



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

November 4, 2016

Mr. Richard Corey, Executive Officer
California Air Resources Board
1001 I Street
Sacramento, CA 95812-2828

RE: Comments on October 21, 2016 Cap-and-Trade Workshop

Dear Mr. Corey:

San Diego Gas and Electric Company (“SDG&E”) respectfully submits its comments to the California Air Resources Board (“ARB”) on the potential changes to the California Cap-and Trade Regulation discussed at the October 21, 2016 workshop (and in the two papers posted with the workshop notice). SDG&E appreciates the continued opportunity to work with ARB staff on improving the Cap-and-Trade regulation and extending the program beyond 2020. SDG&E offers comments on the following five issues discussed in the workshop:

- 1. The Cap-and-Trade program should not be altered to deal with local air quality problems.**
- 2. Continuation of the customer ‘cost burden’ principle past 2020 is the right approach to determining utility allowance allocations, but the Informal Staff Proposal double counts expected reductions and underestimates the cost burden.**
- 3. Inter-agency coordination is necessary to ensure that policies seeking to reduce greenhouse gases from the electric sector are complementary. SDG&E appreciates the proposed continued use of the Renewable Portfolio Standard (RPS) Adjustment, but requests clarifying the language of direct delivery to achieve consistency across agencies regarding the greenhouse gas (GHG) emissions benefits of out-of-state renewable energy built by California load serving entities pursuant to the State’s RPS program.**
- 4. Inter-agency coordination is necessary to ensure consistent market signals are provided to the electric sector to enable cost-effective compliance. SDG&E appreciates the ARB change in the approach to “secondary dispatch emissions” in the California Independent System Operator (CAISO) Energy Imbalance Market (EIM) market, but believes ARB needs to reconsider its position that a change is needed in the regulation.**
- 5. Continuation of a smooth, gradual transition in the amount natural gas utilities consign to the auction post-2020 is preferred to avoid rate shock.**

ARB Should Not Change the Cap-and-Trade Program to Deal with Local Air Quality Issues

SDG&E supports a well-designed Cap and Trade program to help the State achieve its post-2020 goals. A well designed market mechanism can keep total program costs down while achieving the State’s GHG goals. SDG&E generally supports the Cap-and-Trade program extension post-2020 as proposed since

the market design includes mechanisms to control costs including the use of offsets, appropriate linkages with other jurisdictions, and the continuation of the Allowance Price Containment Reserve.

A Cap-and-Trade program for GHG should not attempt to address local air quality issues since the criteria pollutant emissions associated with a GHG reduction vary dramatically depending on the type of emission source.^{1,2} It is much more efficient and effective to deal with local air quality issues through Scoping Plan complementary measures targeted to the type of GHG emissions sources with high criteria co-pollutant emissions that are located in disadvantaged communities.³

Relieving electric customer ‘cost burden’ is the right approach to continuing utility allowance allocations past 2020, but the Informal Staff Proposal falls short.

First, the Informal Staff Proposal double counts expected reductions, and hence underestimates the cost burden, by including both the change from the 50 percent RPS and the cap adjustment factor. The reduction should only be the larger of the two reductions. ARB Staff should not expect that electric utilities will reduce emissions by 40 percent from expected emissions in 2020 in addition to the reductions that will occur in achieving a 50 percent RPS.

Second, if a load forecast is used, it should be a California Energy Commission (CEC) forecast that excludes load reductions from renewable distributed generation and energy efficiency. The reason for using a load forecast that excludes these factors is to acknowledge investments in renewable distributed generation and energy efficiency are part of GHG reduction efforts. The primary reason that some load forecasts, like SDG&E’s, are flat is that they already include large amounts of rooftop solar and energy efficiency. By using an electric distribution company load forecast that includes rooftop solar and energy efficiency, these significant investments are ignored when assessing allowance allocation. Otherwise stated, electric distribution companies with high levels of rooftop solar and energy efficiency should not be disadvantaged because of their more aggressive pursuit of these GHG measures, just as ARB has not disadvantaged electric distribution companies that have aggressively acquired renewables.

Finally, SDG&E supports the ARB in finding a conservative way to allocate allowances to the electric sector for electrification activities that reduce GHG emissions from other sectors. This effort is consistent with the legislative intent of SB 350, which is to help offset the ratepayer impacts of vehicle electrification through Cap-and-Trade allowance allocations. Any effort should not require expensive metering to document increased load, but rely on estimates from the expected emissions based on the type and number of units of technology installed, and adjusted for the RPS percentage.

