households, businesses, and other disadvantaged communities.

As the price of electricity and materials continues to escalate, this will dramatically affect the construction industry’s ability to do their job. Manufacturers will be unable to absorb all of the increased costs that will result from the AQMP, therefore, contractors are likely to experience sharp increases in prices. Due to these increase in prices, this will result in more expensive building that may negatively affect consumers. For example, Enterprise Equity Partners found that 214 affordable housing projects in the Bay Area that are shovel-ready but are still in pre-construction phases of development simply due to a lack of funding. There are at least nine California counties dramatically impacted by this phenomenon resulting in 18,920 units stuck in predevelopment and needs over \$4 million to be able to resume construction. Furthermore, the California Housing Agencies released a report in 2020 that states how local jurisdictions may create barriers that make it harder to build affordable housing, such as restrictions on the number of units developers can build on a portion of land or lengthy processes for approving developers’ projects. This resulted in



local jurisdictions issuing building permits for only about 11 percent of their needed affordable housing units as of June 2019. Since more affordable housing is a goal of California, the AQMP contradicts those goals.

4. AQMP control measures & standards.

EGM-03: Emission Reductions from Clean Construction Policy states this control measure will seek to develop a Clean Construction Policy (CCP) which can be utilized for reference and voluntary implementation by local municipalities and public agencies. AGC of California appreciates that South Coast AQMD will be collaborating with the construction industry as well as consider existing control measures and best management practices that are currently being implemented by entities throughout California. We assert that this policy will remain practical and feasible for all contractors, including smaller and diverse businesses.

MOB-06: Accelerated Retirement of Older On-Road Heavy-Duty Vehicles states that South Coast AQMD will start up a new pilot program utilizing a three-way exchange approach. Specifically, that qualified participants can trade in their MY 2014 or newer heavy-duty diesel truck to a South Coast AQMD approved dealership and receive an incentive toward the purchase of a new low NOx emission (0.02 g NOx) natural gas-powered truck. AGC of California would like to receive some clarification on this control measure. First, what would a qualified participant be? We assert that contractors and their fleets be incorporated as a qualified participant so that they may be able to reap the benefits of this measure. Second, what would the incentive be? Additionally, as the language is currently written, it is uncertain of the timelines in which the acceleration retirement of vehicles turned over will be implemented. AGC of California asks that South Coast AQMD continue to collaborate with stakeholders to determine a time that is economically feasible and pose the least number of disruptions to construction projects.

In Appendix IV-B, Tier 5 Off-Road New Compression-Ignition Engine Standards are expressed, specifically for vehicles to utilize exhaust aftertreatment such as diesel particulate filters (DPFs) and selective catalytic reduction (SCR). DPFs can cost up to \$10,000 per vehicle, according to UTI.edu, and SCRs can cost up to \$9,600 per vehicle, according to Fleetowner.com, not including labor and maintenance costs. Therefore, if a fleet has 100 vehicles, it can cost up to \$960,000 - \$1 million. These additional costs are not economically feasible, especially with other increased cost burdens, such as fuel inflation. AGC of California encourages South Coast AQMD to offer financial incentives that would make this standard more feasible and practical. If a fleet cannot meet this standard, this may result in businesses either being shut down or moved across state lines which would severely disrupt the development of the state.

Conclusion

AGC of California appreciates South Coast Air Quality Management District (SCAQMD) for allowing AGC of California to comment on Air Quality Management Plan (AQMP). We assert that SCAQMD consider the concerns we have expressed above. If you have any questions regarding the comments,



please contact Brian Mello at 603-770-9264 (email: mellob@agc-ca.org). We appreciate the opportunity to comment and hope these concerns are addressed.

Sincerely,

Brian Mello

Brian Mello
Associate Vice President of Engagement & Regulatory Affairs
Associated General Contractors of California

