

January 20, 2017

Clerk of the Board  
California Air Resources Board  
1001 "I" Street  
Sacramento, CA 95814

Subject: Los Angeles Department of Water and Power's Comments on Proposed  
15-Day Amendment Text – Cap-and-Trade Regulation

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to provide comments to the California Air Resources Board (ARB) regarding its proposed 15-day amendments to the Cap-and-Trade Regulation.

Serving approximately 1.4 million customers in Los Angeles with a generating capacity of over 7,300 megawatts, LADWP is the largest municipal electric utility in the nation, and the third largest electric utility in California. LADWP is a vertically integrated utility, owning and operating a diverse portfolio of generation, transmission, and distribution assets spanning several states. LADWP intends to make unprecedented major capital investments over the next ten years to significantly reduce greenhouse gas (GHG) emissions on a LADWP system-wide basis. LADWP's plan to reduce GHG emissions and associated estimated costs of LADWP's programs include the following:

- Replacing all existing coal resources with non- or low-emitting replacement generation, \$49 million (net revenue requirement between operating a coal plant and operating gas-fired generators)
- Expanding reliance on renewable energy, \$6.1 billion
- Modernizing power plants in the South Coast Air Basin, \$1.4 billion
- Implementing major projects and measures for improving end-use energy efficiency, \$1.2 billion
- Investing in electric transportation infrastructure to assist in reducing mobile source emissions, \$250 million
- Developing increased capacity for energy storage, \$279 million

In submitting these comments, LADWP reaffirms its strong support of the AB 32 and SB 32 goals of expeditiously 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.

ARB's schedule for developing the 2030 Target Scoping Plan and updating the GHG Cap-and-Trade Regulation appear to be on a similar timeline such that ARB will likely consider adoption of both in spring 2017. However, much of the data used in the Scoping Plan process would also be used as the basis for developing the post-2020 allowance allocations for the updated Cap-and-Trade Regulation. Unfortunately, this data has just been released this morning. As a result, LADWP believes that ARB should allow a reasonable amount of time after the Scoping Plan is adopted (*e.g.*, at least 90 days) to further develop amendments to the Cap-and-Trade Regulation in light of the conclusions made in the Scoping Plan process

**I. 2021-2030 Electrical Distribution Utility Allowance Allocation**

LADWP appreciates ARB efforts to provide a fuller picture regarding the proposed allowance allocation methodology, including proposed year-by-year allowance allocations for each Electrical Distribution Utility (EDU). LADWP continues to support the consumer cost burden allocation methodology that has enabled the electric sector to meet the state emission reduction targets without imposing undue adverse impacts on ratepayers. LADWP is concerned that certain features of ARB's current proposal do not fully reflect the goals of its approach. LADWP recommends a limited set of changes to more fully harmonize the proposal with ARB's stated goals.

## **A. ARB's Proposed "Change Load" Approach**

In the October 14, 2016 informal staff proposal,<sup>1</sup> ARB staff proposed two options for calculating post-2020 EDU allowance allocations: 1) assume that EDUs' loads change as projected in the 2015 California Energy Commission (CEC) Demand Forecast and 2) assume loads would be fixed at 2020 levels. LADWP appreciates ARB staff's recognition, in this proposal,<sup>2</sup> that there would be EDU service territories that would have loads that increase post-2020 and supports ARB staff's proposed approach to calculate the cost burden based on anticipated load changes instead of keeping load fixed over the 2021-2030 period. calculation of each individual EDU's allowance allocation using each EDU's projected load level is a reasonable approach that would account for growth and increased load due to increased electrification of sources and other expected electricity demand growth in the EDU's service territory.

## **B. Retirement of Intermountain Power Plant**

LADWP supports ARB's incorporation of a 2027 retirement date for the Intermountain Power Plant (IPP), rather than the aspirational target date of 2025, into its cost-based allocation, given the considerable uncertainty regarding the actual retirement date of the IPP units. As LADWP stated in its previous comments, LADWP has set an ambitious goal to replace these two existing coal-fired generating units several years early. Its goal, however, is not a binding obligation to do so. LADWP's ability to meet this earlier date is contingent upon several factors, including the completion of a lengthy permitting process to build the new gas-fired replacement units, material procurement of the components and construction of those replacement units, and final concurrence of all 35 participants of the power sales contracts to terminate those contracts early. ARB's decision to use a 2027 retirement year correctly avoids LADWP from being penalized for the failure to achieve its aspirational goal for shutting down early these two coal units.

## **C. Proposed Calculation of Renewable Portfolio Standard Load**

LADWP supports ARB's proposed approach which assumes that an EDU would meet its Renewable Portfolio Standard (RPS) targets based on retail sales instead of Net Energy for Load. This approach would be consistent with the approach set forth in the Public Utilities Code Section 399.11.

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<sup>1</sup> *Cap-and-Trade Regulation, Post-2020 Allocation to Electrical Distribution Utilities, Informal Staff Proposal*, dated October 14, 2016.

<sup>2</sup> ARB Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation First Notice of Public Availability of 15-Day Amendment Text Enclosure C (Dec. 21, 2016) [hereinafter "Enclosure C"]

#### **D. Proposed Use of Mid-Demand Baseline Forecast Scenario**

LADWP supports ARB's application of the CEC's 2015 Demand Forecast's Mid-Demand No Additional Achievable Energy Efficiency (AAEE) forecast scenario. Since AAEE is defined as future energy efficiency programs that are not yet approved or funded, LADWP believes that it is appropriate to not include AAEE in the allowance allocation methodology.