¹ Brian Tarroja, PhD., Senior Research Scientist, Advanced Power and Energy Program, University of California, Irvine, “Transition to a Low-Carbon Economy: Air Quality Considerations,” 2015 Integrated Energy Policy Report Workshop, July 24, 2015, slide 16, shows eliminating the entire electric sector GHG emissions would have minimal impact on air quality compared to other GHG emission sources.

² For example, the electric sector has very low criteria pollutant co-benefits since those emissions have been controlled through local air quality regulations. See California Energy Commission, “2016 Draft Integrated Energy Policy Report Update,” Table 2, page 38, showing electricity production is less than 1% of most criteria pollutants while 12 percent of Statewide GHG in 2014.

³ See the analysis of University of California economics professor, Meredith Fowlie, in her Energy at Haas blog article, “Is Cap and Trade Failing Low Income and Minority Communities?,” October 10, 2016.

Inter-agency coordination is necessary to ensure that policies seeking to reduce greenhouse gases from the electric sector are complementary. ARB should reconsider its guidance on the RPS adjustment.

SDG&E appreciates ARB not eliminating the RPS Adjustment so that the Cap-and-Trade regulation continues to recognize the State's program to reduce GHG through increasing renewable generation. SDG&E requests that ARB revise the guidance language defining "direct delivery" to require renewable energy credits (RECs) for direct delivery for out-of-state eligible California RPS resources only.⁴ This approach would harmonize ARB regulations with CEC, California Public Utilities Commission (CPUC), and Federal Trade Commission (FTC) treatment of RECs as inclusive of all environmental attributes.⁵ This modification to the guidance language would also be consistent with the contracts signed by California load serving entities pursuant to the RPS program requirements, as well as in compliance with legislative direction that ARB coordinate with other state agencies to avoid duplicative or inconsistent requirements and ensure that early movers (such as SDG&E) receive the appropriate credit for their GHG reduction activities.⁶ Further, this treatment would not impact other out-of-state non-RPS renewables or RPS renewables contracted for by other states, avoiding any legal issues.⁷

⁴ Eligible California RPS resources include electricity procured from an eligible California renewable energy resource reported pursuant to MRR that meets the following conditions to be included in the calculation of the RPS adjustment: The electricity importer must have: (1) Ownership 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 or contract rights to the electricity and associated RECs generated by the eligible renewable energy resource, as verified pursuant to MRR.

⁵ In D.07-05-057 and D.08-08-028, the CPUC indicated the REC contains all the green attributes including "any avoided emissions of carbon dioxide (CO₂), methane (CH₄), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) 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 altering the Earth's climate by trapping heat in the atmosphere." The CPUC stated that when a REC is retired "all its attributes are retired." Similarly, the CEC has the same interpretation per CEC-300-2015-001-ED8-CMF, page 83. Federal Trade Commission letter dated February 5, 2015 to Mr. R. Jeffrey Behm concerning statements Green Mountain Power Corporation made to the public about the renewable energy generation facilities it operates, "In addressing these issues in the Green Guides, the Commission did not provide specific guidance on the content of REC-related claims made by power producers who generate renewable energy as a substantial portion of their business. However, **it did warn that power providers that sell null electricity to their customers, but sell RECs based on that electricity to another party, should keep in mind that their customers may mistakenly believe the electricity they purchase is renewable, when legally it is not.** Accordingly, it advised such generators to exercise caution and qualify claims about their generation **by disclosing that their electricity is not renewable.**" [Emphasis added] In D.07-05-057 and D.08-08-028, the CPUC indicated the REC contains all the green attributes including "any avoided emissions of carbon dioxide (CO₂), methane (CH₄), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) 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 altering the Earth's climate by trapping heat in the atmosphere." The CPUC stated that when a REC is retired "all its attributes are retired." Similarly, the CEC has the same interpretation per CEC-300-2015-001-ED8-CMF, page 83.

⁶ See Cal. Health & Safety Code §§ 38501(f-h), 38561(a), 38562(b)(1 and 3) and (f).

⁷ ARB may want to consider all RPS resources to 1) avoid double-counting the GHG attribute, and 2) allow entities like PacifiCorp to import null power from RPS resources into the EIM. ARB Staff's current interpretation of "direct delivery" does not require RECs. A resource built to meet RPS requirements in other states would be counted as zero GHG by the State owning the REC, and ARB would count the null power (power without the REC) delivered to CA as zero-GHG as well.

At the October 21, 2016 workshop, ARB proposed to treat RPS eligible resources differently from other out-of-state renewable resources in the EIM, assigning zero GHG to the RPS eligible resources and avoiding an average emissions rate adder. While SDG&E is not endorsing the ARB approach in the EIM market, the fact that ARB would propose treating RPS eligible resources differently from other renewables shows ARB may be amenable to a different treatment of direct delivery requirements for RPS eligible resources owned or contracted for by California load serving entities.

