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Water and Power

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September 19, 2016

Mary Nichols, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Modesto Irrigation District's Comments on the Cap-and-Trade Rulemaking 45-Day Package

Dear Chairwoman Nichols:

The Modesto Irrigation District (MID) appreciates the opportunity to submit its comments to the California Air Resources Board (ARB) regarding the Proposed Changes to the California Cap-and-Trade Regulation (Proposed Regulation Order). MID is committed to enacting the carbon reduction targets mandated by Senate Bill (SB) 350, Assembly Bill (AB) 32, and the newly passed SB 32, and sees the Cap-and-Trade program as integral to carrying out these goals in a manner that is efficient and cost-effective to California's ratepayers. MID is also a member of the Joint Utilities Group (JUG) and M-S-R Public Power Agency (M-S-R) and is signatory to the comments submitted by those agencies.

Many of the amendments in the Proposed Regulation Order strengthen the Cap-and-Trade program; however MID has identified several changes that we believe are detrimental to the broad Cap-and-Trade program and to MID's ratepayers.

We offer comment on the following topics:

- **MID supports a cost-effective, market-based system to drive carbon reductions.**
- **Cost containment post-2020 must be well-designed and effective to avoid market disruption and cost shock to ratepayers.**
- **MID supports robust, mutual linkage.**
- **MID supports the "cost burden" allocation method, but stresses the importance of recognizing the impact of increased vehicle electrification in the allocation calculation.**
- **Direct allocation to covered industrial entities for electricity use is unnecessary, places undue burden on Publicly Owned Utilities (POUs) and would create cost inequity among POU customers.**
- **Removal of the Renewable Portfolio Standard (RPS) adjustment penalizes early action, creates disparity with the RPS program and drastically increases compliance costs to MID's ratepayers. MID strongly opposes the amendments discontinuing the RPS adjustment.**
- **MID supports using the Cap-and-Trade program as California's means of demonstrating compliance with the federal Clean Power Plan (CPP).**

- **MID opposes including changes related to Energy Imbalance Market (EIM) secondary dispatch emissions in the Proposed Regulation Order.**

MID supports a cost-effective, market-based system to drive carbon reductions. SB 32's greenhouse gas (GHG) emissions target of 40% below the 1990 emissions level by 2030 is ambitious, but also onerous; meeting this target will require significant investment in emissions reduction technologies and processes by all sectors. It is important that the markets are allowed to dictate the most cost-effective means of reducing emissions to avoid inefficient investments and high costs to Californians. A well-designed Cap-and-Trade program, with provisions in place to prevent snowballing costs, is the preferred method of shepherding California towards its environmental goals over the coming decades.

Cost containment post-2020 must be well-designed and effective to avoid market disruption and cost shock to ratepayers. The Allowance Price Containment Reserve (APCR) is a valuable component of the Cap-and-Trade program. APCR helps ensure that, as economy-wide emissions approach the cap, that allowance prices remain reasonable while entities make investments or change their processes to further reduce their emissions. In the Proposed Regulation Order, ARB proposes several changes to the APCR for the post-2020 program. One such change would be to collapse the existing three-tier price structure of the APCR to a single price that would be equal to $60 (adjusted annually for inflation) above the Auction Reserve price. MID supports the simplification of the APCR. However, it appears that the $60 price difference is based on the existing highest price tier. MID recommends that the post-2020 APCR price instead be based on the lower or middle price tier. Using the difference from the higher price tier would make allowances available for use at a higher price than they would otherwise be, and would unnecessarily increase the cost impact to Californians should Cap-and-Trade covered entities need to access the APCR.

With cost to Californians in mind, MID suggests that ARB reevaluate the escalation rate of the Auction Reserve ("floor") price. The current rate of five percent plus inflation per year is too high, and guarantees high compliance costs as the program matures. Now that the carbon market has been established, it makes sense to allow the market to dictate the price of allowances rather than market participants chasing to keep up with the ever increasing floor price. As proposed, the floor price in 2030 would be roughly three times its current price of $12.73 per allowance.

The Proposed Regulation Order also seeks to place allowances that have been unsold for eight consecutive auctions into the APCR. While we recognize the scrutiny that recent undersubscribed auctions have drawn to the program, MID cautions against prematurely removing allowances from circulation at lower prices and constricting the carbon market with low supply in the future. MID recommends extending the period of time stated in the Proposed Regulation Order before an unsold allowance is transferred to the APCR from eight consecutive auctions to twelve. This would ensure that short term market events are allowed to stabilize

before action is taken to reduce the amount of allowances available to the market through the auction process.

MID supports full, mutual linkages. Linkages that expand the market and increase opportunities for cost reduction, market liquidity and efficient emissions reductions should be pursued. The existing two-way linkage with Quebec and the proposed linkage with Ontario fall under this category and strengthen the Cap-and-Trade program. The Proposed Regulation Order includes amendments to allow two types of one-way linkages with the California Cap-and-Trade program to be available for external GHG programs to take advantage of.

The first type, Retirement Only Limited Linkage, would allow California covered entities to purchase allowances from an external program and retire those allowances towards their Cap-and-Trade compliance obligation. Per the Proposed Regulation Order, this type of one-way linkage is only available if the Governor's SB 1018 findings requirements are satisfied and ARB has carried out a public process.