#### **E. ARB's Proposed Methodology Combines the Cost Burden Methodology and Cap Adjustment Factor in a Way that Substantially Under-Allocates Allowances and Should Be Revised**

ARB is proposing to reduce allowance allocations by the application of a Cap Adjustment Factor. 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 IPP in Utah, substantial increases in renewable energy generation, and other measures it intends to undertake to reduce its GHG emissions system-wide as outlined previously. As a result of combining these utility-specific reduction efforts with the Cap Adjustment Factor, the proposed 2030 allocation to LADWP would be an over 70 percent reduction from LADWP's 2020 allowance allocation. Furthermore, this allocation level would have the effect of requiring an over 80 percent reduction from LADWP's 1990 CO<sub>2</sub> emission levels (assuming purchase of no additional allowances) – a reduction level that is twice as much as the SB 32 goal of achieving a 40 percent GHG emission reduction from 1990 levels by 2030.

The proposed allowance allocation would have the effect of imposing a disproportionately stringent GHG reduction obligation on LADWP (as compared to the statutory reduction target). This disparate obligation would be very costly to LADWP's ratepayers and would not address ARB's stated intent to protect ratepayers from the cost burdens of the Cap-and-Trade Regulation. Over 20 percent of LADWP's ratepayers are on its low-income and lifeline programs and would be substantially and adversely impacted by this additional cost. We urge ARB to consider the cost burden of implementing GHG reduction actions and mitigate it to the maximum extent possible through a full allocation of allowances. The importance of CARB correcting this flaw in the allocation methodology is underscored by the fact LADWP has been making unprecedented major capital investments that would result in significant GHG emissions reductions on a LADWP system-wide basis. These investments over the next 10 years include \$6.1 billion for expanding our use of renewable energy, \$1.4 billion for replacing our in-basin generation with new advanced high efficiency gas-fired generation, \$1.2 billion for implementing end-use energy efficiency measures, \$250 million for electric vehicle infrastructure and \$279 million in developing increased energy storage capacity.

In the same vein, it is imperative that each sector bear its fair share of the GHG reduction obligation. The draft 2030 Scoping Plan discussion draft indicates that about 35 percent of the State’s GHG emissions currently come from the transportation sector. One critical reduction strategy must be widespread vehicle electrification, in combination with cleaner, low-carbon electricity generating resources. Transportation electrification is one of the most cost-effective GHG reduction strategies as shown in the table below.

LADWP GHG Reduction Strategy	Cost-Effectiveness (\$/metric ton)
Increase transportation electrification from base (290,000 EV equivalents by 2030) to high (580,000)	\$7-\$38*
Coal replacement	\$20
Increase energy storage from 178 MW to 404 MW	\$334
Increase local solar from 1200 MW to 1800 MW	\$1,230

\*GHG emission increases for LADWP but decreases for transportation sector, 1 to 4 ratio, respectively. The cost-effectiveness will depend on the extent EDUs will receive credit for net GHG emission reductions

As described in greater detail below, to support transportation electrification, LADWP is considering heavily investing in electric vehicle charging infrastructure and promoting electric vehicle technology.

The imposition of a Cap Adjustment Factor on EDUs such as LADWP to reduce allowance allocations in addition to reductions achieved through energy efficiency and fuel-switching to lower carbon fuels would result in EDUs being required to purchase significant amounts of allowances for compliance. Such an approach would effectively impose costs on the EDUs for net GHG emissions achieved through electrification and remove the incentive for EDUs to invest in electric vehicle infrastructure. Increased compliance burden imposed on the EDUs that lead to significant rate increases to customers removes the incentive for them to invest in electric vehicles. Instead, ARB should develop allowance allocation rules, as well as other regulatory mechanisms, that encourage vehicle electrification by EDUs for achieving net GHG reductions.

ARB’s proposed allowance allocation methodology involves three steps:

1. Calculate the number of allowances that each electric utility would need to mitigate the cost impacts on ratepayers—effectively the utility's expected emissions based on projections of load growth, renewable energy requirements, implementation of energy efficiency measures, and planned unit retirements.

2. Further discounts this allowance level by the yearly cap adjustment factor; and then
3. Subtract the allowances that must be reallocated to industrial covered entities in order to offset the costs for the emissions associated with their electricity purchases.<sup>3</sup>

Applying both the first and second steps of this allocation methodology ARB does not achieve one of the most important goals that underlie each step individually. In particular, by applying the second step to the first, ARB *is by definition not* allocating sufficient allowances to cover the cost burden on ratepayers that will be imposed by compliance with the program.

Applying the cap adjustment factor to a level of emissions that reflects reduction commitments raises major methodological concerns. The cap adjustment factor generally reflects the rate of the decrease in the economy-wide emissions *from the level of GHG emissions in 2020*.<sup>4</sup> However, ARB has not proposed to apply it to an individual EDU's baseline 2020 emissions. Instead it first would discount the emissions associated with the utility's known commitments and then apply the cap adjustment factor to the discounted emission levels. This will result in an allocation that is less than what is needed to meet each electric utility's proportionate share of reductions based on the economy wide cap reduction and on a sector-wide basis, it will result in an allocation of allowances to the electric sector in an amount that is substantially less than the sector's proportionate share of reductions needed to meet the statewide GHG reduction target of 40 percent below the 1990 level by 2030.

