Adrianna B. Kripke
Senior Environmental Counsel

San Diego Gas & Electric Company
8330 Century Park Court, CP32C
San Diego, CA 92123
Tel: 858-654-1536
akripke@semprautilities.com

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

RE: Comments on 45-day Cap-and-Trade Regulation Changes

Dear Board Members:

San Diego Gas & Electric (SDG&E) respectfully submits the following comments in response to the California Air Resources Board (ARB) Staff-proposed changes to the cap-and-trade regulation promulgated on August 2, 2016. SDG&E appreciates the changes to the regulation that make compliance and reporting less burdensome including registration, disclosures and provisions in the cap-and-trade regulation that will allow the cap-and-trade program to satisfy Environmental Protection Agency requirements for the Clean Power Plan. SDG&E supports the continuation of the cap-and-trade program with its proposed measures to control costs including offsets, linkages with other jurisdictions, allocation of allowances to electric distribution ratepayers, continuation of the Allowance Price Containment Reserve (APCR), and the ability to borrow from future years to fill the APCR if necessary.

These comments focus on Greenhouse Gas (GHG) accounting, which is an important element in measuring the success in meeting the State's 2030 goals. Specifically, the Board should not adopt the ARB Staff-proposed changes to provisions with respect to "direct delivery" of renewable energy and the "Renewable Portfolio Standard (RPS) Adjustment." The Board should instead require Staff to enforce the cap-and-trade regulation as adopted by the Board and approved by the Office of Administrative Law in 2011, and adopt the clarifications proposed by SDG&E. The current ARB Staff interpretation (made known to compliance entities in July 2015), and the Staff-proposed changes to reinforce that interpretation, is complicated, deprives electric load serving entities of the GHG reductions contemplated by the State's RPS regulations, and encourages leakage. This occurs both in the bilateral market and in the California Independent System Operator's (CAISO's) Energy Imbalance Market (EIM). In addition, Staff's interpretation of direct delivery does not allow the use of Renewable Energy Credits (RECs) to determine the magnitude of the RPS Adjustment, creating an incredibly difficult barrier to accounting for the GHG reductions from these renewables. Finally, the Board should not eliminate the Qualified Exports (QE) Adjustment provisions of the cap-and-trade regulation related to GHG accounting.

These comments also address several other Staff-proposed changes including allowance consignment requirements, the Voluntary Renewable Energy (VRE) program, the treatment of unsold allowances, and return of allowance value to energy-intensive trade-exposed (EITE) entities.

A. Proposed Staff Changes to Direct Delivery Will Increase Leakage

The cap-and-trade regulation as adopted by the Board and approved by the Office of Administrative Law in 2011 required direct delivery of renewables to include the retired RECs associated with the electricity delivered. The specific language of section 95852(b)(3)(D) states unambiguously, "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." The cap-and-trade regulation requirement as written and implemented in 2013 required that the energy from directly delivered renewables must be bundled with their RECs. This regulation worked well in 2013. The bundling requirement was made optional by ARB Staff in July 2015, and ARB Staff made all affected entities change their 2013 and 2014 compliance reports. This change created difficulties with the RPS Adjustment compliance since the straight-forward use of RECs could not be used to show emissions reductions for this out-of-state power. The accounting is so difficult that ARB Staff has proposed to remove the RPS Adjustment and ignore the GHG reductions from these renewables deemed delivered to California by the California Energy Commission (CEC). But equally important, this change may promote significant leakage.

Under the regulation as adopted by the Board in 2011, the requirement to provide RECs assured that the supplied electricity was from incremental renewable resources built to reduce GHG of California's electric sector. Staff's reinterpretation of 95852(b)(3)(d), and deletion of the section in the proposed regulation, opens the door for specified resource contracts with existing out-of-state resources. Any new importer would be free to sign contracts with renewables built to meet RPS standards in surrounding states and existing hydroelectric facilities. The other state would get the RPS credit, while the California importer would simultaneously be able to "directly deliver" renewable energy without the RECs. This could create significant leakage as fossil resources likely would backfill the exports to California to replace the power originally built to serve load in the exporting state, the so-called "secondary effect." The Board has an obligation to minimize leakage and should do so by rejecting Staff's interpretation and proposed regulation change.

