November 4, 2016

Ms. Rajinder Sahota
California Air Resources Board
1001 "I" Street
Sacramento, CA 95814

Subject: Los Angeles Department of Water and Power's Comments on Proposed Amendments to the California Greenhouse Gas Cap-and-Trade Regulations

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to provide comments to the California Air Resources Board (ARB) regarding potential amendments to the Mandatory Greenhouse Gas (GHG) Reporting and Cap-and-Trade Regulations that were discussed at the ARB workshop held on the October 21, 2016. The primary focus of LADWP's comments is the proposed new methodology for allocating post-2020 allowances to Electric Distribution Utilities (EDUs) under the GHG Cap-and-Trade Regulation, as detailed in the workshop presentations and the informal CARB staff proposal released on October 14, 2016.[1] LADWP's comments also address several other issues that ARB raised during the workshop, including the treatment of unsold allowances with a vintage year of 2020 or earlier, the publication of additional market data, and ensuring that EDUs can claim the Renewable Portfolio Standard (RPS) adjustment for covering GHG emissions for imported RPS-eligible firmed/shaped renewable electricity.

In submitting these comments, LADWP reaffirms its strong support of the AB 32 and SB 32 goals of achieving substantial GHG emission reductions in a cost-effective manner that protects its ratepayers and minimizes impacts to low-income communities. LADWP appreciates the opportunity to submit these comments to improve the effectiveness and workability of ARB's Cap-and-Trade Regulation.

As LADWP has stated in previous comments, it is very difficult to assess the full ramifications of the proposals to amend the California Cap-and-Trade Regulation and

[1] See *Cap-and-Trade Regulation, Post-2020 Allocation to Electrical Distribution Utilities, Informal Staff Proposal, dated* October 14, 2016.

111 N. Hope Street, Los Angeles, California 90012-2607 *Mailing Address:* Box 51111, Los Angeles, CA 90051-5700
Telephone (213) 367-4211 www.LADWP.com

whether they are workable, efficient, and provide adequate protections for LADWP's ratepayers, including low-income customers because the proposed amendments for continuation of the program beyond 2020 are not fully developed. Notwithstanding the evolving nature of ARB's proposal on key regulatory details, LADWP's primary concern so far identified is the substantial under-allocation of allowances to LADWP from 2021 to 2030, which is estimated to increase costs to LADWP ratepayers by $500-$600 million (based on projected auction floor price of allowances).

LADWP recommends that ARB not rush the regulatory process for amending the Cap-and-Trade Regulation and that, at the very least, allow stakeholders sufficient time to comment on the entire rulemaking each time that ARB releases future 15-day amendment packages to the original August 2 proposal.

I. EDU Allowance Allocation – Informal Staff Proposal

Proposed Option 1 (Change Load) vs. Option 2 (Fixed Load)

LADWP recommends applying proposed Option 1 on a regional basis. Option 1 recognizes that the load level will not remain constant at 2020 levels, but rather change for each region within the State throughout the post-2020 allowance allocation period. By contrast, LADWP does not support the approach proposed in Option 2, which assumes California load is fixed at 2020 levels from 2021 to 2030 and thereby does not address the reality that the State is increasingly focused on the electrification of sources (*e.g.*, transportation and other sectors of the economy) to meet its future GHG emission reduction goals and that local air regulatory agencies must implement electrification-related control measures in order to meet federal ambient air quality standards.

The importance of electrification as a key emission control strategy for meeting local air quality goals is clearly evidenced by the 2016 Air Quality Management Plan (AQMP) that the South Coast Air Quality Management District (SCAQMD) is currently developing for the South Coast Air Basin (SCAB). The AQMP is a primary planning document that lays out the potential future rules, requirements, incentives, and other regulatory actions upon which the SCAQMD intends to implement in the SCAB in order to meet the federal ambient air quality standards for criteria air pollutants, such as ozone and particulate matter. According to the Draft Environmental Impact Report (EIR)[2] for the 2016 AQMP, SCAQMD has proposed over 40 control measures that could result increases in electricity demand for the electric power sector. The potential increases in electricity demand would result from electrification-related control measures that are expected to increase the number of near-zero and zero emission

[2] South Coast Air Quality Management District Draft Environmental Impact Report, 2016 Air Quality Management Plan, September 2016

technologies or control measures that are achieved through the installation of control equipment (that increase electricity demand) but achieves a net air quality benefit in the local air shed.