Combining the first and second steps, in effect, penalizes EDUs that do more than their proportionate share to reduce emissions by giving those electric utilities only a discounted percentage of what they have committed to do. This approach has the counterproductive effect of discouraging such commitments in the future.

The following are possible approaches to addressing this issue with the current allocation methodology:

#### Alternative 1: Eliminate Cap Adjustment Factor

One possible alternative is for ARB to eliminate the use of the cap adjustment factor in the allowance allocation methodology. Under this approach, each utility would be allocated the number of allowances needed to meet its expected emissions after known commitments, which are very substantial due to the many complementary GHG reduction obligations (such as renewable energy and energy efficiency mandates) imposed on the electric power sector.

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<sup>3</sup> Enclosure C. LADWP remains concerned regarding the reduction in EDU allocation based on allocation to industrial covered entities for emissions associated with their electricity purchases (step (3)).

<sup>4</sup> The cap adjustment factor ARB proposes to apply to expected EDU emissions is the ratio of the 2020 Cap Adjustment Factor and the Cap Adjustment Factor for a given year post-2020. This ratio reflects, on an economy-wide basis, the percent decrease in emissions *from 2020*.

This approach has a number of advantages. It is the approach that is most fully in line with the policy basis by which ARB is making allocations to EDUs in the first place. That is, by providing allowances for each ton of GHG emissions for which an EDU will have to surrender allowances (directly, or indirectly as reflected in the cost of purchased power), it is the approach that most directly and fully reflects the cost burden that the Regulation will impose on ratepayers.<sup>5</sup> Forgoing the use of the cap adjustment factor is consistent with how ARB has approached allocations since the start of the program.<sup>6</sup> And importantly, because of the fundamental structure of a cap-and-trade approach to GHG reduction, this approach is consistent with the overall emission reduction goals of SB 32 and reflected in the forthcoming 2030 Scoping Plan.

### Alternative 2: Hybrid Approach

If ARB believes that its allocation methodology must reflect both reduction obligations, it could do so not by applying the cap adjustment factor to the level of emissions expected based on known commitments, but instead, for each year, independently calculating each approach, and selecting, for that year, the approach yielding the more stringent or lower allowance allocation. This would ensure that in any year, an EDU's allocation will reflect reductions at least in line with the EDU's fair share of reductions expected by the cap decline factor. And it would also ensure that if the EDU is expected to voluntarily reduce beyond its proportionate share of reductions, it will only receive allowances sufficient to cover the consumer cost burden of those emissions. However, unlike ARB's proposed approach, it will not allocate allowances less than *both* the EDU's fair share and the level needed to cover consumer costs.

Specifically, this approach could use the following formula:

*Allocation* <sub>year x</sub> = The Lesser of A or B, where—

*A* = (EDU Specific Emissions<sub>2020</sub> · Cap Adjustment Factor<sub>year x</sub>)

*B* = EDU Specific Emissions<sub>year x</sub>

### **F. ARB Proposed Treatment of RPS Percentage Targets in Determining Allowance Allocation**

ARB proposes to apply the RPS percentage targets in SB 350 and assumes that RPS power will grow from 33 percent of retail sales to 50 percent in 2030 on a linear path.<sup>7</sup> In other words, ARB assumes that all renewable energy under the RPS would be treated as zero emission. This assumption is inappropriate given that it is inconsistent

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<sup>5</sup> Enclosure C, p. 2 ("ARB staff proposes to continue allocation to EDUs for the benefit of ratepayers, consistent with the goals of AB 32, beyond 2020).

<sup>6</sup> ARB, *Appendix A: Staff Proposal for Allocating Allowances to the Electric Sector*, p. 5 (July 27, 2011), <https://www.arb.ca.gov/regact/2010/capandtrade10/candtappa2.pdf> ("each utility can expect to be able to fully compensate their customers for the costs associated with the cap and trade program that are expected to be passed through to customers")

<sup>7</sup> 2021-2030 Allowance Allocation to Electrical Distribution Utilities dated December 21, 2016, p.4

with the manner in which ARB treats some types of renewable energy under the Cap-and-Trade and Mandatory Reporting Regulations. In particular, the RPS program allows up to 10 percent of the RPS target to be met using unbundled RECs (unbundled RECs from a renewable source have the renewable attributes but the energy from the renewable source which is sold separately does not); however, ARB's regulations do not recognize unbundled RECs as zero emission energy. In addition, there are limitations regarding the extent an EDU can claim a zero GHG emission obligation under the RPS Adjustment provision for renewable energy procured under a contract but not directly delivered to California. These two regulatory limitations directly impact LADWP and the proposed application of the RPS percentage targets without adjustment would result in significant additional costs to LADWP to procure additional allowances for zero emission energy.

For these reasons, LADWP requests that ARB take this feature of the RPS program into account by reducing the assumed amount of electricity supplied renewable energy in each EDU portfolio for each year by 10 percent and increasing the level of electricity supplied by gas-fired generation by 10 percent.