<u>SDG&E Recommendation</u>: ***The Board should reject Staff-proposed deletion of section 95852 (b)(3)(D) and require ARB Staff to interpret the regulation as written. Alternatively, the Board could adopt the SDG&E-proposed revision to section 95852(b)(3), which 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 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.***

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. **<u>If any of the following criteria are not met, then delivered electricity must be reported as an unspecified source pursuant to section 95852(b)(1)(C).</u>**

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

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(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 **<u>and the electricity importer must report and verify its exclusive rights to the RECs (i) as the facility operator with retained rights to the RECs or (ii) by having the right of ownership or a written power contract, as defined in MRR section 95102(a)</u>**.

B. The RPS Adjustments Plays an Important Role in Reducing GHG Emissions and Should Remain Part of the Cap-and-Trade Regulation

SDG&E urges the Board to continue the RPS Adjustment as it was intended to be used by the Board and to adopt SDG&E's proposed clarifications to the RPS Adjustment.[1] As SDG&E discussed in its January 4, 2016 comment letter, these clarifications support a plain meaning interpretation of the regulations, while maintaining the integrity of the cap-and-trade program and protecting the significant early investments in renewable energy made by utilities on behalf of California ratepayers.

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[1] SDG&E, Pacific Gas & Electric Company, and Southern California Edison Company detailed these clarifications in their October 19, 2015 comment letter, which is attached.

ARB Staff, however, has not incorporated the clarifications into the draft amendments to the regulations. Instead, Staff has proposed eliminating the RPS Adjustment after 2020. These Staff-proposed changes fail to recognize the RPS program's important role in reducing GHG emissions.[2] These actions (1) unfairly change the rules for claiming the RPS Adjustment as codified in the plain text of the regulations as adopted by the Board, (2) devalue California utilities' significant investments in renewable electricity, (3) increase the cost of investments in renewable electricity, and (4) increase barriers for California to achieve its 2030 goals for reducing GHG emissions. To avoid these undesirable policy outcomes, SDG&E requests that the Board reject Staff-proposed changes that complicate demonstration of GHG reductions of out-of-state renewables deemed delivered to California by the CEC and decline to eliminate the RPS adjustment post-2020.

The SDG&E-proposed clarifications would confirm that an out-of-state importer must meet all existing criteria for delivered electricity from a specified source, including provision of REC serial numbers, to report the electricity as a specified renewable. If the out-of-state importer cannot meet criteria, it must report the electricity as unspecified power or from an asset-controlling supplier. The entity that owns or has permission to use the RECs would claim the renewable attribute of that electricity as an RPS Adjustment, offsetting the emissions of the substitute power imported under the cap-and-trade program.

SDG&E Recommendation: ***The Board should adopt the SDG&E-proposed revision to section 95852 (b)(4) clarifying that an RPS Adjustment cannot be claimed for electricity that meets the criteria of section 95852 (b)(3). Together, these revisions will maintain the environmental integrity of the cap-and-trade program and protect the GHG benefits of California ratepayers' significant investments in renewable electricity.***

(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.