The Draft EIR states that the potential electricity usage increase for Los Angeles, Orange, Riverside, and San Bernardino counties due to the proposed electrification-related control measures would exceed baseline electricity consumption by 7.8 percent (by 2023) to 12.7 percent (by 2031).[3] In addition, even with the implementation of an aggressive end-use energy efficiency program, substantial increases in electricity demand would remain significant. Because of the forecasted electricity demand due to these electrification-related control measures that would reduce criteria pollutants as well as GHG emissions, LADWP believes that it is unrealistic to assume that EDU loads would remain flat at 2020 levels for the 2021 to 2030 period. Therefore, LADWP recommends that ARB adopt the proposed Option 1 on a regional basis in order to ensure that ARB's post-2020 allowance allocations are more representative of actual operation of the LADWP system and other electric utility systems.

ARB Proposed Application of a Cap Adjustment Factor for EDU Allowance Allocations

The initial staff proposal states that EDUs would be allocated allowances to cover their cost burden associated with fuels used over the 2021 through 2030 period. The allowance allocation is intended for ratepayer protection. ARB is proposing an allowance allocation methodology that falls short of achieving this important goal for the reasons discussed below.

ARB is proposing to reduce allowance allocations by the application of a Cap Adjustment Factor of about 3.4 percent each year. The application of the Cap Adjustment Factor is in addition to the reductions that LADWP would achieve through the shutdown of its remaining coal-fired generation at the Intermountain Power Plant in Utah, substantial increases in renewable energy generation, and other measures it intends to undertake to reduce its GHG emissions system-wide. As a result of combining these utility-specific reduction efforts with the Cap Adjustment Factor, the proposed 2030 allocation to LADWP would be an 82 percent reduction from LADWP's 2020 allowance allocation. Furthermore, this allocation level would have the effect of requiring an 88 percent reduction from LADWP's 1990 GHG emission levels (assuming purchase of no additional allowances) – a reduction level that is over twice as much as the SB 32 goal of achieving a 40 percent GHG emission reduction from 1990 levels by 2030.

[3] Projections based on CEC Electricity Consumption by County. Energy Consumption Database System. Assumed an average increase in electricity of 1 percent per year.

In addition to imposing a disproportionate GHG reduction obligation on LADWP through the proposed allowance allocation (as compared to the statutory reduction target), this reduction requirement would be very costly to LADWP's ratepayers and thereby not address ARB's stated intent to protect ratepayers. We urge ARB to consider the cost burden of implementing GHG reduction actions such that each sector pays for its fair share of the GHG reduction goal mandated under SB 32. The importance of CARB correcting this flaw in the allocation methodology is underscored by the fact LADWP has been making unprecedented major capital investments in the following areas that will result in significant GHG emissions reductions on a LADWP system-wide basis:

- Replacing existing coal resources with non- or low-emitting replacement generation;
- Expanding our reliance on renewable energy in order to keep LADWP on the path to meet the RPS goals of 33 percent by 2020 and 50 percent by 2030;
- Modernizing LADWP's generating fleet in the South Coast Air Basin by replacing its existing generating units with high efficient, state-of-the-art natural gas combustion turbines;
- Implementing major projects and measures for improving end-use energy efficiency;
- Electrifying the transportation sector and other sectors of the economy; and
- Developing increased capacity for energy storage.

LADWP will continue to make these types of major capital investments to further decarbonize its electric utility system. For example, the 50 percent RPS is one major measure by which LADWP and other electric utilities will achieve a significant share of the statewide 40 percent reduction by 2030 goal. Furthermore, electric utilities will play a special role in helping the state achieve its 40 percent reduction by 2030 goal by helping the transportation and industrial sectors reduce their emissions through electrification.

Imposing the Cap Adjustment Factor on top of the utility-specific GHG reductions LADWP will achieve through compliance with the RPS and the SB 1368 requirement will result in costs to LADWP's ratepayers of $500 to $600 million from 2021 to 2030. These costs would be in addition to the approximate $900 million LADWP will be spending to implement the RPS program. Over 20 percent of LADWP's ratepayers are on its low-income and lifeline programs and will be impacted by this additional cost. For these reasons, we urge ARB to reconsider its approach to applying an across-the-board Cap Adjustment Factor to the EDU sector's allowance allocations, in addition to the utility-specific GHG emissions reductions that LADWP is expected to achieve over the 2021-2030 period.