#### **G. Shifting EDU Allowance Allocations to the Industrial Sector**

ARB has proposed to discontinue the allocation to EDUs of 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, with the amount of the allowance allocation representing their electricity consumption and 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, as applied to publicly-owned utilities (POUs), is unlikely to accomplish ARB's goal of leakage prevention for the reasons described in LADWP's prior comment letter of September 19, 2016<sup>8</sup>. LADWP again 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 POUs, such as LADWP.

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<sup>8</sup> <https://www.arb.ca.gov/lists/com-attach/42-capandtrade16-UmsFLI1tUDoLIAQ1.pdf>



## **H. Allowance Allocations for Electrification**

LADWP appreciates that ARB is open to a supplemental additional allowance allocation methodology in order to mitigate the consumer cost burden that may result from vehicle electrification.<sup>9</sup> LADWP looks forward to working with ARB and CEC staffs to address methodologies to quantify the net emissions decrease that would result from electrification. Given that the transportation sector accounts for a significant portion of California's GHG emissions, electrification of the transportation sector could potentially have a significant impact in reducing overall GHG emissions and criteria pollutants. To support transportation electrification, LADWP is considering heavily investing in electric vehicle charging infrastructure and promoting electric vehicle technology. Providing an allowance allocation to cover the increased electricity demand resulting from electrification is critical for encouraging and maximizing LADWP's investment 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. Given the importance of electrification in achieving both the climate change and air quality goals for California, it is important that ARB develop a regulatory framework that sends the correct market signals for encouraging the electrification of transportation and other sectors of the California economy. The following are suggested principles for ARB consideration in the development of such regulatory framework.

- 1. ARB should incentivize electrification in the transportation sector through its policies and programs, including, without limitation, the California Cap-and-Trade Program.**

California's Low Carbon Fuels Standard (LCFS) is a complementary policy to the Cap-and-Trade Program that helps to reduce GHG emissions from the transportation sector. However, the LCFS is not sufficient to achieve the very substantial reductions in GHG emissions that are necessary to achieve California's long-term GHG reduction goals (*i.e.*, 80 percent economy-wide GHG emission reduction by 2050). Other State policies are necessary for promoting the expeditious development and implementation of vehicle electrification and that some of these incentive policies should be incorporated into the Cap-and-Trade Program. Senate Bill 350 recognized this need when it directed ARB identify and adopt policies, rules, or regulations to remove regulatory disincentives to EDU investment in transportation electrification. SB 350 states, "Policies to be considered shall include, but are not limited to, an allocation of greenhouse gas emissions allowances to retail sellers, and local publicly-owned electric utilities, or other regulatory mechanisms, to account for increased

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<sup>9</sup> Enclosure C, p. 4

greenhouse gas emissions in the electric sector from transportation electrification.”

- 2. The compliance burden under the California Cap-and-Trade Program should not increase for EDUs as a result of the implementation of electrification measures that achieve net GHG emission reductions.**

Vehicle electrification results in substantial net GHG reductions by shifting from the use of transportation fuels to cleaner, lower-carbon electricity. EDUs should not be required to obtain additional allowances to cover the increased GHG emissions incidentally resulting from the increased electricity demand due to vehicle electrification. Such an approach would effectively penalize EDUs for net GHG emissions achieved through electrification. Instead, ARB should develop allowance allocation rules, as well as other regulatory mechanism, that encourage vehicle electrification by rewarding EDUs for achieving net GHG reductions.

Similar mechanisms should also be developed for encouraging the electrification of other sectors of the economy.

- 3. Future projected electrification should be fully reflected in the baseline demand forecasts that ARB intends to use for allocating post-2020 allowances under the Cap-and-Trade Program.**

ARB should proactively take measures to ensure EDUs receive full credit, and are not penalized, for increased load that can already be forecasted to result from vehicle electrification. This is best achieved by developing a methodology for fully projecting electricity demand increases for EDUs, based on current and future policies, measures, and incentives that will likely be developed to promote electric vehicle deployment through federal, state and local government initiatives. In addition, the methodology should give utility-specific emission reduction credit for additional policies, measures, and incentives that any particular EDU has committed or is planning to undertake to support and encourage deployment of electric vehicles.

- 4. ARB's allowance allocation rules should provide upfront certainty on the allocation of additional allowances if an EDU exceeds its projected electricity demand (as reflected in its baseline) due to unexpected increases in the levels of electrification.**

ARB's allowance allocation rules should provide assurances that additional allowances will be available for distribution, as well as the specific number of allowances that will be allocated if EDU exceeds its projected electricity demand due to electrification. The development of such a mechanism is necessary to accommodate growth in electric vehicles beyond the level contemplated in the demand forecast that ARB will rely in setting the post-2020 allowance allocations. One approach for reallocating allowances to EDUs could involve the establishment of a reserve of additional allowances that ARB would use to cover the increased electric sector emissions resulting from future increases in vehicle electrification that would be necessary to meet overall GHG reductions goals of the Cap-and-Trade program. The allowances would be allocated to the extent that actual production levels exceed forecasted demand levels as a result of increased electrification.

**5. Clear methodology and criteria must be established for determining when electrification exceeds forecasted measures used for setting an EDU's baseline electricity demand and allocating post-2020 allowances.**

The Cap-and-Trade Regulation must include a methodology for determining when an electric utility exceeds projected electricity demand levels due to increased vehicle electrification beyond baseline projections. One reliable criterion could be the number of electric vehicle registrations in the State. When the number of electric vehicle registrations exceeds the level forecasted by ARB, this would trigger the allocation of additional allowances based on the increased electrification attributed to that utility. In addition, it would be appropriate for ARB to establish utility-specific application of criteria, given that there could be different levels of electrification and different GHG emission profiles for different regions of the State.