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

C. Qualified Export Adjustment Is Needed

ARB Staff proposes to eliminate the qualified export (QE) adjustment to imported electricity. The QE adjustment is a deduction to a compliance obligation on a megawatt-hour-basis to electricity that is exported out of California in the same hour as electricity imported into the State by the same electric power entity. This provision is currently in the regulation in an effort to calculate a reduction in compliance obligation associated with electricity that was not generated in California and did not serve California load (generally called wheeling of electricity). Staff proposes to eliminate the QE adjustment because over the first compliance period, there was a 50 percent increase in the use of the QE Adjustment. Staff's conclusion is that the QE adjustment reflects a change in scheduling and transaction

[2] See the attached January 4, 2016 SDG&E comment letter.

procedures in order to lower GHG compliance obligations and not wheeling transactions. However, Staff's conclusion has not been supported by any analysis and would artificially increase California measured emissions for wheeled power. Power that is not generated in California and does not serve California load should not be subject to a GHG compliance obligation; the Board should reject the proposed change in regulation.

The change is purported to be based on a study by Staff that has not been released to the public, so it is not clear whether ARB Staff accounted for the expansion of the CAISO to include a Nevada electric cooperative, Valley Electric Association (VEA), during the first compliance period. This non-California entity may have increased the use of the QE Adjustment through scheduling and transaction procedures in order to eliminate GHG compliance obligations, but it is a correct use of the QE adjustment since VEA is not in California. Power that is wheeled through California, that was not produced in California nor consumed in CA, should not increase California's measured GHG. If the change in the use of the QE Adjustment was not due to increased wheeling and the addition of VEA, Staff should propose a solution that will not eliminate wheeling power through California and will not incorrectly place a GHG compliance burden on VEA customers.

<u>SDG&E Recommendation</u>: ***The Board should reject proposed changes in section 95802 deleting the definition of qualified export should be rejected as should the deletion of the QE Adjustment in the compliance obligation in section 95852 (b)(1)(B).***

D. EIM Market Purchasers Should Have a Compliance Obligation Only for Electricity Deemed Delivered

The CAISO coordinates and provides operational instructions to a large number of electric power plants in order to equate supply and demand of electricity for about three-fourths of the electricity demand of residential, commercial, and industrial customers within California (the remainder is supplied by publicly-owned utilities (POUs) that are their own balancing authority, e.g., Los Angeles Department of Water and Power). As a part of its operations, CAISO facilitates a market contracting for power a day in advance and also operates a real-time market to make up the difference between the forecasted market energy supply and demand. In 2014, CAISO expanded the real-time market to include out-of-state entities in the Energy Imbalance Market. ARB Staff has concluded that this market expansion has resulted in an incomplete accounting of the GHG emissions associated with power that serves California's load.

ARB Staff states that CAISO's EIM creates a secondary emissions effect for which EIM purchasers should have a compliance obligation, "Clean resources with a lower deemed-delivery bid price are selected for "deemed-delivery" to California, while higher-emitting power plants with a higher deemed-delivery bid may be the actual plants dispatching to serve California load."[3]

Staff's interpretation of direct delivery of renewable power without RECs is responsible for the secondary emissions effect. If direct delivery of renewables requires RECs, as in the original Board-approved regulation, then only importers entitled to claim the power as renewable would benefit, eliminating the need to track secondary dispatches. Therefore, compliance entities who participate in the EIM market should not have any additional compliance obligations for secondary emissions effects. In addition, the method for adjusting for secondary emissions (after-the-fact use of a computer model) does not meet the ARB standards for accuracy. The impact of an after-the-fact unknown uplift charge for EIM purchasers would likely reduce use of the EIM since compliance entities would not be able to control the GHG emissions of such purchases.

The CAISO EIM market optimization is guided by ARB regulations and Federal Energy Regulatory Commission (FERC) regulations. ARB regulations, as incorrectly interpreted by Staff, assign a zero GHG compliance obligation to zero GHG resources that do not have associated RECs rather than treating the emissions as

[3] ISOR, page 52.

unspecified or from an asset-controlling supplier. FERC requires CAISO to cap the GHG cost bid at the expected GHG compliance cost as determined by the ARB cap-and-trade regulation. The CAISO computer model then determines imported EIM energy by selecting the lowest cost out-of-State electricity willing to be deemed delivered to California and receive a cap-and-trade compliance obligation. If this is the electricity deemed delivered to California for consumption by California electric load, there should be no secondary effect considered since that is the power delivered to California.