The second type of linkage, the Retirement Only Agreement, allows entities that are regulated by external GHG programs to retire California's allowances towards their compliance obligation in their external program. This type of arrangement provides no benefit to the broad Cap-and-Trade market, removes allowances from circulation and is untenable. Furthermore, the criteria for allowing this type of one-way linkage are much less intensive than for a Retirement Only Limited Linkage. Per §95945(a) in the Proposed Regulation Order, the only requirement to establish a Retirement Only Agreement linkage is that, "the Board may approve a Retirement-Only Agreement with an external GHG program." This language does not even require a public process. Any program that links with the Cap-and-Trade program should be at least as stringent in its emissions goals and should offer its compliance instruments in exchange for access to California's allowances. Furthermore, the Proposed Regulation Order mentions a "Retirement-Only Agreement" that would define the nature of the linkage. However, the form and function of the agreement are not fully described. One-way linkages that allow entities in external GHG programs access to California Cap-and-Trade allowances should be prevented.

MID supports the "cost burden" allocation method, but stresses the importance of recognizing the impact of increased vehicle electrification in the allocation calculation. MID supports the cost burden method proffered by ARB for calculating EDU allocation. This method utilizes 2020 load forecasts submitted by Electric Distribution Utilities (EDUs) to the California Energy Commission (CEC) for the Integrated Energy Policy Report (IEPR) process, and then subtracts electricity from 2020 zero-emission energy sources as reported by EDUs pursuant to the S-2 process to determine the amount of energy in 2020 with a compliance obligation. That energy is then multiplied by a natural gas emission factor. The resulting emissions would be known as the cost burden. An individual EDU's allocation would be equivalent to its calculated cost burden as reduced by the cap decline factor each year. While this is a great solution for determining allowance allocation, it is important that the effect of vehicle electrification on EDU loads be factored into the cost burden calculation.

2013-2020 allocations were based on load forecasts submitted by the EDUs, which took into account estimates for load increases from vehicle electrification, but the proposed calculation does not recognize the fact that load will increase 2020-2030 as penetration of electric vehicles into the market increases. With state policy set to drive electric vehicle adoption, it is important to recognize the effect this will have on EDU loads. In meetings between the JUG and ARB, ARB has stated that in order to validate load attributed to vehicle electrification, EDU's must be able to supply meter data to support the additional allocation. EDUs cannot force their customers to install or use special meters to measure electric vehicle load, and MID believes that it is counter-productive to place additional requirements on customers seeking to reduce emissions by adopting electric vehicle technology. MID requests that ARB consider the method used in the Low Carbon Fuel Standard program, wherein ARB creates an estimate of electric vehicle charging load using its access to Department of Motor Vehicles data. MID recommends that ARB allow more time to think through the process of recognizing electric vehicle load in the EDU allocation calculation.

MID opposes direct allocation to covered industrial entities for electricity use. The Proposed Regulation Order seeks to reduce direct allocation to EDUs by an amount commensurate with the emissions attributed to electricity purchased by Cap-and-Trade covered industrial entities, and instead supply those allowances directly to the covered industrial entities while the compliance obligation remains with the EDU. ARB stated two reasons for the proposal in its August 2, 2016 Initial Statement of Reasons: 1) inconsistent carbon cost compensation for covered industrial customers of POUs compared to customers of Investor Owned Utilities ("IOUs"); and 2) relief of administrative burden on the California Public Utilities Commission ("CPUC")[1]. MID contends that the first reason is a non-issue and the burden stated in the second would merely shift from the CPUC to ARB and the POUs.

The value of MID's allocated allowances reduces the impact on its ratepayers from Cap-and-Trade compliance costs and above-market renewable energy procurement for compliance with the RPS program. With help from allocated allowance value, MID has not raised its energy rates since 2011. Industrial entities within MID's service territory are situated at least as well as their peers within IOU service territories for protection from emissions leakage. Electricity sales to the three covered industrial customer facilities within MID's service territory represent approximately 10% of MID's total annual retail energy sales. In 2015, the allowance value allocated to MID in association with the covered industrial customers' electricity use was valued at $1.5 million. If this value is allocated directly to the industrial customers in the future, it will be necessary for MID to create special rates for these three customers to reassume the allowance value to cover the compliance obligation for their electricity use and avoid having the bulk of MID's ratepayers shoulder the cost of the covered industrial customers' emissions. Additionally, since a portion of MID's allowance value is applied for purposes that provide system-wide emissions benefits, MID will need to reflect in the covered industrial entities' rates that they have

[1] *Staff Report: Initial Statement of Reasons*, August 2, 2016, California Air Resources Board, p. 33

not contributed towards the cost of those emissions-reducing expenditures and ensure that they do not receive a double-benefit formed of the other ratepayers' allocated allowances and allowances directly allocated to the industrial entities by ARB.

Ratemaking would be further complicated if the covered industrial facilities only receive allocation for electricity usage related to the processes within their operation that produce on-site emissions, even if the entire facility produces only the covered product. If this were the case, not only would these customers need to be treated differently from other industrial customers, but these customers' load would need to be treated differently within each customer's bill. For example, a facility may only report 50% of its electricity usage as supporting the processes that are listed in Table 9-1 of the Cap-and-Trade Regulation (i.e. excluding office load, product conveyance, facility cooling, etc.), which would mean that the POU receives allocated allowances for a portion of the covered industrial customer's load and the customer receives allocated allowances for the remainder of their load. It would be very difficult for both the industrial customer and the POU to accurately meter the energy used for these different processes.

Rate setting is a difficult and lengthy process, and the targeted nature of these rate changes could result in rate disparity among facilities producing similar products in a very close proximity, potentially inducing local economic and emissions leakage. It seems unnecessary to remove a burdensome process from the CPUC and place a burdensome process on affected POUs. MID recommends that EDUs receive allocation to reduce the cost burden for all load for which they generate electricity, including load from covered industrial entities.

