

May 10, 2018

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

Dear Ms. Sahota:

Subject: Los Angeles Department of Water and Power's Comments on California Air Resources Board's Cap-and-Trade Regulation Workshop of April 26, 2018

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to provide comments to the California Air Resources Board (ARB) on the Cap-and-Trade Regulation Workshop to Continue Informal Discussion on Potential Amendments of April 26, 2018. Since the focus of the April 26 workshop was on many of the same issues covered in several other recent ARB workshops, we are attaching for your consideration the message points that LADWP provided on those issues in recent LADWP comments submitted to ARB on March 26, 2018, and December 4, 2017 (Enclosures 1 and 2).

In submitting these comments, LADWP reaffirms its strong support of the Assembly Bill 32 (AB 32) and Senate Bill 32 (SB 32) goals of expeditiously achieving substantial greenhouse gas (GHG) emission reductions in a cost-effective manner that protects its ratepayers and minimizes impacts to low-income communities.

#### **I. Use of Allowance Auction Proceeds**

LADWP urges ARB to clarify electrical distribution utilities (EDUs) are expressly authorized to use allowance auction proceeds for local solar rooftop programs and research and development programs. As discussed in our March 16, 2018 comments, it makes good policy sense to identify as permissible uses these and activities that help to achieve the AB 32 and SB 32 GHG emission reduction goals. For example, local solar rooftop initiatives, such as community solar, are critically important to provide solar access to customers who are unable to install solar on their own. ARB should therefore adopt the following clarifying language to the current draft regulatory text to eliminate the ambiguity introduced by including the term "eligible" that is not defined with respect to customer-owned renewable energy resources:

95892(d)(3) "... (A) Renewable Energy or Integration of Renewable Energy: Funding the construction or purchase of generation from eligible renewable energy resources directly delivered to California, including product content category 1 or 2 under Public Utilities Code section 399.16(b) or support for customer-owned eligible renewable energy resources, including local solar resources..."

A similar clarification to the draft regulatory text is needed to ensure the use of allowance auction proceeds for conducting research and development programs. As EDUs respond to electricity system shifts from central to distributed generation in response to increased renewable generation, energy storage and grid-connected electric vehicles, it is increasingly important for EDUs to participate in research and development projects to assess the potential environmental benefits and impacts, as well as to develop effective technologies, methods, and techniques for achieving substantial GHG reductions across the electric grid. For these reasons, LADWP strongly recommends inclusion of research and development programs as follows:

95892(d)(3) "... (C) Research and Development: Funding research and development programs of technologies and/or approaches that analyze the potential GHG reductions associated with technologies and/or approaches.  
"... (GD) Non-Volumetric Return to Ratepayers..."

## **II. Quantification Methodology for Use of Auction Proceeds**

ARB has stated that EDUs could use existing quantification methodologies and calculator tools applied to California Climate Investments (CCI) programs using Greenhouse Gas Reduction Funds (GGRF). The CCI quantification methodologies cover limited projects, some of which can be translated and adapted to project categories listed under the proposed language in § 95892(d)(3) - Limitations on the Use of Auction Proceeds and Allowance Value.

Additionally, to aid stakeholders in quantification methodology development, ARB has proposed to establish the CCI Quantification Methodology Emission Factor Database. LADWP recommends using quantification methodologies similar to those used for the CCI programs and existing quantification methodologies. For example, rebate programs for electric vehicles (EV) can be quantified using the existing Clean Vehicle Rebates (CVRP) quantification methodology. Furthermore, publicly-owned utilities (POUs) are required to annually report to its customers and the California Energy Commission (CEC) on its investments in energy efficiency and demand reduction programs, as governed by Senate Bill 1037. Descriptions of the methodologies and assumptions, as well as, evaluation, measurement, and verification (EM&V) activities are provided in the report. LADWP recommends that ARB should allow methodologies already used in reports to other State agencies. Similar to how the CCI quantification methodologies are developed, LADWP also recommends that ARB work with stakeholders to develop future quantification methodologies that are not unnecessarily time consuming or burdensome.

## **III. Quantification of Transportation-Related Load Growth Emissions**

During the workshop, ARB staff requested comments on methods to quantify transportation-related load growth emissions such that they are quantifiable and verifiable to allocation standards. LADWP reiterates and incorporates by reference its comments on methods to accurately quantify transportation related load growth and corresponding emissions submitted on December 4, 2017 on the Cap-and-Trade Regulation Workshop presented on October 12, 2017.

As previously explained in our comments, LADWP agrees with ARB staff that it is important to avoid incentivizing load increases that do not reduce net GHG emissions, as this may result in a

disincentive for energy efficiency measures. Additionally, as ARB staff has indicated, load growth does not necessarily equate to GHG emissions increases due to increasing Renewable Portfolio Standards (RPS) and other abatement measures (e.g. early divestiture from coal). However, it is currently difficult to attribute load increase to electrification transportation using actual data, and to also verify that the electrons generated are going to electric transportation due to the lack of separate and dedicated metering to account for all aspects of electric transportation (light-duty, medium-duty, heavy-duty, on-road, and off-road vehicles). At best, data in the electric transportation sector is based on estimation methodology, similar to the one used in the Low Carbon Fuel Standard (LCFS) program.

