Public Interest Organizations' Comments on Regional Integration California Greenhouse Gas Compliance

October 27th, 2016 Public Interest Organizations' Stakeholder Comments

The following Public Interest Organizations ("PIOs") support a thoughtfully designed and wellimplemented regional system market. We value increased renewable energy integration, overall lower greenhouse gas emissions, lower costs, and increased grid efficiency and reliability.

These comments are submitted on behalf of Environmental Defense Fund, Union of Concerned Scientists, and Natural Resources Defense Council. Our organizations work together to promote decarbonizing the electric grid and to help ensure clean affordable energy for California and the west.

For these reasons, we submit the following comments based upon information gained from the October 13th, 2016 Technical Workshop and consequent CAISO presentation (collectively, "CAISO presentation"). In light of the CAISO presentation, PIOs continue to believe that foundational greenhouse gas ("GHG") compliance considerations could benefit from continued attention and increased examination. Particularly, CAISO should further develop and refine (1) GHG secondary dispatch, (2) replicability, and (3) system sophistication elements.

1. GHG Secondary Dispatch

Parties recognize that secondary dispatch concerns in EIM design, and that secondary dispatch design imperfections should not be transferred to a regional ISO market structure. PIOs agree and commend the ISO for its work in this area with CARB. PIOs further note that foundational ISO expansion principles support the ISO reflecting state public policy in operations, rather than state public policy adapting to ISO decisions.

The CAISO presentation identifies three "top options" to address secondary dispatch:

- Calculate overall GHG impact based on comparison to counter-factual dispatch outside the market optimization;
- Modify ISO optimization, but maintain resource specific cost and attribution; and
- Modify ISO optimization, residual emission rate for EIM transfers into ISO. No resource attribution of residual emissions.

Option three is the CAISO's preferred alternative. However, for the reasons described below PIOs believe both further evaluation beyond the scope of only this particular option and, indeed, beyond these three options, should be considered before choosing a pathway forward. PIOs believe that developing an approach that supports California's policy goals and works for the broader region is possible with further consideration.

Most significantly, CAISO's third alternative is chosen from a preselected set of "top options." However, as stated in CARB's October 21, 2016 *Mandatory GHG Reporting Cap-and-Trade program Workshop*, continued work to identify options and discuss details is ongoing. Preselecting three options, each with particular concerns (ranging from a CAISO determination of computational impracticality to potential accounting challenges), thus eliminates potential discussion and analysis that could result in better options not currently identified. As such, PIOs believe that GHG secondary dispatch decisions would benefit from continued discussion and examination.

With respect to CAISO's preferred alternative, the CAISO presentation raises important policy, legal, and operational considerations that should be given thoughtful examination. Detailed analysis and study is necessary to ensure that this alternative as designed and implemented will indeed provide the means to the universally agreed upon end. Indeed, without greater information, study, and analysis it is currently difficult to fully evaluate each proposed option to determine actual impact upon secondary dispatch (rather than theoretical, which has been provided in the CAISO presentation).

2. Replicability

PIOs commend the CAISO for once again articulating the importance of replicability – that is, a design which can be utilized for any state GHG program inside the CAISO program as appropriate. However, the CAISO presentation does not address this significant issue, nor are options provided examined with respect to ease of replicability. PIOs recommend that future design considerations include replicability as an element that should be considered in weighing particular options and alternatives.

3. System Sophistication

As noted in PIO's earlier comments, actionable and transparent GHG tracking is necessary to ensure state public policies remain intact and meaningful. This sophistication is perhaps best exemplified by CAISO's own examination of the three preferred secondary dispatch mechanisms, with the second alternative dismissed due to a lack of computational feasibility. PIOs again recommend that CAISO initiate dialog with experts and institutions to determine mechanisms which would allow for a more sophisticated system.

Notably, system sophistication may be enhanced in a number of ways, including technological upgrades, leveraging best practices from other jurisdictions, improved accounting, and greater transparency. For example, leveraging existing EIM data may provide a better understanding of existing primary and secondary dispatch. EIM preliminary results suggest that primary dispatch may offset secondary dispatch, but more sophisticated analysis of potential primary and secondary dispatch in a regional ISO can and should take place – both modeled before and after potential integration to validate and/or identify issues with the chosen option.¹ Non-confidential information and underlying data should also be available and accessible to interested stakeholders. This example is illustrative, and meant to express

¹ See CAISO Presentation, Energy Imbalance Market GHG Counter-Factual Comparison (Preliminary Results: January-June 2016), (August 25, 2016).

generally how CAISO should actively consider pathways to enhance system sophistication in anticipation of possible ISO expansion.

Sincerely,

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