Net Energy for Load Data

The informal staff proposal states that ARB would allocate allowances to each EDU according to its cost burden. "Cost burden" is defined as the anticipated incremental cost of power to serve load due to the requirement to surrender compliance instruments in the Cap-and-Trade Program. For EDUs that submit S-2 data to the California Energy Commission (CEC), ARB proposes to use the CEC's 2015 Integrated Energy Policy Report (IEPR) demand forecast and expected generation data from resources reported in the 2015 S-2 forms. Unfortunately, the proposed post-2020 allowance allocations for LADWP do not achieve this objective due, in part, to the underlying data that ARB is using to calculate the proposed allowance allocations. Specifically, ARB is proposing to use *Form 1.5a-Statewide California Energy Demand Revised/Final Forecast, 2016-2026, Mid Demand Baseline Case, Mid AAEE Savings, Net Energy for Load* to determine LADWP's allowance allocations. LADWP has found significant discrepancies between the Net Energy for Load (NEL) it has reported to the CEC on its S-2 forms (and subsequently included in its 2015 Integrated Resource Plan) and the levels that CEC states as LADWP's projected NEL in the Form 1.5a of the Mid-Demand AAEE demand forecast.

CEC staff stated that the reason why CEC's 2016-2026 demand forecast shows a much lower NEL (as compared to LADWP's own forecast) is that CEC deducted the load associated with additional achievable energy efficiency (AAEE) and higher solar photovoltaic forecast. AAEE is defined as future energy efficiency programs that are not yet approved or funded. Accordingly, LADWP recommends that the Mid-Demand Baseline No AAEE forecast scenario be used instead of the Mid-Demand Baseline Mid-AAEE forecast so that all of the EDUs will be on an equal footing.

LADWP looks forward to continuing to work with ARB and CEC staffs on these technical, but very important, matters for determining the post-2020 allocation of allowances. We stand ready to ensure that the most accurate data is used for the allocation calculations.

Proposed Calculation of RPS Load

ARB assumes that an EDU would meet its RPS targets based on a linear increase in renewable energy from 33 percent of *total load* in 2020 to 50 percent in 2030. ARB is proposing to use this approach as it is consistent with the method used to calculate the 2013 to 2020 allowance allocations. Since RPS percentage compliance is based on retail sales instead of NEL, LADWP believes that it is more appropriate that the amount of renewable energy for each EDU be based on the approach set forth in the Public Utilities Code Section 399.11: "The Legislature finds and declares all of the following:

(a) In order to attain a target of generating 20 percent of total retail sales of electricity in California from eligible renewable energy resources by December 31, 2013, 33 percent by December 31, 2020, and 50 percent by December 31, 2030, it is the intent of the Legislature that the commission and the Energy Commission implement the California Renewables Portfolio Standard Program described in this article (emphasis added)."

ARB Use of Global Warming Potential Factors

LADWP notes that ARB is using Global Warming Potentials (GWP) from the Intergovernmental Panel on Climate Change (IPCC) Third Assessment Report. LADWP recommends that ARB use updated GWP factors from the IPCC Fourth Assessment Report regarding the appropriate emission factors used to calculate 2021-2030 allocation since those GWPs will be used for compliance in the 2021 to 2030 period.

Shifting EDU Allowance Allocations to the Industrial Sector

ARB has proposed to discontinue the allocation to EDUs the allowances associated with energy used at "energy intensive trade exposed" (EITE) facilities. Instead, the ARB proposal would allocate these allowances directly to EITE facilities representing their electricity consumption using a formula that includes Product-Based Benchmarks. ARB's stated purpose of this reallocation of allowances is to mitigate electricity cost increases for Cap-and-Trade Regulation compliance costs that would otherwise be borne by EITE sources by providing this supplemental allocation of allowances directly to those sources. Under this approach, ARB would "subtract from an EDU's allocation an amount equivalent to the emissions resulting from power that serves industrial covered entities that are customers of each EDU."

LADWP believes that ARB's proposal is unlikely to accomplish ARB's goal of leakage prevention for the reasons described in its prior comment letter of September 19.[4] As stated before, LADWP recommends that the most efficient and effective way to mitigate cost impacts to EITE facilities (and thereby avoid resulting leakage) is for the ARB to retain the current approach and not shift any allowances from EDUs to EITE sources, at least in the case of publically owned utilities, such as LADWP.

Allocation for Electrification

LADWP looks forward to working with ARB and CEC staffs to address methodologies to quantify the net emissions decrease as a result of electrification efforts as well as the emissions increase due to increased demand. As the transportation sector accounts for a significant portion of California's GHG emissions, electrification of the transportation

[4] https://www.arb.ca.gov/lists/com-attach/42-capandtrade16-UmsFLI1tUDoLIAQ1.pdf

sector could potentially have a significant impact in reducing overall GHG emissions and criteria pollutants. In support of transportation electrification, LADWP will be heavily investing in electric vehicle charging infrastructure and promoting electric vehicle technology. In order to achieve the transportation electrification goal as described in its Integrated Resource Plan (580,000 electric vehicle equivalents by 2030), LADWP has estimated that it will be investing $1.4 billion by 2030. Providing an allowance allocation for electrification can mitigate the disincentive to invest in electrification.