According to ARB Staff, this accounting system is inconsistent with the requirement in AB 32 that ARB account for the total GHG emissions in the State, including all GHG emissions from the electricity delivered to and consumed in California. But it is the same GHG accounting system ARB staff has adopted for bilateral transactions by making RECs optional for specified imports. If leakage occurred, it is due to the ARB Staff's incorrect interpretation of the cap-and-trade regulation's direct delivery requirements, not the CAISO optimization process. EIM purchasers should not be burdened with secondary effects that bilateral purchasers of the same power are not. If a new importer enters into a contract to buy existing large scale hydro power, the same power as might bid into the EIM market, it will have the same secondary emissions impact, yet the importer would not have an obligation for secondary emissions effects. EIM participants should be given identical treatment as bilateral purchasers. The Board should reject the Staff-proposed adjustment for secondary emissions effects. Instead, the Board should keep the current requirements for direct delivery of renewable power by requiring RECs be delivered for the power to be considered zero GHG, with changes to the GHG compliance obligation built into bids in the EIM market.

The Board should also reject Staff-proposed changes to the resource shuffling provisions. As a market, neither sellers nor buyers are determining whether particular electricity is deemed delivered to California. It is the ARB rules, the FERC rules, and the CAISO optimization that are responsible for any leakage that occurs as a result of the shuffling of resources deemed delivered to California; therefore, the first deliverer should not be held responsible.
SDG&E Recommendation: ***The Board should reject the following proposed changes:***

- ***The change in the definition of an electricity importer to include the EIM purchaser in section 95802.***
- ***The $CO_{2}e_{EIM\ adjustment}$ in the compliance obligation in section 95852 (b)(1)(B).***
- ***The additions to section 95852(b)(2)(A)(10).***

E. Unsold Allowances Should Not Be Taken Off the Market at This Time

Staff has proposed to change the treatment of unsold allowances, proposing amendments to the cap-and-trade regulation to include a method for transferring state-owned allowances that remain unsold for 24 months to the APCR, with the amendments taking effect by January 1, 2018. In other words, beginning in 2018, any previously unsold allowances owned by the State that have been in ARB's Auction Holding Account for 24 months would be transferred to the APCR.

The Staff-proposed change would only serve to increase allowance costs for compliance entities. This additional measure to tighten the market is premature and may be unnecessary if the current situation is due entirely to legal uncertainty regarding the cap-and-trade regulation (review of the Low Carbon Fuel Standard prices indicates that legal uncertainty can greatly influence the market). Further, while Staff states that this proposed amendment can also be viewed as requiring the completion of eight auctions before the transfer, it is possible under the other auction rules regarding unsold allowances that these are only offered at a single auction. Other rules such as putting the oldest vintage unsold allowances back in the auction first should also be included. The Board should make no change in the cap-and-trade regulation at this time with respect to unsold allowances.

SDG&E Recommendation: ***The Board should reject new section 95911(g).***

F. Current Consignment Level Increases of 5% per year for NG Supplier utilities should continue

SDG&E urges ARB to maintain the current 5% annual increase in required allowance consignment levels for natural gas suppliers. The most recent Initial Statement of Reasons (ISOR) that accompanies the 2016 Proposed Amendments indicates that staff is "evaluating an acceleration of the natural gas supplier consignment requirement" for post-2020 program years.

Alternative consignment levels have already been evaluated. Less than three years ago, California's natural gas utilities and other stakeholders worked together with ARB staff to determine the appropriate consignment rate of allowance allocations under the Cap-and-Trade Regulation. This effort included extensive policy discussions resulting in ARB's decision of starting with a minimum 25% consignment in 2015 and gradually increasing the minimum by 5% per year to 50% in 2020 with the goal of 100% consignment by 2030 (see page 16 of the September 4, 2013 Initial Statement of Reasons-Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms[4] and page 66 of the May 2014 Final Statement of Reasons-Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms[5]). Any acceleration of consignment requirements overlooks the documented reasoning for a more gradual transition to a full price signal, an approach that remains sound today.

