November 30, 2018

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

**SMUD Comments on Potential Post AB 398 Cap-and-Trade Amendments – 15-Day Language**

Thank you for the continuing opportunity to submit comments concerning amending the Cap and Trade regulations, in response to proposed amendments posted on November 14th (15-day language). While SMUD appreciates the additional clarifications of changes in the 45-day language pertaining to the use of allowance proceeds, SMUD disagrees with the new policy position prohibiting the use of allowance proceeds to procure allowances for compliance. SMUD suggests additional clarifications for allowance proceeds use.

SMUD also continues to support the banking structure that has been in place for some time and the program cap that was established in last year's Cap and Trade amendments. The current banking structure is an essential component of a well-designed Cap and Trade program. SMUD believes that the bank of allowances that has developed under the current program is a clear reflection of early emission reductions and clear evidence of a successful banking structure. A program change at this time sends the wrong message that successful reductions will be viewed simply as oversupply.

On these topics and others, SMUD has the following comments:

**A. Use of Allowance Proceeds**

SMUD appreciates the inclusion of an additional specific use for allowance proceeds under Section 95892(d)(3)(C), allowing proceeds to be spent on "… wildfire risk reduction or forest carbon sequestration …", pending development by CARB of a standardized system for quantifying GHG reductions from such actions. SMUD requests that an expedited development of this system be directed in the Board Resolution or other direction to CARB staff.

SMUD also supports the clarifying specific addition of '… educational programs ..." as an allowed use but believes that the proposed limit on such funding -- $100,000 or 1% of annual proceed expenditures -- is too low. SMUD's proceeds from selling allowances not used for compliance is unlikely to be above $10 million annually, meaning that $100,000 would be the applicable limit. SMUD suggests changing the limit to $100,000 or 5% of annual proceed expenditures, whichever is greater. SMUD would expect that this is a change that can be included in a Board direction and adopted with the 15-day language, but if not SMUD requests Board direction to examine the proposed limit in relation to POU allocations and change the limit to allow higher educational expenditures. It is sometimes forgotten by climate professionals that many Americans are either unaware of the dangers posed by Global Warming to California or preoccupied with other concerns. Public education of climate impacts and the opportunities offered by this Board and other state agencies to combat Climate Change is critical for public support and transformation to a low carbon economy.

SMUD strongly supports the continued ability to use allowance proceeds to purchase allowances and is disappointed that the 15-day language expressly prohibits such use. **SMUD strongly recommends removing this added language.** SMUD reiterates our conviction that use of allowance proceeds to procure allowances for compliance is fully consistent with the goals of AB 32. CARB should either directly clarify that use of proceeds to procure allowances is expressly allowed (with constraints) or clarify that using proceeds to procure allowances does not constitute a volumetric return of proceeds to ratepayers. SMUD suggested several possible means of clarification in our 45-day comments. At the very least, the Board Resolution should direct staff to analyze the impacts of the express prohibition on the market and ratepayer costs and reconsider the ban as appropriate.

SMUD reiterates our 45-day comments that while the GHG reduction estimation protocols in section 95892(e)(4) discuss GHG emission factors applicable to the reductions from changes in electricity or fuel use, it does not include any factors to be used for (1) the GHG reductions from the provisions in section 95892(d)(3)(C) relating to sulfur hexafluoride reductions, (2) the newly added use for wildfire risk reduction or forest carbon sequestration, or (3) the other potential uses implied by Section 95892(d)(3)(C). SMUD believes this oversight could be corrected at the Board hearing by directing staff to correct these omissions, without additional 15-day language or in-program guidance.

### B. Electrification Related Load Growth

Once again, the proposed amendments in the 15-day language do not include any provisions to address Board Resolution 17-21. Board Resolution 17-21 directed the Executive Officer to "… evaluate appropriate quantification methodologies for additional electric distribution allocation that would provide ratepayer benefit for ***the Cap-and-Trade program cost burden*** to EDUs associated with transportation electrification load growth (in recognition of the requirements of SB 350)." This has been a long-standing and repeated Board directive to staff that over the years has not been implemented.

During the informal workshops in this rulemaking, CARB staff requested specific proposals regarding "… methods to quantify transportation-related load growth emissions (quantifiable and verifiable to allocation standards)." When asked what was meant by "allocation standards", CARB staff described an evidence standard that mirrored the same level of demonstration as for industrial sector allocations, which are provided retroactively based on tracked and reported historical data (either product or energy). Such a "metered data or its equivalent" requirement for the cost burden from electrification is not feasible or cost-effective for much of the potential transportation electrification load, or for the potential building electrification load, because these loads cannot be metered cost-effectively. For example, adding a separate meter to measure the load from replacing a natural gas water heater with an electric heat-pump water heater is infeasible and unnecessary.

