



ORA

Office of Ratepayer Advocates

California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

<http://ora.ca.gov>

THE OFFICE OF RATEPAYER ADVOCATES' COMMENTS ON THE PROPOSED 15-DAY MODIFICATIONS ON AMENDMENTS TO THE CALIFORNIA CAP ON GREENHOUSE GAS EMISSIONS AND MARKET-BASED COMPLIANCE MECHANISMS

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I. INTRODUCTION

The Office of Ratepayer Advocates (ORA) is the independent consumer advocate within the California Public Utilities Commission (CPUC), with a mandate to obtain the lowest possible rates for utility services consistent with reliable and safe service levels, and the state's environmental goals.

ORA supports the efforts of the California Air Resources Board (ARB) staff to develop regulations for the extension of the Cap-and-Trade Program (Program) beyond 2020, while recognizing complementary policies in California to reduce greenhouse gas (GHG) emissions by 2030 and beyond. As stated in the Initial Statement of Reason: "AB 32 also requires ARB to work with other jurisdictions to identify and facilitate the development of integrated and cost-effective regional, national, and international GHG reduction programs."¹

ORA appreciates this opportunity to comment on the proposed 15-day modifications on amendments to the California cap on GHG emissions and market-based compliance mechanisms. ORA provides the following comments intended to support the alignment of ARB's proposed amendments to the regulations with the state's current and future policies for reducing GHG emissions. ORA focuses on developing strategies that minimize the cost impact on California's ratepayers, while maximizing the benefits from their investments in current and future programs to achieve the state's GHG reduction goals. At this point, ORA has a number of questions about the proposed 15-day modifications on amendments to the California cap on GHG emissions and market-based compliance mechanisms, and respectfully requests that ARB hold a public workshop or meeting to discuss its proposed bridge solution to energy imbalance market (EIM) imports and address stakeholder comments. Alternatively, ORA recommends that ARB provide written answers to stakeholder comments and questions, and provide another opportunity for comments on the proposed amendments.

¹ Staff Report: Initial Statement of Reasons, August 2, 2016 (ARB Staff Report), p. ES-1.

II. Proposed New Compliance Rules for EIM Imported Electricity

The ARB Staff's proposed amendments introduce a new compliance and reporting approach for EIM imported electricity. While the proposed new approach would not change the current reporting requirements for EIM participating resource scheduling coordinators pursuant to the Mandatory Reporting of Greenhouse Gas Emissions (MRR), the new approach would require the California Independent System Operator (CAISO) to report information regarding EIM imported electricity that is used to serve California load annually. ARB would use the information provided by CAISO to calculate the "outstanding emissions." Staff defines "EIM Outstanding Emissions" as:

"equal to the annual metric tons of CO₂e from electricity that is imported into California through CAISO's EIM but not otherwise accounted for by emissions reported by the EIM participating resource scheduling coordinators. These emissions are calculated pursuant to the requirements in MRR section 95111(h)(1)."²

The proposed approach would act as a bridge to support accurate accounting from EIM market operations while a long-term approach is being developed by CAISO.³ Staff stated that "this data can then be used to appropriately determine compliance obligations in the Cap-and-Trade Regulation."⁴ Staff indicated that the interim solution and the longer term solution are both necessary because the CAISO's current EIM model does not capture and report the full quantity of GHG emissions that result from imports that serve California load.

Section 95852(b)(1)(D) of the proposed amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation regulations⁵ includes additional provisions that would direct some unsold allowances to the Retirement Account to fully account for emissions from electricity imported through the CAISO EIM to "ensure environmental and market integrity of the Program."⁶

² Attachment A, *Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation*, p. 127.
<https://www.arb.ca.gov/regact/2016/capandtrade16/attacha.pdf>

³ Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information, p. 12. <https://www.arb.ca.gov/regact/2016/capandtrade16/15daynotice.pdf>.

⁴ Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information, p. 12. <https://www.arb.ca.gov/regact/2016/capandtrade16/15daynotice.pdf>.

⁵ Refer to page 127-128 of Attachment A, *Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation*,
<https://www.arb.ca.gov/regact/2016/capandtrade16/attacha.pdf>.

⁶ Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information, p. 13. <https://www.arb.ca.gov/regact/2016/capandtrade16/15daynotice.pdf>.