There is a paradigm shift to a connected information society. Copious amounts of information are changing all aspects of social organization. Data is becoming more available, faster, and easily shared. Vehicles, homes, and the electric grid are getting smarter and connected. Eventually an accurate tracking system will most likely be developed, but until that time, LADWP recommends that ARB use an estimation methodology similar to the LCFS, where ARB staff estimates the electrification transportation increase in load demand based on each EDU's service territory. To require a more elaborate and complex methodology at this time is not necessary to evaluate the effectiveness of our efforts to electrify the transportation sector which reduced overall GHG emissions within the California economy.

#### **IV. Non-Tradable Allowances to Avoid Disincentives to Transportation and Building Electrification**

For the important policy reasons stated in our December 4, 2017 comments, LADWP believes it is important for ARB to establish workable methods for providing an additional allocation of allowances to EDUs for both transportation **and** building electrification related load growth. LADWP believes that load growth from building electrification could be of the same magnitude as from transportation electrification, and is partnering with others on a building electrification potential study. Furthermore, we believe that it would be prudent for ARB to have such a provision in place at this time should load growth due to electrification increase beyond what is expected.

One approach could entail the allocation of non-tradable allowances to avoid disincentives to the electrification of the transportation and building sector. Under this approach, after estimating an EDU's projected increase in electricity demand (and the resulting GHG emissions) due to electrification, ARB would allocate to the covered EDUs additional non-tradeable allowances that they would hold in their allowance accounts. This additional allocation should cover their increased emissions attributable to supply the transportation and building sector and would only remain available for that limited purpose. This approach assures that these non-tradeable allowances can only be used for meeting increased electricity demand due to transportation and building electrification for which substantial net GHG reductions would accrue. In addition, any unused allowances would be surrendered and permanently retired in accordance with procedures established by the ARB.

Alternatively, ARB could provide each EDU with an adjustment to its compliance obligation. Similar to getting additional allocation of non-tradeable allowances, an electrification adjustment will help lower the Cap-and-Trade cost burden due to increase in load demand for transportation



and building electrification. However, unlike the additional allowance allocation, EDUs will not get actual allowances, just a downward adjustment to their annual compliance obligations. This will eliminate issues associated with a possible allocation of non-tradeable allowances or the auction and uses of auction proceeds. LADWP believes that it is important to recognize the net emission reductions and the resulting air quality co-benefits of electrification of any type of combustion source and stress the importance of removing barriers to electrification.

#### **V. Overalllocation of Allowances**

For the reasons stated in our March 16, 2018 comments, LADWP agrees with ARB that the Cap-and-Trade Regulation is working as intended and compliance entities' GHG emissions are lower than the 2020 emission cap. As a result of the success of the Cap-and-Trade Regulation, it is not necessary for ARB to set post-2020 caps lower, de-value pre-2021 allowances, or place expiration dates on banked allowances.

LADWP further believes ARB should not take allowances away from compliance entities, as this action would penalize compliance entities that have spent significant funds to invest in resources to reduce GHG emissions early. The market price of carbon allowances has been and will continue to send a price signal to compliance entities that result in GHG reductions.

#### **VI. Direct Environmental Benefit**

LADWP reiterates and incorporates by reference its December 4, 2017 comments on the definition of "Direct Environmental Benefits" as it relates to offsets. LADWP supports ARB's analysis that it is immaterial where the ozone-depleting substance (ODS) is being destroyed. If the ODS is collected in California, there can be no doubt that the destruction of the ODS in either California or another state clearly results in direct environmental benefits to California because the inventory of ODS that can be used is lowered, therefore directly benefitting the global environment. The location of GHG reductions is not relevant because climate change is a global issue. If the project was sourced from California, the direct emissions reduction should be attributed to benefitting California.

If you have any questions, please contact me at (213) 367-0403 or Ms. Jodean Giese at (213) 367-0409.

Sincerely,



Mark J. Sedlacek  
Director of Environmental Affairs

BP:rs

Enclosures

c/enc: Mr. Jason Gray, ARB  
Ms. Brienne Aguilar, ARB  
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*General Manager*

December 4, 2017

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

Dear Ms. Sahota:

Subject: Los Angeles Department of Water and Power's Comments on California Air Resources Board's Cap-and-Trade Regulation Workshop presented on October 12, 2017

The Los Angeles Department of Water and Power (LADWP) appreciate the opportunity to provide comments to the California Air Resources Board (ARB) on the Cap-and-Trade Regulation Workshop presented on October 12, 2017.

In submitting these comments, LADWP reaffirms its strong support of the Assembly Bill 32 (AB 32) and Senate Bill 32 (SB 32) goals of expeditiously achieving substantial greenhouse gas (GHG) emission reductions in a cost-effective manner that protects its ratepayers and minimizes impacts to low-income communities.

