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**Re: Sacramento Municipal Utility District's Comments to Proposed Revisions to GHG MRR for Electric Power Entities Reporting**

We appreciate the opportunity to comment on the potential updates to the California Regulation for the Mandatory Reporting of Greenhouse Gas (GHG) emissions presented during the July 23rd ARB workshop. Our principal interest is in the proposed System Power emission rates, and the circumstances under which asset controlling supplier (ACS) power may be claimed as a specified or unspecified source.

As we understand it, ARB is proposing to institute customized System Power emission factors for providers with emission rates that exceed the default rate of 0.428 MT of CO<sub>2</sub>e/MWh (e.g., Arizona Public Service would qualify for a System Power rate). These System Power rates will be calculated by ARB and published on its website. The System Power rates would be effective for CY 2014 data.

SMUD is concerned that elements of ARB's proposed regulation would add to existing uncertainty in the electric energy trading markets caused by the differing carbon attributes of electricity products. This uncertainty would cause additional illiquidity in the bilateral power markets, and further complicate bidding into the CAISO markets, thus hampering their efficient function.

*The ARB's proposal in section 95111(b)(5) to create System Power emission factors would chill an already illiquid bi-lateral energy market.*

Before the advent of the Cap-and-Trade program in California, there was essentially a single energy product that traded easily at trading hubs in the Western Interconnection. However, when ARB created the paradigm of different carbon content for specified and unspecified sources of power, that all changed. Now, instead of one ubiquitous product, there are over 300 electricity products identified with the same number of specified sources. And what makes these products different is that they all have different emission factors, which of course are different from the default emission rate of 0.428

MT of CO<sub>2</sub>e/MWh for unspecified sources. The rationale for assigning individual emission factors is to provide a more accurate measurement of the carbon footprint of Electric Power Entities (EPE), which is a worthy goal. However, it has come at a cost.

A consequence of enhanced accuracy in quantifying carbon inventories has been reduced liquidity at certain energy market hubs. Instead of ubiquitous supplies of homogenous energy for sale, there are scarce supplies of specified and unspecified products. Years ago, SMUD invested heavily in transmission from the California – Oregon Border (COB) trading hub because of the relative abundance of energy supplies from the Pacific Northwest, especially during our hot summer months. Traditionally, we have been able to fill orders for much of our net short at this hub and move it down to our service territory along transmission that we own. However, since promulgation of the Cap-and-Trade Regulation, there has been a significant reduction in liquidity. Sellers at COB have pulled out of the bi-lateral market, and SMUD is having a hard time filling our buy orders. Frankly, we do not know where the sellers have gone, but both unspecified and specified energy products, which sell at a premium, are hard to come by. Consequently, costs to our ratepayers have gone up simply because of illiquidity caused by Cap-and-Trade at a hub that we literally count on. To make matters less certain, current regulation provides that the emission factors for specified sources are adjusted in the year following the compliance year (and of course the year in which our energy is purchased). Thus, even when we purchase specified power products at COB, we are not entirely sure how many allowances we will need until ARB performs its after-the-fact adjustments. It could be that publication of actual specified emission factors in the year following the year in which power is delivered is also contributing to the dearth of buyers and sellers at COB.

Now, to make matters worse, ARB is proposing to further differentiate unspecified power from system-specific power, where it determines that the emission rates of the system are above the default emission factor of unspecified power. Clearly, the goal of this proposal is enhanced accuracy. However, SMUD is concerned that, once again, improved accuracy will have the unintended consequence of reduced liquidity at key energy trading hubs in the West. At some point, ARB should ask itself if it is striking the right balance between accuracy and liquidity. With greater accuracy, presumably comes better accountability, but already at a greater cost to SMUD ratepayers, and potentially at an even higher cost with this new proposal.

*Identifying system power on the NERC e-tag precludes buyers from knowing the true carbon cost.*

SMUD is concerned that, under the staff proposal, electric power importers will not know the total cost of power at the time transactions are executed because the NERC e-tag is created after the transaction is made. In typical day-ahead markets, where most short-term trades are made, buyers purchase power very early in the day, and then wait for

the selling entity to issue the tag as the latter sorts through its inventory to efficiently schedule its resources. Thus, at the time of the trade, the buyer does not know from which system the seller is scheduling the sale. If the proposed system power emission factor is adopted, buyers would not understand what their true power import costs will be under current practice. For obvious reasons, this added level of uncertainty would also be detrimental to trading liquidity at the power hubs entering California. To eliminate this uncertainty, sellers would have to change the way they schedule their resources, which could be detrimental to efficiently maximizing their resources. In addition, new system power factors would create even more products, as each system would have its own emissions rate. SMUD is very concerned that the added complexity would compound an existing liquidity problem. SMUD recommends that ARB reconsider its ambition of greater accuracy and study the potential impacts of the proposal on liquidity.

*If ARB does adopt annual System Power factors, it should publish constant emission factors in advance. Regardless of adoption of System Power factors, ARB should publicize specified emission factors in advance.*

The ARB currently publishes actual specified emission factors in the year following the year in which power is delivered. By publishing emissions rates after-the-fact, ARB currently is placing energy buyers and sellers in the position of not knowing what their actual costs are when executing transactions or bidding into the CAISO markets. This is a significant barrier to market function that was created by the Cap-and-Trade Regulation. SMUD advises against adopting an after-the-fact revision of the proposed System Power emission factors out of a similar concern. Currently, Bonneville Power Administration and Power-Ex both have fixed emission factors, which boost the appeal of their products in the market. SMUD proposes that all emission factors, specified and unspecified and System Power factors, if necessary, be published prior to the beginning of the year in which power is delivered, and remain effective for the compliance year.

*Briefly, SMUD would like to touch upon several other proposed changes.*

SMUD advocates that ARB clarify its language with respect to ACS Power Path Outs. It is currently unclear whether ACS Path Outs that are not acquired as specified power are to be treated as specified or unspecified power.

With regard to proposed subsection 95111(a)(4)(A)(3), it is our view that establishing an additional, documented basis for busbar claims for specified power seems redundant. Consider that the receiving plant is the first point of delivery identified on the NERC e-tag. In this case, it is a given that the power delivered is received at the busbar, since the busbar substation is typically located within several hundred feet (and no more than several miles) from the facility. Requesting additional documentation from the purchaser to this point is unnecessary. Rather, the ARB might consider requesting from the resource (as part of the ARB's specified certification process) a documented basis for

busbar claims, since the purchaser is unlikely to possess additional documentation beyond what is on the e-tag.

Regarding the proposed revision to subsection 95111(a)(5)(D), assigning a transmission loss factor of 1.02% to ACS power seems inconsistent with how the RPS Adjustment is calculated because when RECs are used to offset unspecified power, the calculation does not account for whether 2% losses were applied to the unspecified import calculation. For consistency, the RPS Adjustment calculation should also take into account whether the 2% losses were applied to the unspecified source. This methodology should apply to System Power as well. If the Adjustment is made to a source with an emission factor that exceeds the default the rate of 0.428 MT of CO<sub>2</sub>e/MWh, and the EPE is charged at the higher rate, it should be allowed to offset that higher rate through the RPS Adjustment.

The requirement that meter data be retained for claimed specified sources per section 95111(g)(1)(N) is reasonable, and SMUD supports this approach. SMUD would also like to express its appreciation at the ARB's willingness to defer to industry standard for the monthly true-ups.

Beyond SMUD's aforementioned concerns, we are committed to the ARB's mission, and we fully support the MRR program. Thank you again for the opportunity to provide feedback on this issue.

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cc: Corporate Files