SMUD suggests that a new Board Resolution is necessary to direct ARB staff to estimate the Cap-and-Trade program cost burden to EDUs associated with increased transportation and other electrification load growth (in recognition of the requirements of SB 350 and recent state electrification policies), using methods that do not require separate metering or the equivalent of every vehicle or newly electrified building load.

At the November hearing, ARB Staff indicated that they would bring back potential changes to EDU allowance allocations due to the increase in the RPS enacted by SB 100, perhaps in a new rulemaking next year. While increased RPS requirements are likely to lead to reduced utility sector emissions, this is not necessarily a reason to reduce the allocation of allowances to EDUs. SMUD notes that there has been an increased focus by Governor Brown and energy agencies on both transportation and building electrification since the EDU allocations were established, and the implied electric load growth will tend to increase utility sector emissions. The added electrification load beyond that reflected in the load forecasts underlying utility allocations is an *additional* cost burden to ratepayers, not reflected in the administrative allocations.

One way to put the proposed new resolution in place would be to simply consider the potential reduction in EDU emissions from the new 60% RPS as "offsetting" the potential increase in emissions from sharply higher transportation electrification and building electrification goals and leave the EDU allocations as is through 2030. Both issues can be revisited down the line as policy beyond 2030 is developed.

### C. Cost Containment Design Features

In the 15-day language, ARB staff did not propose any changes of note to the price ceiling and price containment point mechanisms in the previous 45-day language. Board Chair Mary Nichols expressed surprise at the industry opposition to the 45-day proposal and speculated that the motivation was just a desire for lower prices. SMUD respectfully disagrees. Keeping Cap and Trade costs under control is certainly important for the long-term viability of Cap and Trade, but SMUD's proposal would have yielded higher price ceiling prices and price containment point prices in some years, and lower in others. It is simply the rapid escalation of these price containment structures that is of most concern. SMUD does not believe there is an economic rationale for this kind of escalation in the price containment structure.

SMUD's recommendation, in our 45-day comments and verbally at the Board hearing, was simple and consistent with current ARB price containment practice. To reiterate, SMUD's proposal is to mirror the current "floor plus fixed amount" structure that has already been adopted by the Air Board for the single-tier APCR in the current regulations, as follows:

- Price Ceiling equals price floor plus $60 real (increasing with inflation).
- Price Containment Point 1 equals price floor plus $20 real.
- Price Containment Point 2 equals price floor plus $40 real.

This yields a price ceiling point starting in 2021 of around $78, significantly higher than the $65 price in the 45-day language. It also yields a starting level for the first price containment point at about $38, not much lower than the $41 price point in the 45-day language. And finally, the second price containment point would start at about $58, substantively higher than the $53 starting level in the 45-day language. In the latter years, all three price points are significantly lower than in the 45-day package, yielding better cost-containment in SMUD's mind.

SMUD believes that a significant benefit from this proposal is that the price containment mechanisms are more spread out from each other, allowing two clearly separate market price breaks well below the price ceiling level. The price containment points should be pauses where stakeholders consider additional investments in abatement technologies, rather than waiting for or immediately considering the supply from the next price containment point.

SMUD suggests that the Board direct staff to modify the price containment mechanisms to match SMUD's proposed structure. At the very least, SMUD recommends a Board resolution that directs staff to analyze the structure SMUD is proposing for potential consideration in a subsequent rulemaking.

### D. Energy Imbalance Market

**Abandon the EIM Participant Approach**: SMUD strongly opposes the changes in the 15-day language and the earlier 45-day language that abandon the use of CARB's current "bridge solution" for dealing with potential "outstanding" (secondary dispatch) emissions in the Energy Imbalance Market (EIM). The bridge solution preserves environmental integrity in relation to emissions leakage by retiring allowances to cover the estimated outstanding emissions in the (EIM). The EIM participant approach as proposed in the 45-day language and modified in the 15-day language does nothing to enhance environmental integrity. Instead, the changed approach risks disruption of the EIM market just as it is expanding and bringing greater environmental benefits to California and the western region.