Furthermore, LADWP believes that similar efforts will be necessary as ARB moves forward with the electrification of industrial sources and other sectors of the economy.

II. Treatment of Unsold Allowances

During the October 21 workshop, CARB indicated that it could retire some or all unsold State-owned allowances with vintage year 2020 or earlier. Although there are unsold State-owned allowances today, it is unknown what the demand for allowances will be in the future given the significant reductions that would be needed post-2020. LADWP supports ARB completing a cost-containment evaluation before it moves forward with any proposal to retire some or all of the unsold state-owned allowances, whether vintage 2020 or earlier or post-2020 vintage allowances.

III. Additional Market Data Publication Under Consideration

ARB currently publishes information on the transfer quantities and average prices of allowances annually. During the workshop, ARB indicated that staff is considering the possibility of publishing the information more frequently and referred to the Emissions Market Advisory Committee's paper of February 2014, which includes recommendations for market data publication.

As a general matter, LADWP believes that the disclosure of market information should be balanced against the need to protect individual covered entities from market manipulation. Although it may be more time intensive for ARB staff, LADWP believes that publishing the transfer quantities and average prices of allowances on a quarterly basis would be reasonable as ARB's auctions are done on a quarterly basis.

With respect to the recommendations to provide an index of the concentration of net positions in the market, publishing this information may not provide a full picture of the market. Information related to non-covered individuals and entities would not be included and these entities may hold, in aggregate, a significant number of allowances. For example, in the SCAQMD's NOx RECLAIM cap-and-trade program, commodity

traders, mutual funds, and private investors invest in and own RECLAIM Trading Credits (RTCs) and seek profit from trading them. These investors have been involved in a significant portion of the trades with respect to both value and volume of RTCs. The proposal's definition of long position (applying the emissions from a previous year as estimates for the remaining three-year compliance cycle) may not provide an adequate view of potential excess allowances in the market for the post-2020 period as the required emission reductions are more significant from year-to-year. Also, the Cap-and-Trade Regulation requires each covered entity to surrender at least 30 percent of the allowances representing 30 percent of its GHG emissions during the first and second years of a 3-year compliance period, and 100 percent of the required allowances at the end of a compliance period. Judgment on an entity's compliance status based on information shown before retirement/reconciliation of allowances would be premature and could cause confusion amongst those that are not familiar with the complexities of the Cap-and-Trade Regulation.

Instead, LADWP recommends that ARB publish an annual carbon market report similar to what the SCAQMD publishes annually for the RECLAIM cap-and-trade market. In SCAQMD's *Annual RECLAIM Audit Report*, allocation and trading issues that are addressed include;

- Number of registered transactions and associated values;
- Average annual prices of emission credits;
- Emission credit supply compared to reported emissions;
- Information on market participants (*e.g.*, investors' impact on the RECLAIM trading credit market);
- List of facilities that ceased operation; and
- Compliance status of facilities (*e.g.*, number of facilities that failed to reconcile emissions and the reasons why).

LADWP believes that aggregating the information and preparing an overall market report will provide market information to the public in a user-friendly format.

IV. RPS Adjustment

LADWP supports ARB's proposal to retain the RPS adjustment provision. However, the application of ARB's current guidance and interpretation of the RPS adjustment related to reporting and verification requirements severely limits the usefulness of the RPS Adjustment and so risks imposing significant additional costs on LADWP's and other California ratepayers for zero-emission generation for which they are already paying in order to comply with the RPS. LADWP is ready and willing to continue discussions with ARB to develop a workable solution.

V. Conclusion

LADWP supports ARB's efforts to revise the current Cap-and-Trade Regulation in order to ensure the achievement of the GHG emission reduction goals of AB 32 and SB 32. To that end, LADWP appreciates the opportunity to provide these comments in order to improve the effectiveness and workability of ARB's Cap-and-Trade Regulation in a manner that protects its ratepayers and minimizes impacts to low-income communities. If you have any questions, please contact me at (213) 367-0403 or Jodean Giese at (213) 367-0409.

Sincerely,

Mark J. Sedlacek
Director of Environmental Affairs

JG:vf
C: Ms. Rajinder Sahota, ARB
Ms. Mary Jane Coombs, ARB
Mr. Jason Gray, ARB
Mr. Bill Knox, ARB
Mr. Craig Segall, ARB
Ms. Jodean Giese