Removal of the RPS adjustment penalizes early action, creates disparity with the RPS program and would drastically increase compliance costs to MID's ratepayers. MID strongly opposes the amendments discontinuing the RPS adjustment. The RPS adjustment is an essential provision of the Cap-and-Trade program and Mandatory Reporting Regulation (MRR) that recognizes the zero-emission attributes of energy resources that EDUs procured or contracted with prior to the inception of the Cap-and-Trade program. Citing difficulty with validating claims of RPS adjustment energy and the potential for double-counting zero-emission energy, the Proposed Regulation Order proposes to eliminate the RPS adjustment in 2021. The JUG and its members have worked with ARB staff over the past year to preserve this important provision and have developed a simple, comprehensive solution that eliminates the risk of double-counting zero-emissions benefits and ensures that the entity that owns the renewable energy attributes of the imported electricity receive the compliance benefit in the Cap-and-Trade program[2]. MID requests the Board to consider the solution proposed by the JUG.

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[2] Attachment A to these comments was originally submitted by the JUG as comments to an ARB workshop discussing the RPS adjustment. The document describes the solution proposed by the JUG to keep the RPS adjustment while ensuring that double-counting is not possible by using Renewable Energy Credits (RECs) to identify ownership of the renewable qualities of a specific quantity of electric energy and thus preclude a third party from also claiming the renewable qualities, which they did not pay for.

Through meetings between the JUG and ARB staff, staff has proposed a replacement to the RPS adjustment that is not sufficient. The cost burden calculation that the EDU direct allocation will be based on assumes that all EDUs will maintain an RPS compliance of 33% RPS-eligible renewable energy through 2030. ARB staff's replacement to the RPS adjustment is to assume RPS compliance of 28%, thereby increasing the amount of an EDU's load that is assumed to be served by natural gas generation and increasing its cost burden, thus increasing its allowance allocation. The 28% RPS compliance figure is arrived at by assuming that all EDUs procure the maximum amount of PCC2[3] energy allowed by the RPS program, which is 15% of an EDU's RPS compliance amount. However, one of the issues with this solution is that many EDUs, especially POUs like MID, have grandfathered, or PCC0 in the RPS program, contracts that they entered into prior to the development of the Cap-and-Trade program that can exceed the PCC2 limit/ ARB staff's RPS adjustment replacement does not recognize EDU ratepayers' investments in PCC0 resources. MID will have 45% of its 2030 RPS compliance fulfilled by PCC0 resources that are currently eligible for the RPS adjustment and that have contract terms extending past 2030, much greater than the 15% offered by ARB staff. If the RPS adjustment is eliminated and staff's replacement provision is adopted, MID's ratepayers will have to pay an additional $31 million in Cap-and-Trade compliance costs over the period of 2021-2030[4].

Additionally, our service area is almost entirely identified as a disadvantaged community. The rate increases triggered by this change would be counter to one of the tenets of the recently passed AB 197, which directs ARB to be mindful of the social costs of emissions reductions particularly those experienced by disadvantaged communities. Also, by failing to recognize the environmental benefits of the RPS grandfathered contracts, ARB will create disparity between California's two marquee environmental programs, the Cap-and-Trade program and the RPS mandate. MID requests that the RPS adjustment be retained and ARB staff continue to work with stakeholders to refine the provision within the Cap-and-Trade and MRR regulations.

MID supports the use of the Cap-and-Trade program as California's means of demonstrating compliance with the federal Clean Power Plan ("CPP"). California has already invested in the Cap-and-Trade market-based program and should leverage its capabilities to ensure compliance with the U.S. EPA's Clean Power Plan. MID suggests that ARB consider outreach with neighboring states to help them adopt mass-based trading programs that are capable of robust, two-way linkage with the California Cap-and-Trade program.

MID opposes including changes related to EIM) secondary dispatch emissions into the Proposed Regulation Order. MID recommends that ARB take additional time to consider the problem of secondary dispatch in the EIM market, potential solutions (or whether a solution is warranted at all, and any market ramifications that action on this issue may illicit. The western energy markets are nearing a transformational change should the California Independent System Operator (CAISO) balancing authority area expand to include load in five other states. While the quantity of secondary dispatch emissions (a figure that has not yet been published) may be

[3] The RPS "bucket 2" electricity, which is sourced from out-of-state firmed-and-shaped electricity contracts.
[4] Based on the CEC's 2015 IEPR allowance price forecast.

small, when applied to the regional scale day-ahead markets its impact may be monumental. Caution is urged to ensure that California ratepayers do not pick up the tab for other states' greenhouse gas emissions. MID recommends that ARB staff strike the amendments tying California entities to secondary dispatch compliance obligations at this time and that ARB continue to work closely with the CAISO and stakeholders to further evaluate EIM secondary dispatch.

MID thanks ARB for its consideration of our comments on these important issues. MID urges ARB to be mindful of the significant cost impacts that the amendments in the Proposed Regulation Order might have on California's ratepayers, particularly regarding the RPS adjustment and direct industrial allocation.

Sincerely

Gary Soiseth
Regulatory Administrator
Modesto Irrigation District
1231 11th Street
Modesto, CA 95354

Attachment A

January 15, 2016

Ms. Rajinder Sahota
Chief, Climate Change Program Planning & Management Branch
California Air Resources Board
1001 I Street
Sacramento, CA 95812-2828

Re: Potential 2016 Amendments to the Cap-and-Trade Program Concerning the Renewables Portfolio Standard Adjustment

Dear Ms. Sahota:

Los Angeles Department of Water and Power, Modesto Irrigation District, M-S-R Public Power Agency[1], Pacific Gas and Electric Company, San Diego Gas and Electric Company, Southern California Edison, Southern California Public Power Authority, and Turlock Irrigation District (together, "Utilities") hereby provide input on the Air Resources Board (ARB) December 14, 2015 workshop to discuss potential 2016 amendments to the Cap-and-Trade Program (workshop). These comments are limited to recommended revisions to the Renewables Portfolio Standard (RPS) adjustment sections of the Cap-and-Trade Regulation and Mandatory Reporting Regulation (MRR).