MRR Section 95111 (h) (1) and Section 95111 (h) (2) of the proposed modifications to the MRR regulations, contain the following proposed bridge solution reporting requirements for EIM imported electricity:⁷

(h) Reporting requirements for Imported Electricity in the Energy Imbalance Market (EIM):

(1) *Calculation of EIM Outstanding Emissions.* Each year after the verification deadline in section 95103(f), ARB will calculate “EIM Outstanding Emissions” using information reported annually by CAISO and Participating Resource Scheduling Coordinators with imported electricity in EIM. Annual information reported by CAISO and Participating Resource Scheduling Coordinators must be based on data for each 5- minute interval:

(A) “EIM Outstanding emissions” equals “Total California EIM Emissions” less “Deemed Delivered EIM Emissions” associated with electricity imported by EIM Participating Resource Scheduling Coordinators deemed delivered to California by the EIM optimization model.

Where “Total California EIM Emissions” equals the amount of emissions calculated by CAISO pursuant to section 95111(h)(1)(B).

(B) *Calculating Total California EIM Emissions.* Annually, based on each 5-minute interval, CAISO must calculate, report and cause to be verified, the CO₂ equivalent mass emissions associated with imported electricity in EIM using the following equation:

$$\text{CO}_2\text{e} = \text{MWh} \times \text{EF}_{\text{unsp}} \times \text{TL}^8$$

(C) *Deemed Delivered EIM Emissions.* Annually, based on each 5-minute interval, each EIM Participating Resource Scheduling Coordinator must calculate, report, and cause to be verified, emissions associated with electricity imported as deemed delivered to California by the EIM optimization model.

⁷ Attachment A, *PROPOSED AMENDMENTS TO THE REGULATION FOR THE MANDATORY REPORTING OF GREENHOUSE GAS EMISSIONS*, pp.A-98 to A-99.
<https://www.arb.ca.gov/regact/2016/ghg2016/attacha.pdf>.

⁸ Where: CO₂e = CO₂ equivalent mass emissions from Total California EIM electricity (MT of CO₂e); MWh = Megawatt-hours of EIM imports identified by CAISO to serve California load. EF_{unsp} = 0.428 MT of CO₂e/MWh; and TL = 1.02 (transmission loss factor). Attachment A, *PROPOSED AMENDMENTS TO THE REGULATION FOR THE MANDATORY REPORTING OF GREENHOUSE GAS EMISSIONS*, p. A-98. <https://www.arb.ca.gov/regact/2016/ghg2016/attacha.pdf>.

(2) Annually, CAISO will report, and cause to be verified, the following information:⁹

(A) Annual State-Wide Total for EIM Imports and Exports. Total annual imports and exports into and out of California in MWh, consistent with the results of the EIM optimization based on Real-Time Dispatch (RTD), and associated with (1) Total California EIM Emissions, and (2) Deemed Delivered EIM Emissions;

(B) Annual State-Wide Total for EIM Imports by Entity. Total annual imports into California in MWh, consistent with the results of the EIM optimization model based on Real-Time Dispatch (RTD), and associated with (1) Total California EIM Emissions, and (2) Deemed Delivered emissions, for each Participating Resource Scheduling Coordinator (PRSC) and for CAISO;

(C) Annual State-Wide Total for EIM Exports. Report total annual exports out of California in MWh, consistent with the results of the EIM optimization model based on Real-Time Dispatch (RTD), for each Participating Resource Scheduling Coordinator (PRSC) and for CAISO.

ORA submits the following questions regarding the proposed bridge solution for EIM imports:

1. Please clarify when and for how long the Staff bridge solution will take effect?
2. Would the proposed new approach for EIM imports impact the compliance obligations of covered entities? If the answer is yes, how would the covered entities reconcile the variance in compliance obligations resulting from the proposed new approach for EIM imports with their current compliance obligations?
3. Would the CAISO's proposed long-term solution for accurate accounting for EIM market operations result in different compliance obligations of covered entities as compared to the ARB's proposed bridge solution? If the answer is yes, how would the covered entities reconcile the variance in compliance obligations for under the ARB's proposed bridge solution with the compliance obligations under the CAISO's proposed long-term solution?
4. What is the definition of "Deemed Delivered EIM Emissions"?
5. Please clarify how ARB defines Real-Time Dispatch in terms of intervals?
6. How does ARB intend to use the proposed amendments in Section 95111 (h) (2) [subsections (A), (B) and (C)] of the MRR regulations?
7. Is the intent of the proposed bridge solution to determine annual EIM Outstanding Emissions by entity or for California in total?
8. In the proposed amendments to the MRR regulation in Section 95111 (h) (2) (B), please clarify how the Annual State-Wide Total for EIM Imports by Entity would be calculated?

