December 15, 2023

Ms. Rajinder Sahota
Deputy Executive Officer, Climate Change and Research
California Air Resources Board
1001 I Street
Sacramento CA 95814
Submitted electronically

Subject: Comments on the November 16, 2023 Cap-and-Trade Program Workshop

Dear Ms. Sahota:

The Los Angeles Department of Water (LADWP) appreciates the opportunity to provide comments in response to the November 16, 2023 workshop to discuss potential changes to the Cap-and-Trade Program.

Based on the modeling results presented at the November 16 workshop, LADWP urges the California Air Resources Board (CARB) to carefully consider the consequences of making any significant changes to the Cap-and-Trade Program at this time, such as reducing the allowance budget. LADWP recommends that CARB also consider the following, which are discussed in further detail below.

- A significant increase in the allowance price would affect Publicly Owned Utility (POU) long-term plans for their electricity generating resource portfolio, and would increase the cost of electricity in California. A higher cost of electricity would be a disincentive to electrification, which is a key strategy in the Scoping Plan to achieve California's emission reduction goals.

- Dispatchable generating resources are essential for a reliable and resilient electricity supply. Hydrogen is a promising alternative to natural gas for dispatchable generating units. However, this new technology is still evolving with regards to accessibility to hydrogen and the full conversion from natural gas.

- The impact on cost containment of preemptively removing allowances from the budget versus extension of the program beyond 2030.

- Allowance banking rules are working well for market participants with compliance obligations. Any changes to rules, such as the Limited Exemption calculation, should consider the difference between voluntary (no compliance obligation) and involuntary (with compliance obligation) market participants, and not adversely affect a compliance entity's strategy to comply with the program.

I. High Carbon Allowance Prices: Effect on POU Long-Term Resource Planning and Affordability

At the November 16 workshop, the presentation on the UC Davis modeling of allowance supply and demand in California's Cap-and-Trade market indicates that removing allowances from the Cap-and-Trade program budget would increase the carbon allowance price close to the ceiling price. The current allowance price based on the November 2023 auction is $38.73, compared to the price ceiling which is currently $84. To understand the ramifications of a significant increase in the allowance price, vertically-integrated POUs such as LADWP need more time to model the impact this would have on their long-term integrated resource plans. LADWP encourages CARB to exercise caution when considering whether to remove allowances from the program, and recommends deferring such a major change until a later point in time after the consequences have been thoroughly evaluated.

The Cap-and-Trade Program is designed to provide a financial incentive to make investments that reduce GHG emissions. A higher carbon allowance price should encourage Cap-and-Trade compliance entities to invest in emission reductions. For vertically-integrated POUs like LADWP, theoretical modeling of an electricity generating resource portfolio would respond to a higher allowance price by building more zero emission generating resources. However, that may not be possible in reality. Currently, supply chain disruptions are limiting the supply of new renewable energy resources. The technical feasibility of reducing GHG emissions must be considered when making a policy decision to reduce the allowance budget.

Another consequence of increasing the carbon allowance price would be to increase the cost of electricity purchased on the wholesale market when the marginal generating resource is a fossil fueled unit, thus increasing the cost to serve load in California. Increasing the cost of electricity in California would be counterproductive, since affordable electricity is essential for electrification to be cost-effective, and electrification is a key strategy in the Scoping Plan to achieve California's GHG emission reduction goals.

For the Electric Sector, emission reductions are primarily driven by regulatory and legislative requirements (i.e. the Renewables Portfolio Standard Program and Senate Bill 100) and local government climate action plans (i.e. Los Angeles' Green New Deal). The Cap-and-Trade Program can be a valuable tool to help POUs decarbonize their electricity supply by investing the value of the allocated allowances to reduce emissions. This reduce-and-invest cycle based on the existing fixed 10-year allowance allocation to Electrical Distribution Utilities (EDUs) is working as intended. In the absence of sources of funding (such as allocated allowance value), LADWP's customers would bear the full cost burden to achieve these goals. LADWP's 2022 Power Strategic Long-Term Resource Plan (SLTRP) included a price forecast associated with achieving the Senate Bill 100 goal, which will require a 4.8% annual rate increase. If carbon allowance prices reach the price ceiling, LADWP estimates the total operating cost between 2025 and 2045 of LADWP's generation and energy storage portfolio would increase by 85%. Such a cost increase would be untenable.