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[1] 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.

I. Summary of Recommendation

The Utilities urge ARB to maintain and strengthen the RPS Adjustment sections of the Cap-and-Trade and MRR regulations. The Utilities propose two simple amendments to ensure the Regulations' existing terms are enforced:

(1) only entities that meet existing criteria for delivered electricity from a renewable specified source, including the Renewable Energy Credit (REC), may report the electricity as specified power; and
(2) no entity may make an RPS Adjustment claim for eligible renewable power properly reported as specified.

Adoption of the Utilities' proposal will better align the characterization and accounting of greenhouse gas (GHG) benefits under the Cap-and-Trade and the RPS Programs, two landmark programs adopted by the Legislature to reduce GHGs. To do so, ARB staff must recognize the role and value that a REC provides under state law, regulation, and commercial practice to accurately track, report, and account for the benefits of eligible renewable generation, including GHG benefits. Without aligning California's two key GHG-reducing programs in this manner the renewable market may face disruption and California ratepayers will be forced to pay tens of millions of dollars in unnecessary emission allowance costs for the same investment made on their behalf to achieve GHG goals.

At the Workshop, diverse stakeholders, including concerned citizens, public and investor-owned utilities, community choice aggregators, and renewable developers, were united in their support for aligning the MRR and Cap-and-Trade regulations with state law, as well as with the established commercial practices of entities engaged in transactions to help the state achieve its ambitious GHG goals through the RPS Program. The Utilities' proposal achieves this alignment. Finally, the use of the REC as a validation tool under the Cap-and-Trade and MRR programs, as it serves under the RPS Program, will simplify the onerous verification process encountered by the ARB in the 2014 reporting year and, critically, will ensure that the GHG benefit from eligible renewable generation is accounted for once, and only once, and by the entity the state Legislature intended to receive such benefit.

II. Because the Legislature Promulgated the RPS and AB 32 Laws to Meet GHG Reduction Goals, ARB Staff Should Align its Regulations to Reflect the Legislature's Intent

At the workshop, ARB Staff did not fully consider stakeholders' suggestions to better align the RPS and Cap-and-Trade programs, noting that the purpose of the RPS Program was to encourage renewable procurement, and not cost-effective GHG reductions.[2] The Utilities implore that Staff reconsider this position, which is inconsistent with both Legislative intent, as described below, but also historical ARB positions.[3] There is no question that the RPS Program and corresponding renewable energy investment by Californians play a critical role in helping California achieve its aggressive GHG reduction goals.

A. The Legislature Explicitly Recognizes that Renewables Reduce GHG Emissions

A key purpose of the RPS program is to reduce GHG emissions. Indeed, the Legislature considers the GHG reduction benefit of renewables alone as sufficient justification for the RPS program. Specifically, Section 399.11(b)[4] of the Public Utilities Code states that procurement of renewable electricity is intended to provide unique benefits to California and lists those benefits, stating "***each of which independently justifies the program***" (emphasis added). Among the benefits enumerated by the Legislature are ***two*** directly related to the GHG reductions.

First, Section 399.11 (b)(1) lists the benefit of "displacing fossil fuel consumption in the state." Clearly, this displacement, and the reduced combustion of those fuels, provides GHG benefits In contrast, renewables are generally non-emitting, and displace fossil emissions that otherwise would service load absent the renewable resource. A second, and more explicit benefit, is identified in Section 399.11 (b) (4): "meeting the state's climate change goals by reducing emissions of greenhouse gases associated with electrical generation." Given this unambiguous language, it is clear that the Legislature considers the RPS Program as a mechanism to reduce GHG emissions. In the Legislature's own words, the fact that renewables meet GHG reductions independently justifies the [RPS] Program. Therefore, the ARB should look at this issue from the perspective that the Legislature intended the RPS Program to provide the same GHG reductions sought by AB 32. Where possible, the ARB should consider aligning the two programs. As the Utilities describe below, the ARB can align the two programs through simple changes to existing regulatory language.

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[2] *See* RPS Adjustment: Past and Future (December 14, 2015) at p.5 *available at* http://www.arb.ca.gov/cc/capandtrade/meetings/20151214/rpssb350.pdf.

[3] *See* ARB, Climate Change Scoping Plan: A framework for change (2008) at ES-3, ES-13, 11, 16-17, 22, 44-46 (recognizing that the RPS program will reduce emissions of greenhouse gases from the Electricity sector and/or contribute to AB 32 goals). *See also* ARB, First Update to Climate Change Scoping Plan (2014) at 40-41 (recognizing the achievements of the RPS as contributing to climate change goals) and 89 (recognizing the RPS as among "notable groundbreaking climate change initiatives")

[4] This and all other references in these comments to the California Public Utilities Code are to the version of the code as of December 29, 2015.

i. ARB Should Recognize the Value that Firmed and Shaped Transactions Provide Utilities Because the Legislature Allows Firmed-and-Shaped Transactions to Meet GHG Goals

To achieve the RPS Program's GHG-reduction and other goals, the past and current state RPS laws allow utilities to procure renewable energy through out-of-state resources. This long established policy is at the core of the RPS adjustment issue. Among eligible procurement for the RPS are "firmed and shaped eligible renewable energy resource electricity products providing incremental electricity and scheduled into a California balancing authority."[5]

In a typical firming and shaping transaction, a Utility purchases bundled power from an eligible out-of-state generator. The underlying electricity associated with the renewable power is re-sold to a third party as "null" power, which is widely understood to be the energy remaining when the REC is stripped from the renewable generator. The Utility retains the REC, which, as described throughout this letter, reflects the renewable and environmental attributes of the generation. The purchaser of the "null" electricity does not own the REC, and therefore cannot claim that the associated renewable generation carries any environmental attribute, including the GHG attribute.