⁹ Attachment A, *PROPOSED AMENDMENTS TO THE REGULATION FOR THE MANDATORY REPORTING OF GREENHOUSE GAS EMISSIONS*, p. A-99.
<https://www.arb.ca.gov/regact/2016/ghg2016/attacha.pdf>

9. In the proposed amendments to the MRR regulation in Section 95111 (h) (2) (A) and Section 95111 (h) (B), please clarify the difference between Annual State-Wide Total for EIM Imports in Section 95111 (h) (2) (A), and Annual State-Wide Total for EIM Imports... “for CAISO” in Section 95111 (h) (2) (B).
10. For the proposed amendments to the MRR regulation in Section 95111 (h) (2) (A) and (B), please clarify the difference between Annual State-Wide Total for EIM Exports in Section 95111 (h) (2) (A), and Annual State-Wide Total for EIM Exports... “for CAISO” in Section 95111 (h) (2) (B).
11. The proposed amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation in Section 95852(b)(1)(D) would retire some unsold allowances in the Auction Holding Account in the amount of EIM Outstanding Emissions. Please clarify if ARB is proposing to retire unsold allowances by the amount of California total EIM Outstanding Emissions, or retiring unsold allowances proportional to each entity’s EIM Outstanding Emissions, and please provide the rationale for proposing that method?
12. Public Utilities Code (PUC) Section 399.16, of the Renewable Portfolio Standards (RPS) statute identifies the electricity products that are eligible to comply with the RPS procurement requirements, including portfolio content category 2 (PCC2 or bucket 2), which allows for incremental electricity and substitute energy when procuring renewable resources.¹⁰ Do the proposed amendments treat emissions resulting from eligible imports under PCC2, as unaccounted for, and therefore include them in EIM Outstanding Emissions? If the answer is yes, ORA disagrees with ARB’s proposed inclusion of such imports within “EIM Outstanding Emissions,” because the RPS rules consider the entire output of a renewable energy facility covered by firmed and shaped contracts as renewable energy delivered to California.¹¹ In this situation, after paying a renewable premium for Renewable Energy Credits (RECs) in compliance with the RPS program, any importing utility (and therefore its ratepayers) would still be obligated to pay GHG compliance costs for renewable energy pursuant to ARB proposed rules.

If ARB proposes to include emissions resulting from eligible imports under PCC2 within “EIM Outstanding Emissions,” ORA recommends that ARB develop a mechanism to distinguish emissions associated with PCC2 imports from other unaccounted for emissions due to EIM imports.

Lastly, ORA requests that ARB Staff hold a public workshop or meeting to discuss its proposed bridge solution to EIM imports and address stakeholder comments. Alternatively, ORA recommends that ARB provide written answers to stakeholder comments and questions, and provide another opportunity for comments on the proposed amendments.

¹⁰ Under RPS rules, one of the portfolio content categories of eligible renewable energy resources, as defined in PU Code 399.16 (b) (2) is: “Firmed and shaped eligible renewable energy resource electricity products providing incremental electricity and scheduled into a California Balancing Authority.”

¹¹ Refer to CEC Guidebook, Renewable Portfolio Standard Eligibility, 3rd ed., January 2008.
<http://www.energy.ca.gov/2007publications/CEC-300-2007-006/CEC-300-2007-006-ED3-CMF.PDF>.

III. Proposed Amendments to Post-2020 Natural Gas Supplier Allowance Allocation and Consignment

ARB allocates allowances to natural gas suppliers. Natural gas suppliers do not pay for allocated allowances, but are required to consign a portion of the allocated allowances to ARB's auctions, where the proceeds from the sale of these allowances are returned to ratepayers. The remaining allocated allowances are to be used by natural gas suppliers to reduce their compliance obligations. The reduction in compliance costs benefits the customers of natural gas suppliers by reducing their gas bills, because natural gas suppliers recover their compliance costs through rates.