#### **I. LADWP's Strong Support for ARB's Current Allocation Policy**

As LADWP has stated in its previous comments, LADWP supports ARB's existing regulatory structure that allows publicly owned utilities (POUs) the option to surrender directly allocated allowances for compliance or to consign portions of their allocated allowances to auction. In the 2017 Final Statement of Reasons for the California Cap-and-Trade Regulation (2017 FSOR), the ARB staff stated that

"ARB seeks "alignment" in this case in the sense that it seeks for its policies to result in equitable treatment for ratepayers who are customers of different entities. ARB finds this goal of equitable treatment to be reasonable."<sup>1</sup>

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<sup>1</sup> From the 2017 Final Statement of Reasons for the California Cap-and-Trade Regulation, page 1033

LADWP supports the goal of “equitable treatment of ratepayers.” However, to reach the goal of “equitable treatment for ratepayers,” ARB must recognize the reality that neither investor owned utilities (IOUs) nor POU are structured nor governed the same way.

LADWP is striving to continue GHG reduction efforts pursuant to AB 32 and SB 32, and continues to invest in cleaner and renewable energy. LADWP, as part of a vertically integrated electric utility system, owns generation facilities that have direct compliance obligations. For these facilities to remain in compliance with the Cap-and-Trade Regulation, LADWP will need to invest in upgrading these facilities and other programs to reduce GHG emissions. Therefore, it is unreasonable to expect POUs to have the same financial ability as IOUs, to fund GHG reduction measures and buy allowances, in addition to keeping rates low for ratepayers. As a load-serving entity, LADWP is in the best position to make investments in GHG reduction measures for the exclusive benefit of their customers. From 2013 to 2016, LADWP’s GHG reduction measures (i.e. increase in renewable energy and use of the carbon cost adder) have resulted in overall CO<sub>2</sub> emissions reduction of 26%. In order to continue making investments and provide competitive rates, LADWP will need the continuation of the current requirements.

#### LADWP’s Non-Volumetric Distribution of Allowance Value

LADWP believes that funding programs that directly provide ratepayers with energy efficiency products or a rebate for verified energy efficient purchases is a better alternative to a mandated non-volumetric distribution of allowance value to customers. LADWP offers various programs that help ratepayers save money, reduce electricity demand, and as a consequence reduce GHG emissions. Some of these programs include the Consumer Rebate Program and Efficient Product Marketplace (both programs promote energy efficiency and provide rebates), and the Refrigerator Exchange Program (LADWP will give customers a free refrigerator in exchange for a qualified older model). By giving ratepayers the opportunity to adopt energy efficient products (i.e. by literally giving away LED bulbs), LADWP believes this will lead to improved energy efficiency on the demand-side. A climate-related credit to ratepayers may not necessarily lead to adoption of energy efficient products, because ratepayers generally would not associate a credit on their bill as an opportunity to go out and buy LED bulbs.

The ARB also should keep in mind that there is no explicit mandate under AB 32 or other state law for POUs to distribute the allowance value in an equal amount to all of its customers only through some type of climate dividend credit in their electricity bills. Due to this statutory silence by the legislature, we believe that the “off-bill” approaches that LADWP and other POUs are currently using to decarbonize their electricity power systems provide an effective way to distribute in the allowance value back to our customers.

#### No Changed Circumstances Justifying a New ARB Allocation Policy

Finally, allocating allowances to POUs does not distort their incentive to reduce emissions from their facilities because POUs are under a mandate to deliver electricity as cost-effectively as possible to their customers. The ARB has expressly recognized this in fact in

the 2010 Final Statement of Reasons for the California Cap-and-Trade Regulation (2010 FSOR), stating that:

In order to minimize the administrative costs of the program to the POUs, and recognizing that directly allocating the allowances to the POUs does not distort their economic incentive to make cost-effective emissions reductions, we determined that it would be prudent to allow POUs to surrender directly allocated allowances without participating in the auction process.

Similarly, the 2010 FSOR contains other findings that expressly support the direct allocation of allowances to POUs for compliance and not requiring the consignment of some or all of those allowances to auction. In particular, ARB recognized that POU-owned generation is typically used only to serve POU ratepayers, whereas IOU subsidiaries can profit from selling power from their merchant generators. As a result, the 2010 FSOR concludes that not-for-profit POUs have no incentive to use allowance allocations to artificially lower the price of the power from their owned resources in order to increase market share and, as a result, the concerns that animated the ARB's decision to require IOUs to consign allowances to auction do not apply to POUs.<sup>2</sup>

ARB has not identified any changed circumstances that could justify any substantial revision to the current allowance allocation policy to POUs. As a result, LADWP believes that ARB lacks a reasoned basis or justification for changing that policy by requiring the consignment of all allocated allowances to the auction for POUs.

## **II. Definition of "Direct Environmental Benefits"**

LADWP understands the need to establish new offset credit limits pursuant to AB 398, and appreciates ARB Staff's effort to request feedback on the definition of "direct environmental benefits." LADWP supports ARB Staff in seeking clarification on this issue and believes that they are correct in stating that:

"...many offset projects are located in California, and directly result in benefits to California. A significant portion of the ozone-depleting substances destroyed out-of-