To effectuate a firmed and shaped transaction, the eligible renewable generator or the Utility also enters into a separate transaction to deliver a corresponding amount of electricity as that generated by the eligible out-of-state generator to a California balancing authority (CBA). Under a typical transaction, firmed and shaped power is scheduled to the Utility during an agreed-upon re-delivery period into a CBA. This transaction, combined with the purchased RECs, allows the firmed and shaped electricity to be utilized by the Utility for the purpose of the RPS program.

These transactions benefit Californians by providing utilities and their customers a cost-effective and predictable means to procure and receive zero-emissions energy. The Legislature supported such arrangements through current and past RPS laws as a means to achieve the RPS Program's benefits, including GHG benefits. ARB staff should recognize that these transactions are intended by the Legislature to provide GHG reducing benefits, and those benefits should inure to those that the Legislature intended to receive renewable and environmental attributes.

ii. The ARB Should Recognize the Usefulness of RECs in GHG Reporting Because State Law Recognizes RECs as Providing Renewable and Environmental Attributes

The California Legislature established the REC as the compliance instrument for the RPS program. Specifically, RPS law establishes that the REC is "a certificate of proof, issued through the accounting system established by the Energy Commission… that one unit of electricity was generated and delivered by an eligible renewable energy resource."[6] The Legislature further stated that the REC conveys:

> ***all renewable and environmental*** attributes associated with the production of electricity from the eligible renewable energy resource, except for an emissions reduction credit issued

[5] Public Utilities Code §399.16 (b)(2)
[6] Public Utilities Code §399.12 (h)(1)

> pursuant to Section 40709 of the Health and Safety Code and any credits or payments associated with the reduction of solid waste and treatment benefits created by the utilization of biomass or biogas fuels.[7]

With limited exclusions not pertaining to GHG emissions, the Legislature established that renewable and environmental attributes associated with procured renewable generation is conveyed through the REC instrument. Moreover, the Legislature strengthened the importance of a REC by directing that the California Public Utilities Commission ("CPUC") adopt unmodifiable terms and conditions conveying the RECs to the purchaser of electricity generated by the eligible renewable resource:

> Standard terms and conditions to be used by all electrical corporations in contracting for eligible renewable energy resources, including performance requirements for renewable generators. **A contract for the purchase of electricity generated by an eligible renewable energy resource, at a minimum, shall include the renewable energy credits associated with all electricity generation specified under the contract.**[8]

As described below, the CPUC subsequently established that the GHG attributes of renewable generation are transferred to the buyer of the REC.

iii. The ARB Should Recognize that the Renewable Market Transacts Under Standard Terms and Conditions Recognizing that the Buyer of the REC Maintains Any Avoided Emissions of GHGs and the Reporting Rights Thereto

In 2008, the CPUC clarified that the GHG attributes of the renewable generation are conveyed to the *buyer* of the REC. The Decision ordered that the REC includes any avoided emissions of "carbon dioxide . . . or any other greenhouse gases that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of global climate change, and the reporting rights to these avoided emissions."[9] D.08-08-028 did not address the ability to use RECs for the purposes of the Cap-and-Trade program nor did it address the complex reporting issue before the ARB here. However, the California renewables market developed and transacted in reliance on the understanding that GHG attributes associated with the underlying renewable resource, including reporting rights thereto, are transferred to the buyer of the REC.

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[7] Public Utilities Code §399.12(h)(2) (emphasis added)

[8] Public Utilities Code §399.13(a)(4)(C) (emphasis added)

[9] CPUC Decision ("D.") 08-08-028, at Ordering Paragraph 1, available at http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/86954.pdf. The Decision did not direct the ARB or other regulatory agency to use the RECs for GHG compliance purposes, stating: "Avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the definition of the REC, this definition does not create any right to use those avoided emissions to comply with any GHG regulatory program." Note that CPUC standard terms and conditions applicable to the RPS program have conveyed all environmental attributes, broadly defined, to the buyer of renewable power since the inception of the RPS Program. *See* CPUC D. 04-06-014 at Appendix A (defining Environmental Attributes to include any and all "credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Unit(s), and its displacement of conventional energy generation.").

Further, utilities regulated by the CPUC have transacted for RPS products under certain fixed terms and conditions, and these standard terms and conditions are generally accepted by the broader renewable market. Pursuant to such fixed and standard terms and conditions, the purchaser of the RPS product purchases RECs and the emission reporting rights described above. [10] As a result, many of those firming and shaping transactions of concern to the ARB contain specific commercial terms required by the CPUC providing purchaser the REC and all rights to the "renewable-ness" of the generation, including the right to report the underlying power as zero-emitting.

ARB staff should recognize that the CPUC provided the state's renewable electricity market with certainty and consistency through the establishment of standard terms and conditions concerning ownership of environmental attributes of renewable generation. More recently, the CPUC's Decision 08-08-028 clarified which attributes the RECs convey to the purchaser of RECs, and which attributes do not, and determined that GHG attributes generally transfer to the REC purchaser. [11] ARB regulations and interpretations of regulations that do not provide GHG reporting and other rights to the REC owner will lead to commercial disputes. To convey GHG benefits to entities that sold such benefits or have not purchased rights to such a claim is inconsistent with Legislative intent, CPUC precedent, and commercial practice.