Failing to address this direct delivery issue would continue the current direct contradiction between the Cap-and-Trade program regulations and the CEC, CPUC and FTC interpretation of the RPS program. The continuation of this contradiction is inconsistent with the direction provided by the California Health & Safety Code,⁸ which seeks to ensure consistency across programs and avoid penalizing early action to reduce GHG emissions. Misalignment of RPS treatment between agencies, as is currently the case, will only lead to perverse results such as allowing a third party to claim zero-GHG benefits for which they have no contractual rights.

Inter-agency coordination is necessary to ensure consistent market signals are provided to the electric sector to enable cost-effective compliance. ARB should reconsider its position that changes are needed in the EIM market.

With so many policies and programs guiding SDG&E towards a decarbonized future, it is necessary to ensure that the agencies, and the programs they administer, work together. Cross-agency initiatives include Integrated Resource Plans, 50% RPS requirements, the CAISO expansion, and utility requirements to develop and propose transportation electrification programs to the CPUC. With the electric sector playing an important role in the state's long term climate change strategy, it is imperative that state agencies work to create a synergistic regulatory environment with the common goal of reducing greenhouse gases, whether or not it is deemed to reduce GHG "for California" in the ARB GHG accounting framework.

One clear example of the need for consistency is the recent focus on "secondary emission effects" that result from the CAISO EIM optimization. The CAISO has shown the EIM provides a net benefit to the environment through increased electricity market trading and the associated reduction in curtailment of renewable energy in California. However, it is the opinion of ARB Staff that the EIM market has resulted in an incomplete accounting of the GHG emissions associated with imported power that serves California's load and that GHG "for California" is increased.

However, ARB regulations, as currently implemented, assign a zero GHG compliance obligation to imported power whose e-tags indicate the energy was generated from out-of-state resources with no emissions. In the same manner, the CAISO modeling 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. SDG&E can see no difference between the ARB's current treatment of the power in the bilateral market and the current CAISO treatment of that exact same type of power in the EIM market.

⁸ See Cal. Health & Safety Code §§ 38501(f-h), 38561(a), 38562(b)(1 and 3) and (f).

Further, the CAISO's counter-factual analysis showing that there is no net GHG impact on the environment as compared to not having the EIM should be enough to let the EIM market continue as is. AB 32 includes a list of considerations for ARB to include in its program development, one of which is "overall societal benefits, including reductions in other air pollutants, diversification of energy sources, and other benefits to the economy, environment, and public health." The ARB is required to consider the societal benefits including the benefits to the economy and the environment. The fact that the EIM reduces GHG in the western U.S. should be a significant environmental benefit that should be considered since GHG is a global pollutant and the entire purpose of AB 32 is to reduce GHG.

The ARB should leave the Cap-and-Trade regulation as is with respect to the EIM since ARB is not imposing an added burden on similar transactions in the bilateral market. The imposition of new requirements may adversely affect the operation of the EIM, and the EIM has been shown to provide GHG reductions in California and the Western U.S. through efficient dispatch of resources and reduced curtailments of renewable energy.⁹ The application of a hurdle rate or an average emissions rate adder is a blunt force instrument that is divorced from the specific market conditions that exist within each settlement interval in the EIM. SDG&E is concerned that a hurdle rate or average emissions rate adder will unnecessarily interfere with efficient market decisions by market participants both within, and outside of, California.

ARB should maintain a smooth, gradual transition in the amount natural gas utilities consign to the auction to avoid rate shock.

The existing Cap-and-Trade Regulation sets forth a minimum consignment of natural gas suppliers' allocation of allowances that began at 25% in 2015 and increases by 5% per year, so that full consignment will be achieved by 2030. Allowances not consigned to auction may be retired for a natural gas supplier's compliance without the otherwise associated costs showing up in customer rates. This approach helps transition the cost of GHG-reduction into natural gas rates so that no rate shock is experienced. ARB's proposal to have 100 percent consignment in 2021 does not address the reasons for a gradual transition adopted just three years ago, which are still valid today. SDG&E urges ARB to continue with the consignment rate that was developed as an effective way to reduce impacts to California businesses and customers that use natural gas and maintain their support for the Cap-and-Trade program.



Adrianna B. Kripke
Senior Environmental Counsel
San Diego Gas & Electric Company

⁹ CAISO, Senate Bill 35 Market Study, "The Impacts of a Regional ISO-Operated Power Market on California," pages I-44-49.