Los Angeles Department of Water & Power

ERIC GARCETTI
Mayor

Commission
MEL LEVINE, *President*
WILLIAM W. FUNDERBURK JR., *Vice President*
JILL BANKS BARAD
CHRISTINA E. NOONAN
AURA VASQUEZ
BARBARA E. MOSCHOS, *Secretary*

DAVID H. WRIGHT
General Manager

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 increasing 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.
>
> "...(~~C~~D) 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.

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

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)

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

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 2nd 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

<u>CAISO Should Ensure Consistent Treatment of Participating Resources Located in New In-State EIM Entities</u>

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.[1] 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

[1] 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."[2]

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."[3]

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.

---

[2] 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.

[3] Proposal at 10.