The current regulation required natural gas suppliers to consign at least 25 percent of the allocated allowances to ARB's auctions in 2015. Under the current regulations, starting with 2015 budget year, the amount of allowances that must be consigned to auction increases by 5 percent each year until 2020 budget year, when 50 percent of the allocated allowances must be consigned to the auction.¹²

The proposed amendments would not change the existing natural gas supplier allowance consignment through 2020. The proposed amendments address the post-2020 period, and would require natural gas suppliers to consign 100 percent of their allocated allowances beginning in 2021. In addition, the proposed regulations would increase the annual rate of decline of the emission cap beginning in 2021 through 2031. These cap adjustment factors will constitute a linear decline from the 2020 GHG emissions target to the 2030 emissions target. The proposed adjustment factors are used for calculating allocations to all entities eligible for allowance allocation. Thus, the number of allocated allowances will decrease in proportion to the annual allowance budget.¹³

The proposed amendments explain that:

"Full consignment is needed to generate appropriate incentives to reduce natural gas-related GHG emissions, remove inequities between covered and non-covered entities that consume natural gas, and encourage GHG-reducing electrification. Requiring full consignment for natural gas suppliers is also consistent with the existing full consignment requirement for investor-owned electrical distribution utilities."¹⁴

The proposed amendments note that "[t]his approach maintains the initial regulatory package's emphasis on reaching full consignment, while postponing changes until after the third

¹² Title 17, CCR, ARTICLE 5, § 95893. Table 9-4 "Percentage Consignment Requirements for Natural Gas Utilities by Year." Official Legal Edition <http://www.oal.ca.gov/CCR.htm>.

¹³ *First Notice of Public Availability of 15-Day Amendment Text, Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation, Attachment D*, p.6. <https://www.arb.ca.gov/regact/2016/capandtrade16/attachd.pdf>

¹⁴ *Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information*, p. 19. <https://www.arb.ca.gov/regact/2016/capandtrade16/15daynotice.pdf>

compliance period gives affected entities several years to prepare before this regulatory change takes effect.”¹⁵

By 2020 the current regulation allows natural gas suppliers to use 50 percent of their allocated allowances to reduce the cost of compliance. Beginning in 2021, the proposed amendments would prevent natural gas suppliers from using any of their allocated allowances to reduce compliance costs. Instead, the proposed amendments would require natural gas suppliers to consign 100 percent of the allocated allowances to ARB’s auctions. This is likely to produce a significant rate increase in a period of only one year. Even though the proceeds of the allowances consigned to auctions are returned to customers, it is unlikely that the amount returned will offset the rate increase that results from decreasing the amount of allowances that can be used for compliance from 50 percent to zero in a single year.

Unlike investor-owned electric distribution utilities, which have options to meet electric demand using renewable resources, natural gas suppliers have limited available natural-gas renewable resources to reliably meet the natural gas demand. Moreover, expecting customer behavior to change in response to the Cap-and Trade price signal in the three years remaining before the proposed regulation would go into effect may not be feasible. For instance, one of the options to avoid the increased cost of gas would be to replace natural gas water heating or natural gas space heating with electric equipment. It is unclear how many residential and commercial customers, including small businesses, would be able to replace (and incur the capital costs of) their natural gas heating (space and water) with electric heating in only three years to avoid the potentially significant spike in natural gas rates due to compliance with the Cap-and-Trade program.

Before adopting such changes, ARB should assess the impact of the proposed amendments on ratepayers, and should conduct market feasibility studies on the expected adoption of electrical heating equipment (water and space heating).

ORA recommends that ARB reconsider the proposed amendment that prohibits natural gas suppliers from using any of the allocated allowances for compliance beginning in 2021. ORA recommends consideration of alternative proposals, such as a previously proposed second option to gradually increase the level of consigned allocated allowances (increasing the required amount to consigned allowances by 10 percent annually, starting in 2021 to reach 100 percent by 2025). A more gradual transition to the ultimate target of requiring 100 percent of the allocated allowances to be consigned would allow incremental increases in rates without the potential for significant rate shock, and would allow more time for the market to adopt new technologies for reducing natural gas use.

IV. CONCLUSION

ORA recommends that ARB schedule a workshop to discuss its proposed bridge solution for EIM imports and address stakeholder comments. Alternatively, ORA recommends that ARB

¹⁵ *Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information, Attachment D, p. 6* <https://www.arb.ca.gov/regact/2016/capandtrade16/15daynotice.pdf>.

provide written answers to stakeholder comments and questions, and provide another opportunity for comments on the proposed amendments.

ORA also recommends that ARB reconsider its proposal to prohibit natural gas suppliers from using any allocated allowances for compliance beginning in 2021 and instead assess alternative options to protect customers from the potential for rate shock due to a rapid transition away from the use of allocated allowances for compliance.

Please contact Ayat Osman (ayat.osman@cpuc.ca.gov) or (415) 703-1567 with any questions regarding these comments.

/s/ Julie Halligan

Julie Halligan
Program Manager