### JOINT COMMENTS OF THE EIM ENTITIES REGIONAL GREENHOUSE GAS INITIATIVE TECHNICAL WORKSHOP October 27, 2016

### A. INTRODUCTION

Energy Imbalance Market ("EIM") current and future participants, PacifiCorp, NV Energy, Arizona Public Service, Puget Sound Energy, and Idaho Power ("EIM Entities") hereby submit the following comments to the California Independent System Operator ("ISO") regarding the Regional Greenhouse Gas ("GHG") Initiative Technical Workshop on October 13, 2016 ("Workshop"). The EIM Entities appreciate the opportunity to provide comments for consideration by the ISO.

### **B. COMMENTS**

During the ISO's October 13, 2016 workshop, the ISO proposed three options to ensure that the EIM and proposed regional ISO account for the GHG effects of secondary dispatch. Although the ISO has not yet published these options in a straw proposal, nor has it opened a stakeholder process specifically applicable to the EIM, the ISO publicly presented a similar set of options in reference to the EIM during the August 4, 2016 Regional Issues Forum meeting. It would follow to reason that these options would be applied in the ISO's real-time market if applied regionally. For these reasons, the EIM Entities propose the following comments.

The EIM Entities also request clarification on any distinctions between the current initiative and the initiative titled "Changes to EIM Greenhouse Gas Design to Address Secondary Dispatch Leakage" in section 10.7 of the draft 2017 Stakeholder Initiatives Catalogue published September 15, 2016.

The three options presented by the ISO at the Workshop are summarized below<sup>1</sup>:

- Option 1: Calculate overall GHG impact based on comparison to counter-factual dispatch outside the market optimization.
- Option 2: Modify ISO optimization, but maintain resource specific cost and attribution.
- Option 3: Modify ISO optimization, add a residual emission rate for EIM transfers into ISO. No resource attribution of residual emissions.

<sup>&</sup>lt;sup>1</sup> CAISO Technical Workshop, October 13, 2016, Presentation Slide Deck, Slide 15.

During the Workshop, the ISO indicated that Option 1 is not workable due to California Air Resources Board ("CARB") regulatory limitations, and that Option 2 is not computationally feasible. The ISO stated that it prefers Option 3 because it is technically feasible to implement, among other reasons.

The EIM Entities appreciate the difficulty in developing feasible solutions to address CARB's concerns with GHG accounting in the current EIM design. We also understand that the ISO continues to work with CARB to address its concerns in coordination with CARB's proposed regulation amendments relevant to this issue. However, for reasons described below, the EIM Entities generally support Options 1 and 2, and have concerns about Option 3. Further, the EIM Entities cannot at this time support Option 3 without the ISO providing further analysis.

Specifically, the EIM Entities believe that Option 1 best reflects the effect of the entire EIM footprint for net GHG emissions to the atmosphere. The EIM Entities also understand that Option 2 may not be technically feasible in five-minute intervals, but it may be feasible in longer intervals. Furthermore, it appears that Option 3 increases the energy prices for all imports, including carbon-free resources. The effects of Option 3 on EIM market performance, value, and incentives are unknown at this time due to lack of an in-depth analysis available for review. The EIM Entities offer the following comments for each option.

## 1. Option 1 Best Reflects the Net Effects of Total GHG Emissions in the EIM

Since November 2014, the EIM has produced substantial economic and environmental benefits for customers both inside and outside of California. The geographical diversity of loads and resources participating in the EIM enables improved integration of renewable resources which can be followed more closely and at lower cost using the EIM-wide dispatch model. Further, the geographic diversity of the multi-state EIM can reduce the curtailment of renewable resources, including California's, by having access to more resources capable of being displaced by carbon-free generation in real-time. These benefits are expected to grow in magnitude as the EIM expands to include Portland General Electric in 2017, Idaho Power in 2018, and others in future years.

Option 1 proposes to create a balancing account over a fixed period of time to recognize the net GHG emissions associated with imports and exports from the ISO. The ISO would base these net emissions on a counter-factual analysis, similar to the ISO's GHG counter-factual analysis of the EIM.<sup>2</sup> In that analysis, the ISO calculated that in the second quarter of 2016, the EIM allowed the ISO to avoid renewable curtailment of 158,806 MWh,<sup>3</sup> and that for the first and second

<sup>&</sup>lt;sup>2</sup> CAISO Slide Deck, Energy Imbalance Market, GHG Counter-Factual Analysis (Preliminary Results: January – June 2016), August 25, 2016.
<sup>3</sup> Id.

quarters of 2016, the EIM dispatch reduced GHG emissions in the footprint by 291,998 MTons.<sup>4</sup> This report clearly shows the net positive benefits of the EIM on reducing GHG emissions to the atmosphere.