Within LADWP's service territory, approximately half the census tracts are considered disadvantaged communities as defined by Cal Enviroscreen, and approximately 18 percent of LADWP's residential customers receive discounted low-income and senior rates. LADWP wishes to protect its customers, especially our low-income customers, from the impact of regulatory cost increases. LADWP urges CARB to evaluate the cumulative cost impact of all the

potential Cap-and-Trade program changes holistically, and consider the important role of affordable electricity in achieving the Scoping Plan emission reduction goals.

II. Fuel Switching to Hydrogen

The UC Davis Model listed a variety of programs and activities as sources of GHG emission reductions (i.e. abatement). The list of abatement activities includes fuel switching.

LADWP is currently planning on switching to hydrogen as a fuel for its local power plants within the Los Angeles Basin. These local power plants are necessary to support electric grid reliability, resiliency and voltage control. The goal is to ultimately burn 100 percent clean hydrogen to produce zero-carbon electricity.

LADWP is in the early stages of projects to replace older steam boiler generating units with turbines capable of running on natural gas blended with hydrogen to lower the carbon intensity of the fuel. Another benefit of the new turbines is their ability to respond quickly when needed to balance the electricity supply and load. The hydrogen fuel supply and delivery system are still evolving, so it could be challenging to get the new infrastructure in place by the deadline to begin co-firing of 30 percent hydrogen as required by EPA's proposed GHG standards for fossil fuel-fired power plants[1].

LADWP urges CARB to consider the challenges related to new technology and infrastructure that is still evolving, when deciding what changes to make to the Cap-and-Trade program at this time.

III. Cost-Containment: Allowance Removal vs. Program Extension

Preemptive removal of allowances from the Cap-and-Trade program budget is not necessary, considering the UC Davis study which indicates that annual net deficits will begin decreasing any unused allowances by 2030. The UC Davis study also indicates that allowance prices are strongly influenced by the model end year (i.e. 2030 or 2040), and that most alternative scenarios yield prices that follow the price ceiling through 2040 ($145 in 2035 and ~$180 in 2040). The study also concluded "The single biggest impact California can have to encourage abatement through its cap and trade is committing to the program beyond 2030."[2]

Since it will take time to achieve California's emission reduction and carbon neutrality goals, LADWP encourages CARB to extend the Cap-and-Trade program beyond 2030 to provide flexibility during the transition. In addition, continuing the allowance allocation to EDUs beyond 2030 would be appreciated to cover Cap-and-Trade compliance as well as financially support decarbonizing the electricity supply and infrastructure upgrades for electrification.

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[1] New Source Performance Standards for GHG Emissions from New, Modified, and Reconstructed Electric Utility Generating Units, https://www.epa.gov/stationary-sources-air-pollution/nsps-ghg-emissions-new-modified-and-reconstructed-electric-utility

[2] Bushnell, James, California's Cap-and-Trade Market Enters its Teenage Years, https://energyathaas.wordpress.com/2023/11/27/californias-cap-and-trade-market-enters-its-teen-age-years/

IV. Market Rules: Changes Should Not Affect Compliance Strategy for Participants

Many participants in the Cap-and-Trade Program, like LADWP, have a compliance obligation and have developed a long-term strategy to comply with the program. The allowance banking rules as they currently exist, are working well for LADWP. Any proposed changes to the allowance banking rules should consider the differences between entities that are in the market voluntarily (without a compliance obligation) and entities with a compliance obligation. Any changes to rules, such as the Limited Exemption calculation, should not jeopardize an entity's strategy to comply with the program.

In closing, LADWP appreciates the opportunity to provide comments and feedback on these important topics. LADWP urges CARB to carefully consider the cumulative cost impacts to electricity ratepayers before making any regulatory changes that will further increase costs.

If you have any questions, please contact Ms. Andrea Villarin at (213) 367-0409 or Ms. Cindy Parsons at (213) 367-0636.

Sincerely,

Katherine Rubin

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