**6. An emission accounting system must be developed to ensure sufficient allowances are allocated for vehicle electrification. This accounting system needs to provide estimates of the increased emissions to the utility sector with a reasonable degree of accuracy, timeliness, and reliability that is appropriate for achieving the goals of the Cap-and-Trade Program.**

There must be an accurate accounting for the actual emissions attributable to vehicle electrification above pre-determined baseline projects. This methodology should incorporate data on increased generation and the net reduction of emissions due to electrification. The vast majority of electric vehicles (both battery and plug-in hybrids) have built-in charging data capture systems in place, which should help to provide a sound basis for such accurate accounting.

## II. Publicly-Owned Utility Use of Allowances for Compliance

Enclosure C: 2021-2030 Allocation to Electrical Distribution Utilities states that ARB staff is “considering requiring POUs and co-ops to consign allocated allowances to auction and requiring that the auction proceeds be used for specific purposes. Requiring consignment would align the use of allowance value amongst investor-owned EDUs, electrical cooperatives, and natural gas suppliers.” LADWP strongly opposes any proposal that would require POUs to consign its allocated allowances to auction.

ARB consideration of this alternative runs counter to ARB’s long-standing policy on the use of allowances by POUs, which ARB recently affirmed in its August 2016 proposal to continue to permit POUs to directly use allocated allowances for the post-2020 compliance period. Unlike IOUs, POUs operate for the exclusive benefit of their retail ratepayers and own and operate their generation assets on behalf of their retail ratepayers. POU-owned generation also is generally used only to serve POU ratepayers as part of a vertically integrated electric utility system. Unlike IOUs, POUs do not have subsidiaries that can profit from selling power on the market from their merchant generators. Thus, not-for-profit POUs have no incentive to use allowance allocations to artificially lower the price of the power from their own resources in order to increase market share. Rather, they have a legal obligation to serve their communities and customers by providing reliable and clean electricity at the most affordable cost. Therefore, the concerns that led to ARB’s 2010 decision to require IOUs to consign allowances to auction continue not to apply to POUs.<sup>10</sup>

LADWP agrees with ARB’s rationale for allowing POUs to surrender directed allocated allowances without consigning their allowances to auction.<sup>11</sup> Excerpts from ARB’s 2011 Final Statement of Reasons in support of this approach are outlined below:

- IOUs and POUs operate differently with respect to electricity generation.

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<sup>10</sup> ARB, Staff Report: Initial Statement of Reasons at IX-62 (Oct. 28, 2010), <https://www.arb.ca.gov/regact/2010/capandtrade10/capisor.pdf> [hereafter “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).”); *Id.* at II-32 (“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.”); ARB, Final Statement of Reasons at 342 (Oct. 2011), <https://www.arb.ca.gov/regact/2010/capandtrade10/fsor.pdf> [hereafter “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.”).

<sup>11</sup> ARB Final Statement of Reasons, California Cap-and-Trade Program, October 2011

- POU generally own and operate generation facilities that they use to provide electricity directly to their end-use customers. ARB also acknowledged that if POU consigned their allowances, they would be required to sell and repurchase their own allowances.
- IOUs compete in an open market for electricity with their own generation and third party generators. In order to ensure that independent generators have equal access to allowances, IOUs are required to auction their allowances.
- By requiring IOUs to consign allowances at auction, the electricity generators will be sure to have a strong incentive to pass their GHG costs back to the IOUs who will then be able to use their share of auction revenues to reduce ratepayer burden consistent with the goals of AB 32.
- Directly allocating allowances to POU does not distort their economic incentive to make cost-effective emissions reductions.
- Whether auctioned or not, the price of carbon affects decisions to emit. Even though POU are not required to consign allowances, they are required to use that value for ratepayer benefit and no other purposes. This is equitable with the requirements on the IOUs.

The requirement for POU such as LADWP to consign their allowances to auction would result in the following adverse impacts:

- Increased staff time related to participation in the auctions
- Risk that LADWP will not be successful in purchasing all of its allowances back if the auction is oversubscribed. LADWP would have to bid more in subsequent auctions, purchase allowances through the secondary market and pay commission fees, or participate in ARB's reserve auction (at prices at least \$60 above the auction reserve price) if auction allowances are exhausted.
- Increased transactional costs resulting from payment of commission fees and/or bid guarantees that would limit LADWP's ability to mitigate the cost burden on ratepayers for no corresponding environmental benefit.
- Risk that LADWP would be at a significant deficit if the auction is unsubscribed. LADWP would purchase its needed allowances which would be a significant outflow of money but would receive significantly less auction proceeds.
- Increased cost associated with getting bid guarantees for the purchase of allowances.

Enclosure C also states that ARB staff is considering that POU use the auction proceeds "for specific purposes." In discussions with POU, ARB staff has also expressed concern with certain uses of allowance value. LADWP has committed to investing in programs to meet the City of Los Angeles' strong environmental goals which are beyond regulatory requirements. For example, LADWP committed to a 33 percent RPS goal by 2020 before that State goal was established, committed to a 15 percent energy efficiency goal by 2020 (beyond the 10 percent State mandate), and is

providing residential and commercial electric vehicle incentives in the amount of \$21.5 million (2016 to 2018 time period). LADWP believes that its local policymakers are in the best position to know how to use the value of its allowances in order to achieve GHG emission reductions.