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<sup>2</sup> See 2010: ISOR: Rationale for Section 95892(c). "Monetization of allowances through auction is intended to ensure that the amount of value given to distribution utilities is transparent to the public, and that this value is used on behalf of electricity ratepayers. This practice will also ensure that freely allocated allowances to a distribution utility will not impact competition in the electricity generation market (where utilities compete with merchant power producers)."; 2010 ISOR: "By requiring IOUs to put their allowances up for auction, the regulation maintains the current competitiveness of the deregulated California electricity market. In this way, utility-owned generation and independent generation have equal access to allowances."; 2010 FSOR: "In order to minimize the administrative costs of the program to the POUs, and recognizing that directly allocating the allowances to the POUs does not distort their economic incentive to make cost-effective emissions reductions, we determined that it would be prudent to allow POUs to surrender directly allocated allowances without participating in the auction process."



state are recovered from communities throughout California, resulting in direct emissions reductions in California.”<sup>3</sup>

This example of ozone-depleting substances (ODS) being collected in California, and being destroyed out-of-state, is the type of offset projects that LADWP participates in. LADWP’s Residential Appliance Recycling Program offers a rebate for qualifying refrigerators, freezers, and air conditioners from residential electric customers. Pursuant to CARB’s Compliance Offset Protocol ODS Projects, a third-party contractor collects the refrigerant from these appliances and sends them out-of-state to destroy them. LADWP believes that the crucial factor in ARB’s analysis is that the ODS is being collected in California and it is immaterial where the ODS is being destroyed. Furthermore, there can be no doubt that the destruction of the ODS in either California or another state clearly results in a direct environmental benefits to California because the inventory of ODS that can be used is lowered, therefore directly benefitting the global environment.

As ARB Staff has mentioned, the location of GHG reductions is not relevant from a climate perspective, because global warming is a global issue. Therefore, to address the “no more than one-half [of the offsets] may be sourced from projects that do not provide direct environmental benefits in the state” criteria, ARB should focus on whether or not the project was sourced from California. The reason being that all offset projects should be associated with real GHG reductions and any GHG reductions are a “direct environmental benefit.” In the example above, the direct emissions reduction should be attributed to California because the ODS was collected from California communities.

### **III. Methodologies for Additional Allocation for Transportation Electrification Load Growth**

CARB’s Board Resolution 17-21 directs staff to “... evaluate appropriate quantification methodologies for additional electrical distribution utility allocation that would provide ratepayer benefit for the Cap-and Trade Program cost burden associated with transportation electrification load growth (in recognition of the requirements of SB 350).” California has adopted ambitious mandatory targets for reducing its greenhouse gas (GHG) emissions on an economy-wide basis. These reduction targets call for California to return to its 1990 GHG emission levels by 2020<sup>4</sup> and then continue that reduction trend by achieving a 40% reduction in economy-wide GHG emissions by 2030.<sup>5</sup> Additionally, Governor Brown set the goal of over 1.5 million zero-emission vehicles (ZEV) on California roads by 2025.<sup>6</sup> To achieve GHG reduction levels of this magnitude, and to meet the ZEV goal, it will clearly be necessary for California to electrify the transportation sector, which currently produces 42% of the State’s CO<sub>2</sub> emissions.

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<sup>3</sup> From the 2017 Final Statement of Reasons for the California Cap-and-Trade Regulation, page 406

<sup>4</sup> See Assembly Bill 32 (AB 32).

<sup>5</sup> See Senate Bill 32 (SB 32).

<sup>6</sup> See Executive Order B-16-2012

Achieving these steep CO<sub>2</sub> reduction levels will be made more difficult if the ARB advances policies to increase the cost of electricity that would be used to power the transportation sector. To put in other words, regulatory policies that drive up the cost of electricity will increase the cost of electricity that consumers must purchase for their vehicles and that these electricity cost increases would consequently have the counterproductive effect of discouraging this critical shift from gasoline-powered vehicles to electric vehicles for a large segment of transportation sector.

Given the importance of electrification in achieving the climate change goals for California, it is critically important that the ARB develop effective allowance allocation methodologies that do not penalize the electric power sector, but instead encourage the electrification of the transportation sector. As previous stated, LADWP urges ARB to consider methodologies that allocate allowances based on projected emission increases due to projected actual use of electrification infrastructure. These additional allowances would be distributed from an allowance reserve specifically established for Electric Distribution Utilities (EDUs) that document the expected increases in load needed to meet projected future increases in transportation electrification in each EDU service territory.

To quantify the number of allowances needed by an EDU, the methodology should rely on EDU-specific generation data and emission factors. For generation data, ARB should first utilize a projection of expected electricity demand increases associated with the utility's electrification efforts. ARB could utilize EDU Integrated Resource Plans developed as part of the SB 350 process or California Energy Commission (CEC) electric utility data. The demand, in the case of electric vehicles, could be based on EDU-specific forecasts of electric vehicle penetration in its service territory, average kwh/mi electric vehicle efficiency ratings taken from published U.S. Department of Energy (DOE) and U.S. Environmental Protection Agency (EPA) data, and mile per year per vehicle information taken from ARB's EMFAC model. For EDU-specific emission factors, ARB should utilize a three-year average of each EDU's system-wide emission rate. Quantification could be updated annually.

After estimating an EDU's projected increase in electricity demand (and the resulting GHG emissions) due to electrification, ARB would allocate to the covered EDUs an extra allocation of non-tradeable allowances that they would hold in their allowance accounts. This extra allocation of non-tradeable allowances would be sufficient in number to cover their increased emissions attributable to supply the transportation sector and would only remain available for that limited purpose.

