

January 20, 2016

**VIA ELECTRONIC MAIL**

Clerk of the Board  
California Air Resources Board  
1001 I Street  
Sacramento, California 95814  
<http://www.arb.ca.gov/lispub/comm/bclist.php>

**Re: Comments on 15 Day Notices Proposing Modifications to Amendments to California Cap-and-Trade and Mandatory Greenhouse Gas Reporting Regulations**

The California Independent System Operator Corporation (ISO) submits these comments on the Notices of Modified Text and Availability of Additional Documents and/or Information (15 Day Notices) issued by the California Air Resource Board (ARB) on December 21, 2016 in connection with proposed amendments to California's cap-and-trade and mandatory greenhouse gas reporting regulations.<sup>1</sup> The ISO supports efforts to accurately account for greenhouse gas emissions in California's electricity sector and will continue to work collaboratively with state agencies and stakeholders to advance this objective. Over the last several years, the ISO and ARB have worked to align the ISO's market rules with ARB's regulations. This alignment needs to continue.

In comments submitted in this rulemaking last year, the ISO explained the operation of the western Energy Imbalance Market (EIM) and how the ISO's market optimization attributes EIM transfers to serve California load to EIM participating resources. The ISO also explained how ARB's regulations apply resource-specific emission rates for EIM participating resources dispatched through the ISO's market optimization. Recently, the ISO and ARB staff have discussed a proposed enhancement to the ISO's market optimization to address concerns that the current dispatch may not accurately capture secondary emissions associated with the dispatch of external resources.<sup>2</sup> The ISO is actively exploring this approach with stakeholders

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<sup>1</sup> ARB's 15 Day Notices provide the deadline for public comment is January 20, 2016.

<sup>2</sup> The term "secondary dispatch" refers to the effect of lower greenhouse gas emitting resources supporting EIM transfers to serve ISO load while higher greenhouse gas cost resources backfill to serve load in EIM Entities' balancing authority areas. Secondary dispatch does not mean that the ISO market optimization has multiple distinct steps in dispatching resources to serve ISO load versus serving load in EIM balancing authority areas.

and plans to complete its conceptual design during the first quarter of 2017.<sup>3</sup> The ISO also plans to expedite implementation efforts so that this approach is available as soon as possible. While the ISO develops and implements this enhancement, the ISO and ARB staff have agreed that a “bridging solution” starting in 2018 may be necessary to account for greenhouse gas emissions associated with secondary dispatches that may occur in connection with the dispatch of external resources that the ISO attributes as serving ISO load. Accordingly, the ISO supports, on an interim basis, ARB’s proposal to calculate emissions not currently captured by the EIM’s resource-specific attribution and retire allowances under its program. If the ISO can implement enhancements to its market optimization by January 1, 2018, it may be possible to forego the use of the bridging solution.

The ISO also supports ARB’s proposal to require EIM participating resources to have sufficient metered delivery data to support EIM transfers to serve ISO load. The ISO, however, strongly opposes other aspects of ARB’s proposal as they relate to the EIM and ISO. ARB should eliminate its proposed changes to its cap-and-trade that exclude EIM transactions from the resource shuffling safe harbor provisions. This language creates uncertainty for entities subject to ARB’s regulation and is inconsistent with other language in ARB’s regulation relating to resource shuffling. ARB also should eliminate the proposal for the ISO to become a reporting entity under ARB’s mandatory reporting regulation. ARB has not justified the need to make the ISO a reporting entity. Other, less burdensome, methods exist for ARB to obtain the information to verify data reported by emitting entities covered under ARB’s regulations.

**I. The ISO supports the use of a bridging solution on an interim basis to calculate emissions not captured by the EIM’s resource-specific attribution.**

Among other changes in its 15 Day Notices, ARB proposes to apply a new emissions rate for EIM transfers that are considered electricity imports under ARB’s regulations. ARB proposes to calculate emissions for these transactions at the emissions rate for unspecified sources less emissions attributed to EIM participating resource scheduling coordinators by the ISO’s market optimization.<sup>4</sup> Beginning January 1, 2018, ARB would retire current vintage allowances designated by ARB for auction, which remain unsold for more than 24 months, in the amount of the calculated outstanding emissions. This proposal constitutes “the bridging solution” the ISO has discussed with ARB staff. While the ISO supports this bridging solution, ARB should only apply it on an interim basis in order to provide time for the ISO and its stakeholders

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<sup>3</sup> More information on the ISO’s stakeholder initiative is available on the ISO’s website: <http://www.caiso.com/informed/Pages/StakeholderProcesses/RegionalIntegrationEIMGreenhouseGasCompliance.aspx>

<sup>4</sup> See proposed changes to cap-and-trade regulation in ARB’s 15 Day Notices at 17 California Code of Regulations Sections 95852.

to develop and implement enhancements to the market optimization to more accurately account for emissions associated with EIM transfers to serve ISO load.

The proposed bridging solution should include provisions allowing ARB not to apply the rule once the ISO implements these enhancements. The ISO urges ARB to articulate a process that will permit it to make the transition from the bridging solution as part of this rulemaking – possibly after certain conditions are met that the ISO and ARB could memorialize in a memorandum of agreement. Once the ISO and stakeholders implement enhancements to the ISO market optimization, ARB should rely solely on resource-specific reported emissions as attributed by the ISO's market optimization.