### **III. RPS Adjustment**

LADWP, as part of the California Joint Utilities Group (JUG), supports JUG's comments and proposals to provide a workable solution to address the potential double counting issue and protect California electricity consumers from unexpected cap-and-trade compliance costs for their substantial investments in renewable electricity generated outside of California (JUG comment letter enclosed).

### **IV. ARB's Proposed California Independent System Operator Energy Imbalance Market GHG Accounting and Reporting Methodology**

ARB is proposing an interim "bridge" solution to account for the GHG emissions associated with California Independent System Operator Energy Imbalance Market (CAISO EIM) electricity imported into California. ARB states that it is concerned that zero or low-emission generation that had been supplying load outside California is being dispatched by the EIM algorithm into California and other higher-emitting fossil generation is used to backfill the zero- or low-emission generation. This scenario would result in the discharge of more GHG emissions in the atmosphere.

ARB and CAISO have been coordinating public stakeholder meetings and working toward the development of GHG accounting methodologies that would address the "backfill" dispatch issue. These efforts have included ARB possibly adopting an interim solution since CAISO would not have a long-term solution completed by 2017 or 2018. However, LADWP is concerned that the ARB's proposed interim solution conflicts with and undermines CAISO's ongoing stakeholder process to establish a long-term solution. CAISO is expected to release its draft final straw proposal later this month to address its long-term solution and discuss the merits of an interim bridge solution as a result of stakeholder comments submitted last December. LADWP urges ARB to coordinate with CAISO in the rulemaking process and the determination of a solution to reduce uncertainties with respect to the impacts of EIM participation.

ARB's proposal seeks to quantify the "outstanding EIM GHG emissions" that ARB believes are unaccounted for by taking the difference between the total gross electricity imported into California through the EIM using the unspecified source emission factor

(marginal grid mix for the western electric grid) and emissions associated with specified source imports reported by CAISO under the current methodology. That is, under this proposal, ARB assumes (not, as it asserts, demonstrates) that the true emissions associated with all electricity imported through the EIM are either generated by a marginal unit or are redispatched and backfilled by a marginal unit, and so, on average carry the unspecified emission rate. One implication of this approach is that by attributing all EIM imports with emissions at the unspecified rate, ARB, by assumption, treats the EIM as having no impact on grid-wide emissions. This assumption does not comport with the nature and purpose of the EIM. As CAISO analysis has demonstrated, the EIM helps reduce *grid-wide* carbon emissions by facilitating the efficient dispatch of *renewable resources* in support of clean energy policies while enhancing grid resiliency.

The assumption that, on average, electricity imported through the EIM carries emissions at the unspecified rate also is not consistent with ARB's policy that GHG emissions reports are accurate. To the extent ARB continues with its current proposed approach, it should calculate the marginal emission rate based on the grid-mix of EIM participating entities and not the entire western regional grid. These are the only resources that would be available for imports into California as secondary dispatch due to the EIM algorithm, and it is unlikely that the emission rate of generation controlled by these EIM entities exactly mirrors the emission rate of the entire western electric grid. To reflect improvements in this rate caused by the EIM, it should be regularly updated.

ARB is justifying its proposal based on limited data (one year of data from one EIM entity). LADWP believes that the proposed bridge solution is premature and likely overestimates GHG emissions; ARB should continue to work with CAISO to develop accounting solutions based on CAISO's principles.<sup>12</sup>

As part of this coordination, LADWP urges ARB to reevaluate its position that it does not have authority to implement a solution that takes into account both emissions associated with secondary dispatch and emission *reductions* associated with reduced renewable curtailments facilitated by the EIM.

ARB proposes to account for the "outstanding EIM GHG emissions" by retiring unsold allowances in the auction account. If this approach is an interim solution, offhand, it appears that the auction account would not be depleted; however, retirement of allowances may raise the price of allowances as the supply diminishes and will reduce the number of allowances that would have gone to the Allowance Price Containment Reserve. ARB has not provided information on how this proposal would impact

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<sup>12</sup> California Independent System Operator Regional Integration California Greenhouse Gas Compliance and EIM Greenhouse Gas Enhancement Straw Proposal, November 17, 2016

allowance supply and prices and the proposal leaves substantial uncertainty regarding what would occur if there is insufficient unsold allowances to cover the calculated outstanding EIM GHG emissions. Answers to these important issues are essential to the development of an accurate and effective methodology to account for GHG emissions for electricity imported through the EIM.

## **V. Other Technical Comments**

### **A. Section 95803(b). Submission Deadlines**

ARB has proposed a new Section 95803(b) that would add a default submission deadline for all information requested by the Executive Officer of 10 calendar days<sup>13</sup> with the exception of specific provisions that state a specific date or period of time (e.g. September 1 of each year, 30 calendar days). Because the deadline is set in calendar days, it is possible that entities would have a maximum of 7 business days to gather and submit information, and as few as 5 days during holidays. This level of time is likely too short to comply with information requests of any complexity. LADWP recommends that ARB establish submission deadlines that are tied to the nature of the requested information. ARB could set a specific reasonable deadline for an information request at the time the request is made rather than a blanket one-size-fits-all requirement. Alternatively, ARB could establish a more reasonable default submission deadline such as 30 calendar days or the approximate equivalent in business days.