Finally, LADWP has concerns on the methodology for projecting the extra allocation of allowances for meeting projected electricity demand increases due to electrification. Specifically, we believe that it is unnecessary for ARB to establish overly stringent verification requirements that will impose considerable complexity and excessive accounting burdens on EGUs. Rather, LADWP believes that better approach is for ARB to restrict the ability of EDUs to sell or trade those allowances allocated to cover costs associated with electrification. This approach assures that these non-tradeable allowances can only be used for meeting increased electricity demand due to transportation electrification for which

substantial net GHG reductions would accrue. Under this approach, any unused allowances would be surrendered and permanently retired in accordance with procedures established by the ARB.

#### **IV. Methods to Accurately Quantify Transportation Related Load Growth and Corresponding Emissions**

In the 2017 FSOR,

“ARB staff notes that any method would need to be as accurate and verifiable as the methods used to calculate product-based allocation for industrial sectors. It would not need to be calculated in advance of load and cost burden increases, but could be based on actual data with allocation occurring in arrears. Use of actual load and emissions/cost burden increase data can minimize or eliminate the use of estimation. Minimizing estimation will ensure that the allocation is appropriate for actual deployment of electrified transportation...it is important to avoid incentivizing load increases which do not reduce net GHG emissions.”<sup>7</sup>

While LADWP agrees with ARB staff that it is important to avoid incentivizing load increases that do not reduce net GHG emissions, as this may result in a disincentive for energy efficiency measures, LADWP is questioning the availability of appropriate data sources that is accurate and verifiable. In the electric transportation sector, a robust tracking system does not exist. At best, data in the electric transportation sector is based on estimation methodology, similar to the one used in the Low Carbon Fuel Standard (LCFS) program. It would be difficult to accurately attribute load increase to electrification transportation using actual data, and to also verify that the electrons generated are going to electric transportation, due to the lack of separate and dedicated metering for electric transportation charging. In the LADWP service territory, approximately 25% of LADWP's customers have separate and dedicated metering for EV charging. Many of LADWP's customers live in multi-unit dwellings where the installation of a dedicated meter for EV charging is not possible or economically feasible. Furthermore, to acquire dedicated meters is not the most economical option right now, as many EVs are supplied with Tier 1 chargers from the manufacturers.

Until an accurate tracking system is developed, LADWP recommends that ARB use an estimation methodology similar to the LCFS, where the ARB staff estimates the electrification transportation increase in load demand based on each EDU's service territory. ARB can then allocate to EDUs an extra allocation of non-tradeable allowances that they would hold in their allowance accounts. This extra allocation of non-tradeable allowances would be sufficient in number to cover their increased emissions attributable to supply the transportation sector and would only remain available for that limited purpose.

In the alternative, the ARB could provide each utility an adjustment to their compliance obligation. Similar to getting additional allocation of non-tradeable allowances, as described

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<sup>7</sup> From the 2017 Final Statement of Reasons for the California Cap-and-Trade Regulation, page 56

above, an electric transportation adjustment will help lower the Cap-and-Trade cost burden due to increase in load demand. However, unlike the additional allowance allocation, EDUs will not be getting actual allowances, but adjustments to their annual compliance obligations. This will eliminate issues associated with the auction and uses of auction proceeds.

#### **V. Allowance Banking Rules that Discourage Speculation**

LADWP believes that ARB's current strategies, as detailed in the Cap and Trade Market Oversight and Enforcement document<sup>8</sup>, already discourage speculation and prevent gaming of the carbon market. The current language establishes limits on how many allowances an entity can purchase from the auctions (purchase limit) and how many they can bank (holding limit and limited exemption). Additionally, there are rules governing the usage of the various accounts (holding account, compliance account, limited use holding account, etc.). The Market Monitor will ensure that the markets are free of abuse and disruptive activities. Furthermore, LADWP believes that the proposed price ceiling and intermediate price signals will help with volatility in the market. For these reasons, there is no need for ARB to establish at this time additional rules to discourage speculation, avoid financial windfall, and ensuring the integrity of the carbon market.

If you have any questions, please contact me at (213) 367-0403 or Ms. Jodean Giese at (213) 367-0409.

Sincerely,



Mark J. Sedlacek  
Director of Environmental Affairs

BP:rs

c: Ms. Rajinder Sahota, CARB  
Mr. Jason Gray, CARB  
Ms. Mary Jane Coombs, CARB  
Mr. Mark Sippola, CARB  
Ms. Rachael Gold, CARB  
Ms. Jodean Giese

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<sup>8</sup> [https://www.arb.ca.gov/cc/capandtrade/market\\_oversight.pdf](https://www.arb.ca.gov/cc/capandtrade/market_oversight.pdf)





March 16, 2018

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

Dear Ms. Sahota:

Subject: Los Angeles Department of Water and Power's Comments on  
Amendments to Cap-and-Trade Regulation - March 2, 2018  
Public Workshop

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to provide comments on materials presented and discussed at California Air Resources Board's (ARB) Amendments to Cap-and-Trade Regulation public workshop.