It is striking that the California Independent System Operator (CAISO), a collaborative state energy governing body that hosts the EIM market, recommended that the ARB retain the bridge solution through 2019 in 45-day comments – a recommendation ignored by CARB in the 15-day language. The utility EIM Participant approach proposed in the 15-day language imposes additional rules and costs on utility EIM participants simply for being part of the market, not in any manner related to a choice to procure or not procure of GHG emitting resources. As such, the 15-day language complicates EIM market participation, and in addition raises the potential that utility ratepayers may be overcharged for the obligation.

The “EIM Participant” language, as currently drafted, is essentially a GHG emissions “penalty” structure on California utilities that are either direct participants in the EIM, or LSEs within the CAISO service territory who have EIM energy cleared on their behalf. The GHG penalty is wholly disconnected from the decisions made by these EIM participants, other than the decision to participate in the first place. As such, the GHG penalty does not encourage any particular GHG reduction in the EIM market transactions. It is no wonder that the CAISO and market participants are recommending that the ARB abandon this problematic solution as they are worried about the unintended impacts on the EIM market place.

SMUD recommends that CARB accept the CAISO advice, which is supported by many market-involved stakeholders and retain the bridge solution at least through 2019. There is no loss of environmental integrity by doing so, because any estimated secondary dispatch emissions are still covered.

**Take Time To Observe and Analyze EIM Market Changes**: SMUD notes that the new CAISO market rule intended to lessen secondary dispatch has just gone into effect, hence there has not been adequate time for CARB Staff to analyze the effects of the rules approved by FERC to evaluate whether they have shifted the patterns of resource dispatch in the EIM, and whether they demonstrate a lower potential amount of energy “leakage” and therefore a lower *potential* for emissions “leakage.” CARB Staff’s decision to move forward at this time without information about the market changes is not justified by any urgency to retire the “bridge solution” currently in place. The bridge solution fully covers the estimated outstanding emissions – there is no “leakage” that remains to threaten environmental integrity.

SMUD notes that when FERC approved the new CAISO tariff, it mandated studies (165 FERC ¶ 61,050), which when completed will provide solid data on the effects of this EIM market change.

> “In order to provide greater transparency to the market, we require CAISO to submit an informational report to the Commission on or before January 1, 2020. The CAISO notes that developing these reports will require

> collaboration with stakeholders to gain consensus on the concept of secondary dispatch and to determine the format and content of the reports. The report must describe the extent to which situations similar to the scenario described by DMM in its comments to CAISO's stakeholder process materialize during the 12 months after the implementation of CAISO's tariff revisions." (165 FERC ¶ 61,050 at 18).

FERC goes on to say that it will not require a report on the "magnitude of secondary dispatch that continues to occur and the historic and ongoing volume of emissions associated with such secondary dispatch as PG&E and Powerex request" (*Id*.at 19) because these reports would be "focused on compliance with current and potential future CARB regulations regarding GHG emissions, and are not necessary to assess the justness and reasonableness of CAISO's proposal." (*Id* at 19). However, it seems that CARB could have CAISO produce these exact reports by January 2020, and thus provide the agency with more representative data on how secondary dispatch and potential emissions leakage has been affected by this tariff change. The FERC mandated study is absolutely material to the issues in CARB's rulemaking and MRRs.

Retaining the bridge solution for an additional period provides time for experience with the newly FERC-approved CAISO tariff to affect secondary dispatch. Retaining the bridge solution also provides time for better calculation of any remaining secondary dispatch emissions, improving accuracy over the rough approach of assuming that all EIM participation should be associated with the default emission factor in the calculation to determine outstanding emissions. In addition, retaining the bridge solution provides time for the study ordered by FERC on secondary dispatch emissions when approving the CAISO tariff aimed at reducing the problem. Lastly, retaining the bridge solution provides time for CARB to conduct additional analysis of the secondary dispatch problem as the EIM expands and the CAISO tariff change is in place.

**Prior to Abandoning the Bridge Solution, CARB Should Revise the Calculation of Outstanding Emissions**: As quarterly data published by the CAISO shows,[1] EIM transfers into California (to date, only into the CAISO and PacifiCorp West balancing areas) are generally balanced quite evenly with EIM transfers out of California over the course of the year (certain seasons result in more imports vs. exports depending on California's renewable output relative to load). The public EIM reports do not break out exports by generation type, but other CAISO reports detail the reduction in renewable curtailment in the state because California is exporting excess renewables in the middle of the day, thus displacing emitting resources elsewhere in the West with non-emitting resources. Furthermore, a high proportion of EIM entities are served primarily by hydropower,[2] meaning that the emissions profile of these entities is even *lower* than California.