SDG&E believes it is imperative for ARB to consider cost impacts from the Cap-and-Trade regulation in light of all future customer bill impacts for both natural gas and electricity, and to take into account the totality of bill increases that natural gas customers will be facing, especially low income households and small businesses.

<u>SDG&E Recommendation</u>: ***The Board should continue the 5% annual increase of NG Supplier utility consignment levels.***

G. The VRE Program Should Continue to Receive Funding Post-2020

ARB Staff have proposed keeping the VRE program and amending eligibility, which SDG&E supports. However, the Staff proposes to remove the funding of allowances for the VRE Program post-2020 due to lack of utilization of the program to date. The Board should consider providing allowances post-2020 as utilities are ramping up Green Tariff Shared Renewables (GTSR) programs. These programs require Green-e certification for compliance. Maintaining Green-e certification in California in turn requires retiring allowances in the C&T program. These GTSR programs are currently enrolling customers, and participation will result in ongoing demand for VRE program allowances through their 20-year statutory program duration. In addition to IOU programs, there are also Green-e certified CCA programs, and POU voluntary renewable programs with similar requirements to reduce greenhouse gases by retiring allowances.

The funding of allowances for the VRE program could be supplied after the fact post-2020, so that other sectors are not prematurely restricted. Further, the supply could come from the supply of unsold allowances. Finally, SDG&E would suggest lowering the assigned emissions factor of the VRE program from 0.428 MTCO2e/MWh to approximately 0.3 MTCO2e/MWh to accommodate increased participation without proportionally increasing the overall number of allowances needed for retirement. The 0.3 MTCO2e/MWh figure represents the avoided portfolio emissions on a procurement basis and so more accurately portrays the GHG benefits of the program.

<u>SDG&E Recommendation</u>: ***The Board should amend the VRE program in section 95841.1 as follows:***

- ***Change the factor in section 95841.1 (c)to convert MWh to MT from $EF_{unspecified}$ to 0.3 MT CO2e/MWh.***
- ***Add a new section 95841.1(d) supporting funding VRE program, possibly on an after-the-fact basis, initially beginning funding with unsold allowances.***

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[4] http://www.arb.ca.gov/regact/2013/capandtrade13/capandtrade13isor.pdf
[5] http://www.arb.ca.gov/regact/2013/capandtrade13/ctfsor.pdf

H. The EITE Return of Allowance Value Should Remain with the EDUs

The California Public Utilities Commission (CPUC) chose to require that IOUs return allowance value to industrial entities using product and energy-based benchmarks comparable to ARB's benchmarks. This process was very slow to implement, and so the according to ARB Staff, the CPUC requested that ARB directly allocate allowances to industrial covered entities to cover the carbon cost associated with their purchased electricity.

The Board should reject this request. Now that the CPUC has developed the calculation process and will be delivering the EITE allowance value in October 2016 for the years 2013 through 2016, there is no benefit to shifting the calculation back to ARB and potentially causing a second, long delay due to the complication of figuring out POU and electrical cooperative industrial covered entity return calculations. This is a complicated issue given that POUs and electric cooperatives do not have to reflect the full GHG cost in rates and the potentially large number of entities with different calculations (there are 46 POUs and electric cooperatives).

SDG&E Recommendation: ***The Board should reject this proposed change that is being considered by Staff (though not in this set of proposed changes) regarding EITE allowance return for indirect electricity emissions or should restrict it to the EITE customers of the IOUs so as not to delay future returns to EITE customers.***

Thank you for your consideration. Please contact me if you have any questions.

Sincerely,

Adrianna B. Kripke