Furthermore, ARB's disregard of the attributes provided by the REC will stymie the development of these transactions. Given the state's increased renewable targets and potential for more stringent GHG goals, ARB should not select a path that could in anyway further constrain efforts to decarbonize the electric sector.

III. The ARB Should Consider Proposals to Better Align the Cap-and-Trade and RPS Programs Because AB 32 Requires the Harmonization of Such Programs

AB 32 directs the ARB to consider activities such as the RPS Program when promulgating its regulations, among other things, in the Legislatures' direction that the Agency:

A. Consider cost-effectiveness of these regulations:[12] Staff should reconsider its position because any regulation that would require Californians to pay tens of millions of dollars' worth of emissions allowances for activities the Legislature directed and intended to reduce GHG emissions is not cost-effective.
B. Consider overall societal benefits, including reductions in other air pollutants, diversification of energy sources, and other benefits to the economy, environment, and public health:[13] Staff should recognize that transactions subject to the RPS adjustment enable a broad, geographically diverse market for non-emitting resources by allowing out-of-state resources to participate in the RPS program. A broader, western-market for renewables provides broad environmental and economic benefits;

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[10] CPUC Decision 08-08-028, at Appendix A-2.
[11] The Legislature established two exceptions to the environmental and renewable attributes : (1) an emissions reduction credit issued pursuant to Section 40709 of the Cal. Health and Safety Code and; (2) any credits or payments associated with the reduction of solid waste and treatment benefits created by the utilization of biomass or biogas fuels. Public Utilities Code § 399.12(h)(2). These exclusions are not relevant to the GHG reporting rights discussed here.
[12] Cal. Health and Safety Code § 38562(b)(5).
[13] *Id.* at § 38562(b)(6).

C. Minimize the administrative burden of implementing and complying with these regulations:[14] As described below, the Utilities' proposal to include RECs as a verification tool to justify an entities' right to the environmental attribute of the generation will minimize the administrative burden of importers' eligible renewable claims; and
D. Consult with the CPUC in the development of the regulations as they affect electricity and natural gas providers in order to minimize duplicative or inconsistent regulatory requirements:[15] At a minimum, the ARB should consult with the CPUC concerning its intent to administer the Cap-and-Trade program in a manner which is inconsistent with the RPS Program. As described above, the CPUC implemented the RPS program to standardize terms and conditions such that the purchaser of the REC generally receives GHG benefits associated with the underlying generation. In contrast, the ARB is administering the Cap-and-Trade Program in a manner that would ignore the rights and responsibilities associated with REC ownership.

Therefore, it is incumbent upon ARB staff to recognize that a key purpose of the RPS Program is to achieve the State's GHG goals. The ARB should make all reasonable efforts to harmonize the two programs with respect to the RPS adjustment and direct delivery claims.

IV. The Utilities' Proposal Will Align the Cap and Trade Program with the Renewables Market

The ARB should avoid revising regulations in a manner inconsistent with standard practices concerning ownership of renewable and environmental attributes. As discussed above, the commercial market for compliance RPS products has developed such that ownership of RECs conveys the GHG benefits associated with the eligible renewable product. This right of ownership is established through fixed terms and conditions of power purchase agreements approved by the CPUC prior to their effectiveness. Under such transactions, the owner of the REC controls the right to claim such benefits. Staff's proposal fails to recognize the REC as proper evidence that an importer has the right to claim electricity as renewable not only defies Legislative intent, but all commercial expectations of parties transacting under the California RPS Program.

RECs were developed with the explicit purpose of ensuring ownership and accurate accounting of the renewable attributes of power. Indeed, the construct utilized by the California Legislature and the CPUC has been adopted nationally. According to the United States Environmental Protection Agency (US EPA), "If the physical electricity and the associated RECs are sold to separate buyers, the electricity is no longer considered 'renewable' or 'green.' The REC product is what conveys the attributes and benefits of the renewable electricity, not the electricity itself."[16] Thus, aligning the regulations with REC ownership is consistent with general practices intended to prevent double counting of the benefits of renewable generation.

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[14] *Id.*
[15] *Id.* at §38562(f).
[16] http://www3.epa.gov/greenpower/gpmarket/rec.htm

V. The Utilities' Proposal Will Minimize the Administrative Burden of the ARB and Covered Entities

As discussed at the December workshop, ARB was challenged to accurately account for electricity sector emissions because of competing claims to the GHG benefit of renewable generation. Specifically, the ARB sought to avoid the case whereby one entity claimed null power generated by an eligible renewable resource as directly delivered and another entity claimed the corresponding RECs as an RPS Adjustment.

Adjusting the Cap-and-Trade and MRR to align the regulations with REC ownership will make the program simple to administer and accurate. REC accounting has been standardized in the Western Electricity Coordinating Council (WECC) region by the Western Renewable Energy Generation Information System (WREGIS).

ARB's administration of the RPS adjustment and specified source imports in the Cap-and-Trade and MRR programs, and compliance by reporting entities, could be simplified and streamlined by simply tracking volumes and ownership of RECs through the fully functional WREGIS REC accounting system. Verifiers may review whether the entity making the claim to the carbon attribute of the power through either a direct delivery claim or an RPS adjustment has the right to use the REC. This approach would lead to significant cost and resource savings to the ARB, covered entities, and verifiers relative to the onerous and time-consuming verification process encountered in 2014.

VI. The ARB Should Protect the Value of Californians' Investments in Renewable Energy

The Utilities' proposal will ensure Californian ratepayers investments in renewable electricity are not diminished or eviscerated. The Utilities urge the ARB to reconsider this proposal prior to taking any action to modify the Regulation and/or remove the RPS adjustment. At worst, removal of the RPS adjustment will force ratepayers to procure millions of dollars' worth of incremental Cap-and-Trade allowances, despite their prior investments in renewable generation. This situation will cause the objectives of the both RPS and Cap-and-Trade Programs to be more costly and difficult to achieve.