### **B. Section 95830(e)(1) and (4). Updating Registration Information**

ARB proposes to add a new Section 95830(e)(1) to clarify the timing for updating registration information for registered entities. When there is a change in information registrants have submitted to ARB (e.g. change in directors and officers at an entity), registrants must update the registration information within 30 calendar days of the change. ARB in the ISOR states that it considers the "frequency of updates to be reasonable and necessary to ensure adequate market monitoring activities."<sup>14</sup>

Although LADWP has been complying with the 30 calendar day reporting requirement, LADWP proposes that ARB allow electronic submittal of the registration information changes and allow updating of registration information on a quarterly basis, instead of within 30 days, to reduce paperwork and streamline the process. There are occasions when the registration information with respect to changes to LADWP's directors and officers needs to be updated on an almost monthly basis. The current process requires

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<sup>13</sup> 2016 ISOR Appendix A, p. 67 (proposed § 95803(b)).

<sup>14</sup> 2016 ISOR, p. 11



the registrant to type the information into the form, have an authorized person sign the form, and then mail the original signed form to ARB. Similar to ARB's proposals in this rulemaking to accept electronic signatures, LADWP recommends electronic submittal to streamline the process. Quarterly updates to registration could be timed such that updated information would be available to ARB prior to the quarterly auctions to address market monitoring concerns.

Proposed Section 95830(e)(4) states that "an entity that fails to update registration information by the applicable deadline is subject to the restriction or revocation of its tracking system accounts pursuant to section 95921(g)(3),"<sup>15</sup> which, as amended, clarifies that when a registered entity has its holding account revoked or suspended it "may not hold compliance instruments or register with the accounts administrator for another set of accounts in any capacity."<sup>16</sup> All existing compliance instruments would have to be sold or retired.<sup>17</sup> This leaves open the possibility that an entity's ability to comply with the program could be placed in jeopardy for a failure to update registration information, including for unintentional or minor violations of the updating requirements. For example, if LADWP updated the name of one of its officers in CITSS 31 days after the new officer had been appointed,<sup>18</sup> its tracking system accounts could be restricted, in which case all compliance instruments would have to be retired and we would not be permitted to establish new accounts. This would completely prevent us from complying with the Cap-and-Trade Regulation, or from operating in service of our customers as we are legally required to do.

LADWP requests that ARB revise this provision to provide more reasonable penalties and clearer standards that govern the exercise of discretion regarding what penalties apply to what violations.

## VI. Closing

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

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<sup>15</sup> 2016 ISOR Appendix A, p. 84.

<sup>16</sup> 2016 ISOR Appendix A, p. 226.

<sup>17</sup> 2016 ISOR, p. 226 ("If registration is revoked or suspended the entity must sell or voluntarily retire all compliance instruments in its holding account within 30 days of revocation").

<sup>18</sup> 2016 ISOR pgs. 64-65.

Sincerely,



Mark J. Sedlacek  
Director of Environmental Affairs

JG:dms  
Enclosure

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



Public Power Agency



January 20, 2017

California Air Resources Board  
1001 I Street  
Sacramento, CA 95812

**Re: Utility Recommendations to Improve Implementation of the Renewable Portfolio Standard Adjustment Under the Cap-and-Trade Program**

Dear California Air Resources Board:

Thank you for the opportunity to comment on the proposed amendments to the cap-and-trade regulation. The following nine utilities are jointly submitting these comments on the Renewable Portfolio Standard (RPS) adjustment: Los Angeles Department of Water and Power, Modesto Irrigation District, M-S-R Public Power Agency,<sup>1</sup> Pacific Gas and Electric Company, Sacramento Municipal Utility District, San Diego Gas & Electric Company, Southern California Edison Company, Southern California Public Power Authority, and Turlock Irrigation District.

We recommend that the California Air Resources Board (ARB) take the following three complementary actions to improve implementation of the RPS adjustment. These three complementary actions avoid double counting, improve workability, and protect California electricity consumers from unexpected cap-and-trade compliance costs for their substantial investments in renewable electricity generated outside of California.

<sup>1</sup> The M-S-R Public Power Agency is a public agency formed by the Modesto Irrigation District, the City of Santa Clara, and the City of Redding, authorized to acquire, construct, maintain, and operate facilities for the generation and transmission of electric power and to enter into contractual agreements for the benefit of any of its members.

**Action 1:     Revise Section 95852(b)(4)(D) of the Cap-and-Trade Regulation to Replace “Directly Delivered” with “Claimed as a Specified Import”**

Currently the cap-and-trade regulation prohibits the RPS adjustment from being claimed when electricity from an eligible renewable energy resource is directly delivered to California. This is too broad and should be narrowed. This will address ARB Staff’s concerns about double counting the zero emission attribute of electricity produced by a renewable generating facility between specified imported electricity and the RPS adjustment.

