# Comments of the Staff of the California Public Utilities Commission (CPUC Staff) on the Regional Integration—California Greenhouse Gas (GHG) Compliance—Initiative Issue Paper

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CPUC Staff appreciate the opportunity to review and comment on the Issue Paper in the Greenhouse Gas Compliance Initiative related to regional integration. As we understand it, the goal for this initiative is for the CAISO market to reflect the costs associated with compliance with the California Cap-and-Trade Program in energy prices under a fully integrated regional energy market. CAISO aims to determine how costs to comply with California's Cap-and-Trade Program will be treated in the expanded regional integrated forward market (IFM). The energy imbalance market currently has a methodology that enables generation resources to include GHG compliance costs in their offers to supply California load. Similar provisions must be developed for the IFM to address GHG compliance costs for new participating transmission owners outside of California.

CPUC Staff observe however, that before a treatment for costs can be determined, fundamental issues related to GHG accounting must be discussed and resolved, both through the California Air Resources Board's (CARB's) regulatory process and through a CAISO initiative. This Issue Paper focuses much more on cost treatment in bid formation than it does on discussing issues related to the calculation of actual GHG emissions and how they would be attributed to energy delivered into California under a fully integrated regional market.

The Issue Paper states that CAISO will build on the methodology developed for GHG accounting and costs in the EIM as the basis for a method for the IFM. At a high level, that method currently calculates the GHG compliance obligation as follows:

- Point of regulation is the EIM Participating Resource Scheduling Coordinator.
- Imported electricity is defined to include dispatches designated by the CAISO's optimization model as electricity imported to serve retail customers' load located in the state of California.
- Currently being reported as "specified power" from participating resources identified by model.

However, as we discuss below, there are unresolved issues with this method, and until those are resolved, it does not seem that the current method should be under consideration as the base to build upon for a fully integrated regional market GHG mechanism.

# Issues under consideration in CARB's GHG Rulemaking and CAISO's Stakeholder Initiative

CARB is in the process of developing amendments to the Cap-and-Trade Regulation<sup>1</sup> and the Mandatory Reporting Regulation.<sup>2</sup> As part of this rulemaking process, CARB staff have discussed treatment of EIM imports in the Cap-and-Trade Program, and bringing the GHG accounting for imports from the EIM into alignment with CARB's GHG accounting policy under Cap-and-Trade. This implies that until CARB's rulemaking process is completed, CARB will consider the current EIM practices to be misaligned with EIM GHG accounting. CPUC staff are aware of two concerns that CARB Staff has expressed in presentations and Staff Reports: one that emissions may not be accurately attributed to imports because the EIM does not allow for attribution to specific generation units, and two, that there may be secondary GHG emissions impacts from "secondary dispatch" effects. We explain each of these in more detail below, based on our understanding of them.

# Accuracy of Emissions Attribution

As explained in CARB's July 19, 2016 Staff Report on Proposed Amendments to the Mandatory Reporting Regulation,<sup>3</sup> there are multiple aspects of current EIM emissions accounting that CARB Staff think need to be changed. First, CARB Staff proposes that "delivered electricity must be disaggregated by generation source when known" (p. 39) and that "unspecified imports must be reported by generation source, or first point of receipt if generation source is unknown" (p.41). CARB Staff also summarize broader concerns with EIM accounting: "in some cases, the difference between the actual metered versus tagged or EIM model (MWh) amounts can be significant. Such inaccuracies do not allow for accurate GHG accounting. Significant discrepancies have resulted . . ." (p.44).

CPUC Staff observes that these concerns seem equally relevant to a full regional market optimization, and therefore suggests that they receive further discussion and resolution before CAISO uses the EIM method as a basis for GHG accounting under regional integration. This may require delaying this initiative until they are resolved.

# **Secondary Dispatch**

Another issue raised by CARB, but not yet addressed through its current Staff Proposal, is the issue of so-called secondary dispatch. CAISO presented on this issue at CARB's June 24, 2016 workshop. CARB is concerned that "EIM optimization results may not in all cases report the full GHG emissions burden experienced by the atmosphere as a consequence of electricity consumed in CA," because the EIM does not capture the emissions that may result when another generator adjusts its output to serve load outside California. CARB suggests that perhaps this increase in emissions should be attributable in some way to the EIM dispatch of energy into California. As CAISO summarized in its presentation, "least cost dispatch can have effect of sending low emitting resources to CAISO, while not accounting for secondary dispatch of other resource to serve external demand." It seems that full regional integration would only expand the potential scope of these secondary effects, and therefore these concerns might be even more prevalent.

<sup>&</sup>lt;sup>1</sup> https://www.arb.ca.gov/regact/2016/capandtrade16/capandtrade16.htm.

<sup>&</sup>lt;sup>2</sup> https://www.arb.ca.gov/regact/2016/ghg2016/ghg2016.htm.

<sup>&</sup>lt;sup>3</sup> Available at: https://www.arb.ca.gov/regact/2016/ghg2016/ghgisor.pdf.

The Issue Paper focuses mostly on how the marginal GHG compliance cost could be calculated for regionalization but we believe a more robust discussion is necessary regarding how GHG emissions would be attributed to dispatches in an IFM, especially on the issues that are still unresolved from the EIM stakeholder processes.

# E-tags as means of tracking generation emissions

The CAISO Issue Paper states that "[u]nder a multi-state balancing authority area, energy flows within the balancing authority area will not use e-tags to identify their contract path or for interchange management" (p. 3). It is CPUC staff's understanding that NERC e-tags are not required for transactions within a balancing authority. However, we would like to understand whether an e-tag could still be created (even though not required), or if a similar tracking mechanism could be used. On the September 6, 2016 stakeholder call, stakeholders asked why e-tags could not be used to track electricity imported into California, and therefore to attribute emissions accordingly. CAISO's response indicated that because the CAISO boundary would no longer be at the California border (or approximately), e-tags would no longer be used. CPUC Staff would appreciate CAISO's Straw Proposal further explaining whether it would be possible to use e-tags (or some similar mechanism), and what alternatives might be available. If CAISO needs to track generation for any other purposes, such as RPS compliance, the Straw Proposal could explore other tracking options to meet multiple tracking needs.

## **Summary**

In conclusion, CPUC Staff hopes that CAISO will consider many of these issues before developing a straw proposal in this initiative, and will acknowledge that the unresolved nature of the issues related to GHG accounting for the EIM may mean that the schedule proposed for this initiative is not workable. CARB has a public hearing happening imminently on its proposed regulatory changes, so at a minimum, new CARB requirements may get finalized in the next few months. We recommend that CAISO's Straw Proposal for GHGs under regional integration fully address the current GHG concerns in the EIM, and propose a path forward for resolving the EIM issues as part of this initiative. This would allow CAISO to ensure consistency with the results of CARB's rulemaking. We understand this would likely require delaying the timelines for this initiative, and we think that delay would be wise to avoid reaching an incompatible result.