LADWP, the largest municipal electric utility in the nation and the third largest electric utility in California, is making unprecedented major capital investments over the next ten years that will result in further greenhouse gas (GHG) emissions reductions. To date, LADWP has reduced its GHG emissions by approximately 42 percent from 1990 levels. In submitting these comments, LADWP reaffirms its strong support for the Assembly Bill (AB) 32 and Senate Bill (SB) 32 goals of expeditiously achieving substantial GHG emission reductions in a cost-effective and efficient manner that protects LADWP ratepayers and minimizes impacts to low-income communities.

**I. Proposed Use of Allowance Auction Proceeds for Electrical Distribution Utilities Should Include Local Solar Rooftop Programs and Research and Development Programs**

LADWP supports ARB's intent to clarify the permissible uses of allocated allowance auction proceeds by the Electrical Distribution Utilities (EDUs). In so doing, ARB should clearly define the boundaries within which the proceeds may be used, while retaining reasonable flexibility within the boundaries regarding the types of GHG reduction programs and activities that are acceptable uses of the auction proceeds. LADWP recommends that the list of specific categories of activities expressly identified as permissible uses of auction proceeds also include local solar rooftop programs and research and development projects that analyze potential GHG reductions. Furthermore, the list should not exclude other yet-to-be identified GHG reduction-related programs and activities that would support the overall purpose of AB 32 and SB 32.

**Local Solar Rooftop Programs.** Public comments received during LADWP's Integrated Resource Plan (IRP) outreach meetings have confirmed that local solar is an important priority. Accordingly, LADWP's IRP recommends policy actions to encourage the siting of 900 MW of local solar installations by 2025 and up to 1,500 MW by 2035. LADWP has created two initiatives to assist in reaching these goals: the Community Solar Program (CSP)/Utility Built Solar Program (UBSP) and the Solar Incentive Program (SIP).

Through the CSP/UBSP, LADWP's goal is to install 40 MW of community solar by 2025 by providing solar access to customers who are unable to install solar on their own. Reasons may stem from lack of financial resources, being a renter and not owning a roof, or having shaded roofs. To address these potential barriers, LADWP will offer assistance in the development of solar resources and pass the savings to this class of customers. LADWP's assistance includes the developing, designing, constructing, operating, maintaining, financing, and contracting of the solar resources. Participants in this solar program are able to reduce their GHG footprint while hedging against rising energy costs. LADWP will aggregate solar projects in selected low-income communities and sell the clean solar energy to program participants so that customers are able to lower their energy consumption costs through economies-of-scale and optimized-project-siting of solar energy resources.

LADWP's SIP initiative provides a onetime incentive to customers who install a solar PV system on their property for their own consumption. When a customer's SIP solar system produces more energy than the customer uses for the billing cycle, the excess energy is calculated as a credit to be used on the customer's future bill (customer-net metering).

Given the importance of these local solar initiatives, LADWP urges ARB to confirm that local solar rooftop programs are an acceptable use of allowance proceeds. In particular, ARB should revise the draft regulatory text at section 95892(d)(A) to address an apparent inadvertent ambiguity caused by including "support for customer-owned *eligible* [emphasis added] renewable energy resource" within the Renewable Energy or Integration of Renewable Energy category. This ambiguity results from the fact that the term "eligible" is not defined with respect to customer-owned renewable energy resources. To clarify this ambiguity, LADWP recommends that the term "eligible" should be deleted from the draft regulatory text and that clarifying language on inclusion of local solar resources should be added as follows:

95892(d)(3) "... (A) Renewable Energy or Integration of  
Renewable Energy: Funding the construction or purchase of

generation from eligible renewable energy resources directly delivered to California, including product content category 1 or 2 under Public Utilities Code section 399.16(b) or support for customer-owned eligible renewable energy resources, including local solar resources..."

**Research and Development Programs.** In addition, ARB should include research and development programs for reducing GHG emissions as permissible uses of auction proceeds. The need for such research and development programs is growing with the intensification of our efforts to decarbonize the electric power grid. As EDUs respond to electricity system shifts, with increased renewable generation, energy storage and grid-connected electric vehicles, it is becoming increasingly important for EDUs to participate in research and development projects to assess the potential environmental benefits and impacts. For these reasons, LADWP recommends that research and development programs be included on the list of permissible uses of allowance proceeds. The following is suggested new regulatory text to implement this proposed change:

95892(d)(3) "... (C) Research and Development: Funding research and development programs of new or emerging carbon-reducing technologies and techniques, as well as other projects that analyze the potential GHG reductions associated with such types of technologies and techniques.

"...(GD) Non-Volumetric Return to Ratepayers..."

## **II. Reporting on the Use of Auction Proceeds – Quantification of GHG Emission Reductions**

The Preliminary Discussion Draft proposes to require that EDUs quantify the GHG emission reductions resulting from the use of allocated allowance auction proceeds under sections 95892(d)(3)(A) and (B) (renewable energy or integration of renewable energy, energy efficiency and fuel-switching programs). See Draft section 95892(e)(3). During the public workshop, ARB stated that EDUs could use existing protocols such as the Greenhouse Gas Reduction Fund (GGRF) protocols to quantify their GHG emission reductions from these programs. Given the existing regulatory workload on EDUs to comply with the Mandatory GHG Reporting and Cap-and-Trade Regulations, LADWP recommends that the quantification protocols be simple to use and not overly time consuming or burdensome.