Likewise, the continued administration of the RPS adjustment provisions to provide carbon benefits to those entities that have no right to such benefits under commercial contracts and RPS law will only harm utility customers and unjustifiably enrich entities that either sold or did not pay for such a claim. Either outcome is contrary to Legislative intent, commercial practices, and good public policy. Accordingly, the Utilities offer the following recommendations.

VII. Proposed Changes to the Cap-and-Trade Regulation

The Utilities propose revisions to Sections 95852(b)(3) and (b)(4) of the Cap-and-Trade regulation to ensure that the GHG benefits of renewable procurement are provided to those who purchased the environmental attribute of such generation. The Cap-and-Trade Regulation must clarify that only entities with ownership of or permission to use the RECs can claim directly delivered imported renewable energy as specified with a zero emission factor.

The Utilities' revision to Section 95852(b)(3) clarifies that an entity must meet all existing criteria for delivered electricity from a specified source, including REC serial numbers, to report the electricity as specified power. If the entity cannot meet all of the existing criteria, it must report the electricity as unspecified power. Only the entity that owns or has permission to use the REC can claim the carbon benefit under the Cap-and-Trade Program. Similarly, the Utilities propose revising Section 95852(b)(4) to clarify that an RPS adjustment cannot be claimed for electricity that meets the criteria of Section 95852(b)(3). Together, these revisions will ensure the environmental integrity of the Cap-and-Trade program is maintained while protecting the GHG benefits of significant investments made on behalf of California's ratepayers.

Revisions to Section 95852(b)(4) extend the deadline to certify RPS adjustment claims to align with the RPS Compliance Report timeline for REC retirement and reporting. This change allows the third party verifier to validate the RPS adjustment up until the RPS Compliance Report deadline of August 1.

The Utilities' proposed revisions to Sections 95852(b)(3) and(b)(4), in strikeout/underline, are as follows:

Section 95852(b)(3): The following criteria must be met for electricity importers to claim a compliance obligation for delivered electricity based on a specified source emission factor or asset controlling supplier emission factor. If any of the following criteria are not met, then delivered electricity must be reported as unspecified.

(A) ~~Electricity deliveries~~ Delivered electricity must be reported to ARB and emissions must be calculated pursuant to MRR section 95111.

(B) The electricity importer must be the facility operator or have right of ownership or a written power contract, as defined in MRR section 95102(a), to the amount of electricity claimed and generated by the facility or unit claimed;

(C) The electricity must be directly delivered, as defined in MRR section 95102(a), to the California grid; and

(D) If RECs were created for the electricity generated and reported pursuant to MRR, then the REC serial numbers must be reported and verified pursuant to MRR and the electricity importer must report its rights to the RECs (i) as the facility operator with retained rights to the RECs or (ii) by having the right of ownership or contract rights.

Section 95852(b)(4) RPS adjustment. Electricity procured from or generated by an eligible renewable energy resource reported pursuant to MRR must meet the following conditions to be included in the calculation of the RPS adjustment:

(A) The electricity importer must have:

1. Ownership of, or contract rights to procure, the electricity and the associated RECs generated by the eligible renewable energy resource; or

2. A contract with an entity subject to the California RPS that has ownership of, or contract rights to, the electricity and associated RECs generated by the eligible renewable energy resource, as verified pursuant to MRR.

(B) The RECs associated with the electricity claimed for the RPS adjustment must be placed in the retirement subaccount of the entity subject to the California RPS, and party to the contract in 95852(b)(4)(A), in the accounting system established by the CEC pursuant to PUC 399.25, and designated as retired for the purpose of compliance with the California RPS program ~~within 45 days of the reporting deadline~~ prior to the annual RPS Compliance Report deadline of August 1 ~~specified in section 95111 (g) of MRR~~ for the year for which the RPS adjustment is claimed.

(C) The quantity of emissions included in the RPS adjustment is calculated as the product of the default emission factor for unspecified sources pursuant to MRR, and the reported electricity generated (MWh) that meets the requirements of this section, 95852(b)(4).

(D) No RPS adjustment may be claimed for ~~electricity generated by~~ the portion of electricity from an eligible renewable energy resource when ~~its~~ this electricity meets all the criteria of section 95852(b)(3) and is claimed as a specified source by an electricity importer and is claimed as a specified source by an electricity importer ~~is directly delivered~~.

VIII. Proposed Regulatory Changes to Mandatory Reporting Regulation

The Utilities propose revisions to Sections 95111(a)(4) and (g)(3) of the Mandatory Reporting Regulation. Specifically, the revisions to Sections 95111(a)(4) and 95111(g)(3) ensure the requirements for a specified source claim are consistent with the Cap-and-Trade regulation.

Revisions to Section 95111(g)(3) extend the deadline to certify RPS adjustment claims to align with the RPS Compliance Report timeline for REC retirement and reporting. This change allows the third party verifier to validate the RPS adjustment up until the RPS Compliance Report deadline of August 1.

Finally, the Utilities propose moving section 95111(g)(1)(M) to its own Section 95111(g)(2) to reflect the fact that this section is not part of the February 1 registration report. The requirements in Section 95111(g)(1)(M) are related to the June emission report, not the February registration report and so should be in a separate section.