The ISO stated during the Workshop that Option 1 is not workable because "CARB regulation does not recognize intertemporal benefits." However, it isn't clear, as a general principle, whether this assertion is accurate. For instance, current CARB GHG regulations allow for the use of various emission reduction offset mechanisms, which generally involve a recognition that verifiable and permanent GHG emission reductions can be the basis for regulatory compliance in the future. Emission allowance banking involves similar "intertemporal benefits," with the benefit of a past GHG emission reduction available for use in future compliance periods. As a result, the ISO should not be the entity to rule out this option without further exploration through stakeholder discussions with CARB. The ISO should present all available options and allow the regulator, CARB, to issue its own analysis and written explanation that, (1) details the regulatory limitations, if any, on taking into account reductions of GHG emissions due to carbon-free exports in the EIM, and (2) offers alternatives for regulatory or legislative changes that could be implemented to rectify this partial accounting of GHG net emissions in the EIM.

## 2. Is Option 2 Feasible in Other Markets?

The EIM Entities understand the technical and processing limitations that may limit the feasibility of accounting for GHG emissions of secondary transfers in the real-time dispatch ("RTD"). The ISO has indicated that the five-minute time interval is too short to run the two-step process (1) to establish whether or not there is a secondary dispatch associated with an import to the ISO, and (2) to attribute the GHG compliance obligation to the correct resource. The ISO also has concerns about the ability to scale this solution to a regional ISO model.

Though the EIM Entities can appreciate potential shortcomings of the current computing power in the optimization model in the RTD, the EIM Entities support Option 2 because it appears to correctly identify the existence of a secondary transfer in the first place, and if so, Option 2 would correctly assign the compliance obligation to the entity with the GHG reporting obligation. In the absence of the ability to run this model in the RTD, the EIM Entities would consider a proposal that the ISO apply this model over a longer timeline. Though extending the timeline in which the model is run could reduce the accuracy of the model in the RTD, it would potentially provide more specificity and visibility to the application of the obligations than Options 1 and 3. The EIM Entities would support the ISO (1) to study and provide information regarding over what time period this Option 2 could be applied with sufficient time and

<sup>4</sup> Briefing on western energy imbalance market, presentation to the ISO Board of Governors August 31, 2016, by Mark Rothleder, p. 11, *available at* 

http://www.caiso.com/Documents/BOGBriefing\_WesternEnergyImbalanceMarket-Presentation-Aug2016.pdf.

computing power to complete the calculations (i.e., the FMM, hourly, etc.) and (2) complete an analysis of EIM and regional ISO market performance, value, and incentives for any feasible time periods.

## 3. Option 3 Could Cause Reductions in Performance and Value in the EIM

The ISO has proposed in Option 3 to add a residual hurdle rate to ISO imports in the EIM. The ISO would collect the hurdle rate revenue in a holding account. After market settlement, the ISO would identify the relevant secondary transactions and responsible parties with GHG compliance obligations. The ISO would reimburse responsible parties to acquire the necessary GHG compliance instruments to meet their GHG obligations from their energy imports.

Option 3 is difficult to comment on due to limited information and lack of details regarding how it would affect the EIM. The EIM Entities believe they can better address Option 3 after a more in-depth analysis is provided by the ISO and the Department of Market Monitoring. Therefore, the EIM Entities provide the following conceptual level comments until a straw proposal is made available by the ISO for stakeholder review.

Option 3 would likely change the treatment of clean and low emitting resources in the EIM, making them artificially more expensive and, therefore, less likely to be dispatched into California. It would likely shift the mix of resources to more heavily favor those resources located in California due to the application of a price adder to external resources that is not applied to California resources. As a result, it could also favor the dispatch of higher emitting California resources over clean resources from outside the state, unnecessarily increasing emissions and reducing the carbon reduction benefits of the current EIM.<sup>5</sup> In addition, this reduction in the dispatch of external resources could create a disincentive for external entities to participate in the EIM. We also note that Option 3 would appear to run counter to the prohibition in the Federal Power Act against undue discrimination<sup>6</sup> and potentially result in violations of the dormant commerce clause under the U.S. Constitution.

<sup>&</sup>lt;sup>5</sup> Though CAISO mentions the option to contract clean resources with a California Load Serving Entity without the hurdle rate, this option does not appear to be available in the EIM. <sup>6</sup> FPA Section 205(b) states:

No public utility shall, with respect to any transmission or sale subject to the jurisdiction of the Commission, (1) make or grant any undue preference or advantage to any person or subject any person to any undue prejudice or disadvantage, or (2) maintain any unreasonable difference in rates, charges, service, facilities, or in any other respect, either as between localities or as between classes of service. 16 U.S.C. § 824d(b) (2000).

# C. CONCLUSION

The EIM Entities are grateful for the opportunity to submit these comments and appreciate the ISO's consideration. We look forward to a full straw proposal for review.