Our concern regarding how this quantification requirement may be implemented is illustrated by the challenge of just estimating the amount of GHG reductions that can be



achieved through electrification of the transportation sector. At present, LADWP quantifies its electric transportation-related growth emissions by comparing its base case with its high electric transportation case. To estimate the net GHG emissions reductions associated with electric vehicle penetration, LADWP has used the California Energy Commission's electric vehicle spreadsheet tool by comparing the carbon intensity of petroleum fuels for vehicles to electricity for electric vehicles with improvements in both sectors over time. To require a more elaborate and complex methodology is not necessary to evaluate the effectiveness of our efforts to electrify the transportation sector which reduces overall GHG emissions within the California economy.

### **III. Allowance Banking Rules**

During the recent workshop, ARB requested feedback on factors to consider in the determination whether any modifications to existing rules on allowance banking are needed. Possible policy options identified by ARB included de-valuing pre-2021 allowances held in private accounts in the post-2020 period and placing expiration dates on banked allowances whereby the allowances would no longer be a valid compliance instrument after a specified expiration date.

LADWP believes no changes are necessary to the allowance banking rules. ARB's current market structure is working well. The Cap-and-Trade Regulation has been successful in reducing GHG emissions in an efficient and cost-effective manner and it has done so not only in California but harmonized across the linked jurisdictions (Quebec and Ontario). There appears to be no identified market problem to warrant a significant change in the banking rules. ARB's Cap-and-Trade Regulation contains holding limit requirements to prevent hoarding of allowances and the ability of an entity to exercise market power. In the development of the Regulation, ARB's intent in allowing banking was to prevent price variability due to potential allowance demands as a result of low hydro years, for example.

Banking of allowances is also an incentive for compliance entities to invest in reducing GHG emissions early. ARB should not develop regulations that penalize early action by making the Cap-and-Trade Program more stringent in response to early GHG emission reductions achieved. Imposing such a penalty by devaluing allowances or establishing an expiration date would incentivize compliance entities to only do the minimum to meeting their GHG reduction obligations. Since no market problems have been identified that are associated with banking of allowances, LADWP urges ARB to leave the current banking provisions in place without change.

#### **IV. “Overallocation” Issue**

As a result of the success of the Cap-and-Trade Regulation, it appears that 2020 GHG emissions will be lower than the cap. LADWP agrees with ARB that the Regulation is working as intended so it is not warranted for ARB to set post-2020 caps lower, de-value pre-2021 allowances, or place expiration dates on banked allowances. ARB had its first linked jurisdiction auction including Ontario in February 2018 and it does not appear that an in-depth analysis has been done on the market impacts to the three jurisdictions as a result of setting the caps lower, de-valuing pre-2021 allowances or placing expiration dates on banked allowances. We believe that it would be premature to make changes to the market system now as the 2021 to 2030 GHG emissions caps will significantly decrease and it is uncertain how the market will respond to the caps; there is no market data yet to warrant taking allowances away from the Cap-and-Trade market universe. LADWP further believes ARB should not take allowances away from compliance entities as this action would penalize entities that have spent significant funds to invest in resources to reduce GHG emissions early. The market price of carbon allowances has been and will continue to send a price signal to compliance entities to reduce GHG emissions. LADWP incorporates the price of carbon in the dispatch of its generating resources; as a result, LADWP's GHG emissions are approximately 42 percent below LADWP's 1990 emissions baseline, already exceeding the 2030 goal of 40 percent below 1990 levels.

#### **V. California Independent System Operator's Energy Imbalance Market GHG Enhancement Approach**

LADWP recently submitted comments to the California Independent System Operator (CAISO) regarding its current Energy Imbalance Market (EIM) GHG enhancement approach. In our comments, we recommended that CAISO makes certain refinements to ensure consistent treatment of participating resources (PRs) located in new in-state EIM entities. In particular, our comments explained that CAISO does not appear to have fully addressed in its proposal regarding a non-CAISO balancing authority area (BAA) with PRs located both within and outside California. Unlike other EIM PRs, LADWP's in-state PRs will have GHG compliance costs embedded in their energy bids, and EIM transfers from LADWP's out-of-California PRs into California are considered by CARB to be “imports” with mandatory reporting and Cap-and-Trade Regulation compliance obligations. The CAISO proposal does not appear to squarely address the unique circumstances of a new EIM Entity such as LADWP, for which all load is within the state of California, but the BAA and generating resources are located both within and outside of California.

Ms. Rajinder Sahota  
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March 16, 2018

In light of this fact, LADWP recommended that CAISO make a holistic review of its proposal in order to revise its approach, analysis, and language to reflect the upcoming reality that beginning in 2019, not all EIM Entities will be located outside the state of California. A copy of our comments to CAISO is enclosed for ARB's reference.

LADWP appreciates the opportunity to provide these comments. If you have any questions, please contact me at (213) 367-0403 or Ms. Jodean Giese at (213) 367-0409.