We propose that ARB revise Section 95852(b)(4)(D) of the cap-and-trade regulation as follows:

- (D)     No RPS adjustment may be claimed for the portion of electricity from an eligible renewable energy resource ~~when its electricity is that is claimed as a specified import directly delivered.~~

We propose this revision for the following reasons:

- The potential for double counting of the zero emission attribute exists only when directly delivered electricity meets all the requirements to be claimed as specified. The zero emission factor cannot be claimed for directly delivered electricity that was purchased as unspecified. Therefore, Section 95852(b)(4)(D) should be narrowed to only electricity that is claimed as specified rather than all electricity that is directly delivered.
- The revision aligns with the contract-based framework used in ARB’s Regulation for the Mandatory Reporting of Greenhouse Gas Emissions to differentiate specified from unspecified electricity. To claim imported electricity from a renewable generating facility as specified with a zero emission factor, the electricity must be directly delivered from the generating facility into California either by a Generation Providing Entity (GPE) or a purchaser whose contract specifies the renewable generating facility as the source. Directly delivered electricity from the same facility that was purchased as unspecified electricity on an exchange cannot be claimed as specified with a zero emission factor because it does not satisfy the specified source contract requirement.
- The revision improves the workability of the RPS adjustment provision by narrowing the scope of the search criteria. To avoid double counting the zero emission attribute, reporting entities should only have to look for electricity that can be claimed as a specified import rather than every e-tag that originates from the renewable generating facility.

**Action 2: Allocate Supplemental Allowances to Compensate for RPS Adjustment Credits that a Utility Has Been Unable to Claim**

If an Electrical Distribution Utility (EDU) that owns Portfolio Content Category 2 (PCC2) or Portfolio Content Category 0 (PCC0) (i.e., grandfathered) renewable energy credits (RECs) associated with a contract for firm and shaped RPS eligible electricity was unable to claim the RPS adjustment credit, then ARB should provide the EDU with a supplemental allocation of allowances. This will protect California electricity customers from unexpected cap-and-trade compliance costs for the RPS eligible electricity. This should occur regardless of whether another entity claimed electricity from the renewable generating facility as a specified import or the EDU was unable to satisfy the burden of proof under the RPS adjustment guidance.

We propose a supplemental allocation for the following reasons:

- The original allocation of allowances to EDUs for protection of California electricity customers assumed that all RPS eligible electricity would be treated as zero emission for cap-and-trade compliance purposes. The RPS adjustment implements that policy decision by providing a credit to reduce the cap-and-trade compliance obligation for firm and shaped RPS eligible electricity that is not directly delivered. If an EDU was unable to claim the RPS adjustment credit to reduce its cap-and-trade compliance obligation, then the EDU will incur cap-and-trade compliance costs that were not anticipated when ARB determined the original allocation of allowances to the EDU.
- The supplemental allocation for the unclaimed RPS adjustment is similar in concept to the true-up allocation that provides industrial entities additional allowances to account for changes in production or allocation not properly accounted for in prior allocations. The supplemental allocation for the unclaimed RPS adjustment should be a one-for-one allocation without any discounts to ensure that the supplemental allocation is equivalent to what the EDU would have received had it been allowed to claim the RPS adjustment.
- The supplemental allocation for the unclaimed RPS adjustment would work as follows: An Electric Power Entity (EPE) would use a new “unclaimed RPS adjustment” tab added to the EPE reporting spreadsheet (Workbook 1) to report PCC2 or PCC0 RECs for firm and shaped RPS-eligible electricity that could not be claimed for the RPS adjustment. The verifier would check this data and review the documentation as part of verifying the annual EPE report. The number of allowances needed for the supplemental allocation would be calculated as the quantity of RECs on the “unclaimed RPS adjustment” tab multiplied by the emissions factor for unspecified electricity, which is the same way that the RPS adjustment would have been calculated. The allowances for the supplemental allocation would come from the pot of state-owned allowances. The supplemental

allocation would be provided to the EDU along with its normal allocation of allowances in October.

- ARB should continue to provide EDUs with the flexibility to “bank” and claim the RPS adjustment at a later date, after the RECs have been retired for RPS compliance. We would like to meet with ARB Staff about the mechanics and timing for integrating a supplemental allocation into the process.

**Action 3: Retain the Requirement in Section 95852(b)(3)(D) of the Cap-and-Trade Regulation to Report and Verify REC Serial Numbers for Quality Control**

We believe that ARB should retain the requirement to report and verify REC serial numbers under Section 95852(b)(3)(D) of the cap-and-trade regulation for the following reasons:

- The REC serial number data is necessary for quality control by ARB to verify claims of specified source imports and the RPS adjustment and to ensure no double counting.
- The REC serial number information is essential for proper accounting of zero emission renewable electricity. There is one and only one REC issued for each megawatt hour (MWh) of electricity produced by a renewable generating facility, so review of the REC data is essential to ensure that each MWh is counted only once. If the requirement to report and verify REC data for specified imports is deleted, ARB will not have the information necessary to perform a quality control check on specified imports of electricity from renewable generating facilities.

Thank you for your consideration of these comments, and for the ongoing opportunities to provide input on strengthening the cap-and-trade program.

Sincerely,

1. Los Angeles Department of Water and Power
2. Modesto Irrigation District
3. M-S-R Public Power Agency
4. Pacific Gas and Electric Company
5. Sacramento Municipal Utility District
6. San Diego Gas & Electric Company
7. Southern California Edison Company
8. Southern California Public Power Authority
9. Turlock Irrigation District