[1] https://www.westerneim.com/Documents/ISO-EIMBenefitsReportQ3-2018.pdf
[2] Idaho Power, Powerex, Portland General, Puget Sound Energy.

The net flows across state-borders as well as the GHG intensity of the current EIM participants should be reviewed again by agencies and stakeholders before CARB proceeds to impose the GHG cost on specific entities rather than covering the obligation through the overall Cap and Trade market. The current MRR use of the default emission factor applied to all EIM imports should be reconsidered as the CARB moves to a permanent solution to replace the bridge solution. A significant portion of the present EIM is dominated by GHG-free hydropower, which often has a lot of room to adjust output. It is merely an assumption that marginal imbalances will be served by gas power plants with capacity factors less than 60% (the genesis of the current default emission factor). In addition, the data underlying the default factor is over 10 years old, and the entire number should be reconsidered prior to moving away from the bridge solution.

The calculation of “outstanding emissions” today rests on out of date assumptions and imperfect information about the EIM market as it grows. The intent of the calculation is reasonable – to identify potential “emissions leakage” associated with the EIM market, so that obligation can be “covered” by retiring allowances in one way or another. However, it is not reasonable to impose an expensive carbon obligation on specific entities that have no responsibility for the emissions identified, rather than on the overall Cap and Trade market. A solution based on better data and that allocates the carbon obligation to those EIM participants that cause the secondary dispatch.

**Bottom Line**: Nearly all of the proposed EIM-related changes in the 45-day and 15-day language for the Cap and Trade and MRR regulations should be rejected by the Air Board. The only parts of the Cap and Trade regulatory change proposals that should be retained are the parts that change the retirement of allowances from the pool of unsold allowances to retirement from the general pool of allowances in the market.

### E. Allocation to Legacy Contract Generators

SMUD appreciates the changes in the 15-day language to provisions continuing allocation of allowances to cover legacy contract emissions for generators with counterparties that are not otherwise included in the Cap and Trade program. SMUD supports, starting the re-introduced program component in 2020, rather than 2021 as earlier proposed, and including “true-up” provisions to cover the years 2018 and 2019. This action makes the legacy contract provisions for this type of contract seamless from when first enacted to the end of the contracts.

SMUD also appreciates that the 15-day language did not remove Section 95892(e), which was added in the 45-day language. The staff presentation at the November hearing indicated the possibility that this provision would be removed, and it is appropriate that it was not. SMUD notes that the legacy allowances in question would have been provided earlier except for ARB’s action expecting a proposed CPUC decision to pass through some PG&E gas GHG costs in rates to be adopted.

Since the final CPUC decision was adopted without a GHG pass through for the years 2015-2017, it makes sense to correct the record.

In addition, given the amount of time that has passed since the ARB first acted on their unfulfilled expectation, SMUD suggests that the allowances provided through Section 95892(e) be taken from the general pool of allowances, rather than from the industrial counterparties. This is a one-time fix, so not precedential. SMUD believes that taking the true-up allowances from the counterparties will place a surprise and perhaps unfair burden on these entities. Hence, SMUD suggests the following:

> Legacy Contract Natural Gas True-up Allocation. Entities that received allowance allocation pursuant to section 95894 for vintage years 2015-2017, used natural gas rates subject to CPUC jurisdiction as part of their legacy contract pricing, and had a percentage of their vintage 2015-2017 legacy contract transition assistance discounted to reflect anticipated compensation for GHG costs in rates corresponding with the natural gas consignment percentage shall receive a legacy contract natural gas true-up allocation that equals the total quantity of allowances that were discounted from the vintage 2015-2017 allocations. This legacy contract natural gas true-up allocation shall only be provided in 2019 with vintage 2020 allowances. Entities shall receive this true-up allocation as a legacy contract generator with an industrial counterparty or a legacy contract generator without an industrial counterparty, as applicable, regardless of their current eligibility for legacy contract transition assistance pursuant to sections 95894(a)-(d). ~~Legacy contract counterparties will have vintage 2020 allocation adjusted by the legacy contract natural gas true-up allocation pursuant to section 95891(e).~~

SMUD believes that this small change can be directed as part of the Board action adopting all the proposed changes in this rulemaking.

SMUD again appreciates the ability to comment on the 15-day language.

/s/

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