The Utilities' proposed revisions to Section 95111(a)(4), in strikeout/underline, are as follows:

> Section 95111 (a)(4): *Imported Electricity from Specified Facilities or Units.* The electric power entity must report all direct delivery of electricity as from a specified source for facilities or units in which they are a generation providing entity (GPE) or have a written power contract to procure electricity, and meet all of the requirements in section 95852(b)(3)

of the cap-and-trade regulation for specified source claims. When reporting imported electricity from specified facilities or units, the electric power entity must disaggregate electricity deliveries and associated GHG emissions by facility or unit and by first point of receipt, as applicable. The reporting entity must also report total GHG emissions and MWh from specified sources and the sum of emissions from specified sources explicitly listed as not covered pursuant to section 95852.2 of the cap-and-trade regulation. The sale or resale of specified source electricity is permitted among entities on the e-tag market path insofar as each sale or resale is for specified source electricity in which sellers have purchased and sold specified source electricity, such that each seller warrants the sale of specified source electricity and, if applicable, RECs associated with the electricity if sourced from an eligible renewable energy resource from the source through the market path.

(A) Claims of specified sources of imported electricity, defined pursuant to section 95102(a), are calculated pursuant to section 95111(b), must meet the requirements in section 95111(g) and in section 95852(b)(3) of the cap-and-trade regulation, and must include the following information…

……

The Utilities' proposed revisions to Section 95111(g)(3), in strikeout/underline, are as follows:

(g) Requirements for Claims of Specified Sources of Electricity, and for Eligible Renewable Energy Resources in the RPS Adjustment.

Each reporting entity claiming specified facilities or units for imported or exported electricity must register its anticipated specified sources with ARB pursuant to subsection 95111(g)(1) and by February 1 following each data year to obtain associated emission factors calculated by ARB for use in the emissions data report required to be submitted by June 1 of the same year. If an operator fails to register a specified source by the June 1 reporting deadline specified in section 95103(e), the operator must use the emission factor provided by ARB for a specified facility or unit in the emissions data report required to be submitted by June 1 of the same year. Each reporting entity claiming specified facilities or units for imported or exported electricity must also meet requirements pursuant to subsection 95111(g)(2)-(5) in the emissions data report. Each reporting entity claiming an RPS adjustment, as defined in section 95111(b)(5), pursuant to section 95852(b)(4) of the cap-and-trade regulation must include registration information for the eligible renewable energy resources pursuant to subsection 95111(g)(1) in the emissions data report. Prior registration and subsection 95111(g)(2)-(5) do not apply to RPS adjustments. Registration information and the amount of electricity claimed in the RPS adjustment must be fully reconciled and corrections must be certified ~~within 45 days following the emissions data report due date~~ by the third party verifier prior to the annual RPS Compliance Report deadline of August 1.

……

The Utilities' proposed revisions to Section 95111(g)(1)(M), in strikeout/underline, are as follows:

~~(M)~~(2) *Requirements for Claims from Eligible Renewable Energy Resources.* Provide the primary facility name, total number of Renewable Energy Credits (RECs), the vintage year and month, and serial numbers of the RECs as specified below:

~~1~~A. RECs associated with electricity procured from or generated by an eligible renewable energy resource and reported as an RPS adjustment as well as whether the RECs have been placed in a retirement subaccount and designated as retired for the purpose of compliance with the California RPS program.

~~2~~B. RECs associated with electricity procured from or generated by an eligible renewable energy resource and reported as an RPS adjustment in a previous emissions data report year that were subsequently withdrawn from the retirement subaccount, or modified the associated emissions data report year the RPS adjustment was claimed, and the date of REC withdrawal or modification.

~~3~~C. For imported electricity from a specified source which is an eligible renewable energy resource, RECs associated with electricity generated, directly delivered, and reported as specified imported electricity and whether or not the RECs have been placed in a retirement subaccount. If RECs were created for electricity imported from an eligible renewable energy resource but not reported, the imported electricity cannot be claimed as specified.

(~~2~~3) *Emission Factors.* The emission factor published on the ARB Mandatory Reporting website, calculated by ARB according to the methods in section 95111(b), must be used when reporting GHG emissions for a specified source of electricity.

(~~3~~4) *Delivery Tracking Conditions Required for Specified Electricity Imports.* Electricity importers may claim a specified source when the electricity delivery meets any of the criteria for direct delivery and for specified source of electricity defined in section 95102(a), and one of the following sets of conditions is satisfied:

(A) The electricity importer is a GPE. If the facility/unit is an eligible renewable energy resource then the GPE must have (1) retained rights to the electricity or generation; (2) retained rights to the associated RECs; and (3) report the REC serial numbers associated with the imported electricity pursuant to section 95111(g)(2); or

(B) The electricity importer has a written power contract for electricity generated by the facility or unit. If the facility/unit is an eligible renewable energy resource then the electricity importer must have (1) a right of ownership or contract rights to the associated RECs; and (2) report the REC serial numbers associated with the imported electricity pursuant to section 95111(g)(2)....

(~~5~~6) *Substitute electricity.* Report substitute electricity received from specified and unspecified sources pursuant to the requirements of this section.

IX. Conclusion

The Utilities are committed to working with ARB staff to more clearly align REC ownership with the ability to claim an RPS adjustment. Doing so will ensure California ratepayers are not forced to fund the procurement of millions of dollars' worth of incremental Cap-and-Trade allowances, despite their prior investments in renewable generation. The RPS adjustment is essential to provide California utility customers the GHG benefit of renewable procurement. We look forward to ongoing discussions about how to resolve this issue for future reporting years and to reduce the burden on both staff and reporting entities.

Sincerely,

/s/

Los Angeles Department of Water and Power
Modesto Irrigation District
M-S-R Public Power Agency
Pacific Gas and Electric Company
San Diego Gas and Electric
Southern California Edison
Southern California Public Power Authority
Turlock Irrigation District