Sincerely,



Mark J. Sedlacek  
Director of Environmental Affairs

JG:dms

Enclosure

c: Mr. Jason Gray, ARB  
Ms. Rachel Gold, ARB  
Ms. Jodean Giese

**Comments of Los Angeles Department of Water and Power  
California Independent System Operator Energy Imbalance Market Greenhouse Gas  
Enhancements 2nd Revised Draft Final Proposal (February 16, 2018)**

<b>Submitted by</b>	<b>Company</b>	<b>Date Submitted</b>
<b>Mark J. Sedlacek, Director of Environmental Affairs, Office of Sustainability Division (213) 367-0403</b>	<b>City of Los Angeles Department of Water and Power (LADWP)</b>	<b>March 1, 2018</b>

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to comment on the California Independent System Operator's (CAISO) Energy Imbalance Market (EIM) Greenhouse Gas (GHG) Enhancements 2<sup>nd</sup> Revised Draft Final Proposal released on February 16, 2018 and updated on February 20, 2018 (Proposal). LADWP recently signed an agreement with CAISO to join the EIM and supports the EIM as a way to integrate renewables and further optimize LADWP's resources.

**Comments on CAISO's EIM GHG Enhancement Approach**

**CAISO Should Ensure Consistent Treatment of Participating Resources Located in New In-State EIM Entities**

LADWP presents a case that CAISO does not appear to have fully addressed in its Proposal—a non-CAISO balancing authority area (BAA) with participating resources (PRs) located both within and outside California. Unlike other EIM PRs, LADWP's in-state PRs will have GHG compliance costs embedded in their energy bids, and EIM transfers from out-of-California PRs to LADWP's BAA will be considered by CARB to be "imports" with mandatory reporting and Cap-and-Trade Regulation compliance obligations. The Proposal does not appear to squarely address the unique circumstances of a new EIM Entity such as LADWP, for which all load, and the majority (but not entirety) of the BAA, is within the state of California.<sup>1</sup> Specifically:

- (1) In-state PRs within LADWP's BAA should not be subject to the GHG bid quantity and GHG bid price requirements applicable to EIM PRs located outside California, including the minimum bid price requirement based on a GHG secondary emission rate. LADWP already ensures GHG compliance for these resources, and thus the cost of GHG compliance will be embedded in its energy bids. Further, EIM transfers from in-state PRs within LADWP's BAA to CAISO or other EIM BAAs do not pose secondary dispatch concerns.
- (2) EIM transfers from out-of-state PRs to LADWP's BAA pose secondary dispatch concerns in the same manner as EIM transfers from out-of-state PRs to CAISO. CAISO should apply the bidding requirements contemplated in the Proposal to all EIM out-of-state PR offers to serve CAISO and LADWP load.

CAISO has previously indicated that for purposes of GHG compliance, it would treat EIM PRs in EIM Entities located in California consistently with CAISO generating resources. Specifically, in

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<sup>1</sup> LADWP's BAA includes generation resources and transmission elements outside the State of California in Utah, Nevada, and Arizona.



its November 2016 straw proposal, CAISO included the following footnote, suggesting how it would treat EIM PRs and PR scheduling coordinators in the event that a non-CAISO BAA located within California became an EIM Entity:

"During the EIM stakeholder process, the potential was recognized for a balancing authority area that is located solely within California may seek to join the EIM. In this scenario, the resources in this balancing authority would bid in the same manner as resources in the CAISO. The resource would submit a single energy bid and not have separate bid costs submitted for energy and GHG costs. The locational marginal prices in this balancing authority area, as in the CAISO, would not include a separate GHG component."<sup>2</sup>

A similar clarification has not been included in the most current Proposal. The fact that this footnote has not been included in the Draft Final Proposal creates substantial uncertainty regarding how EIM PRs within LADWP's BAA will be treated under the CAISO's Proposal. Rather, in the Proposal, CAISO regularly uses language suggesting that *all* EIM PRs must utilize the GHG bid quantity and bid price framework. For instance, footnote 11 (page 8 of the Proposal) defines "EIM participating resources" as "located in balancing authority areas outside the CAISO."

While LADWP's BAA is not "located solely within California," LADWP's load is solely within California. Therefore, CAISO should clarify that it will treat in-state EIM PRs in LADWP's BAA in the same manner as resources in the CAISO, and that such resources will not have to submit bid parameters for GHG costs.

Similarly, consistent with the above comments, the definition of "California Supply" should be adjusted to account for LADWP's circumstances. Load Serving Entities (LSEs) within non-CAISO load located solely *inside* California, such as LADWP, also contract for power from resources outside of California. To that end, LADWP recommends that the definition of "California Supply" be revised to refer to "resources outside **California** that have a contract with or are owned by a load serving entity in **California** for serving **California** load."<sup>3</sup>

LADWP recommends that CAISO make a holistic review of its Proposal in order to revise its approach, analysis, and language to reflect the upcoming reality that beginning in 2019, not all EIM Entities will be located outside the state of California.

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<sup>2</sup> California ISO Regional Integration California Greenhouse Gas Compliance and EIM Greenhouse Gas Enhancement Straw Proposal at 17, n.12 (Nov. 17, 2016), <http://www.caiso.com/Documents/StrawProposal-RegionalIntegration-EIMGreenhouseGasCompliance.pdf>.

<sup>3</sup> Proposal at 10.