When the ISO dispatches EIM resources to support a transfer to serve ISO load, the ISO seeks to minimize total costs associated with these transfers. As a result, the ISO attributes these EIM transfers to participating resources with the lowest economic bids (energy bid and greenhouse gas bid adder) based on available transmission. Least cost dispatch can have the effect of attributing transfers to serve ISO load to lower-emitting EIM resources because these resources face fewer or no costs to comply with ARB's regulations. In some instances, higher-emitting resources will need "to backfill" this dispatch to serve EIM load outside of the ISO.

In connection with its 15 Day Notices, ARB staff issued an analysis describing its concern that the current cap-and-trade and mandatory reporting regulations under-account emissions associated with EIM transfers to serve California load.<sup>5</sup> ARB also raises concerns that unaccounted emissions could increase as the EIM grows and as more transmission and a greater number of participating resources are available to support EIM transfers. ARB, however, makes no attempt to assess whether these additional resources and transmission capabilities will serve ISO load, or serve load with the EIM area outside of California. The former transactions are subject to ARB's regulations; the latter are not.

ARB staff explains that, notwithstanding the ISO's least cost dispatch market optimization, additional resources are likely operating as well to serve EIM and California load. Accordingly, ARB proposes to apply the unspecified source emissions rate to EIM transfers serving ISO load as a way to quantify these emissions. While this approach provides some comparability to how ARB accounts for emissions from unspecified sources, it overstates the emissions associated with EIM transfers to serve ISO load. In some intervals when an EIM transfer serving ISO load occurs, there is no secondary dispatch that could result in unaccounted emissions. For example, the ISO's market optimization may attribute an EIM transfer to a hydro resource that would not have operated except for California demand. Applying the unspecified source emission rate to this transaction over-states the atmospheric impacts of the EIM transfer serving

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<sup>5</sup> See Attachment F to 15 Day Notices: Analysis of the Energy Imbalance Market and Mandatory Greenhouse Gas Reporting and Cap-and-Trade Regulations at 4-8.  
<https://www.arb.ca.gov/regact/2016/capandtrade16/attachf.pdf>

California load. Nevertheless, the ISO supports ARB's proposal, subject to ARB's commitment that this approach is an interim bridging solution.

The ISO has proposed to modify how the optimization will attribute EIM transfers to EIM participating resources in order to address concerns that the current dispatch may not accurately capture secondary emissions associated with an EIM transfer to serve California load.<sup>6</sup> The ISO proposes to run its least cost dispatch optimization in two steps. First, the ISO proposes to identify the least cost dispatch of resources to serve EIM load without allowing transfers to serve ISO load. This step will provide an economic base of resource schedules outside California from which the ISO can then identify incremental dispatches to serve ISO load. Second, the ISO will run its least cost dispatch optimization allowing transfers to serve California load. The ISO will attribute those transfers to output from resources above these resources' economic base schedules identified in the first step. This approach will effectively ensure no secondary dispatch will occur as a result of dispatching a lower emitting resources to serve ISO load. Under the proposed enhancements, the ISO's least cost dispatch optimization will first identify the most economic resources serving EIM external load before attributing output to EIM resources for transfers to serve ISO load. As part of its next 15 Day Notices in this rulemaking, ARB should acknowledge this effort and develop a mechanism to apply the results of the ISO's enhanced market optimization in its cap-and-trade and mandatory reporting regulations.

## **II. The ISO supports ARB's proposal to analyze meter data for EIM participating resources that serve ISO load.**

In its 15 Day Notices, ARB proposes to apply "a lesser of analysis" based on resource meter delivery data for EIM participating resources that the ISO attributes as supporting an EIM transfer to serve ISO load.<sup>7</sup> Under this revision, EIM participating resources must have sufficient metered output to support the EIM transfer attributed by the ISO's optimization in any given interval. The ISO supports this change, which is consistent with other requirements that ARB applies to specified sources of emissions. It is appropriate for ARB to validate a resource's output in a given real-time dispatch interval if the ISO has attributed a transfer to that resource. ARB's proposal ensures that a resource is operating at a level to support an electricity import into California.

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<sup>6</sup> See ISO Straw Proposal dated November 17, 2016 issued in Regional Integration California Greenhouse Gas Compliance and EIM Greenhouse Gas Enhancement initiative. <http://www.caiso.com/Documents/StrawProposal-RegionalIntegration-EIMGreenhouseGasCompliance.pdf>

<sup>7</sup> See proposed changes to mandatory reporting regulation at CCR Section 95111 (b)(2)(E).

**III. ARB's proposal to modify the safe harbor provisions associated with the prohibition against resource shuffling creates uncertainty and is internally inconsistent.**

In its 15 Day Notices, ARB has not changed its earlier proposal to modify the safe harbor provisions associated with the prohibition against resource shuffling. These proposed changes exclude EIM transactions from the list of transactions that ARB has clarified do not constitute resource shuffling.<sup>8</sup>

As the ISO explained in comments submitted last year in this rulemaking, this proposed change creates uncertainty and it creates an internal inconsistency in ARB's cap-and-trade regulation. First, the proposed language creates uncertainty because it suggests that economic bids or self-schedules that clear the ISO's real-time market constitute resource shuffling when they do not. Resource shuffling, as defined by ARB, is a "plan, scheme, or artifice undertaken by a First Deliverer of Electricity to substitute electricity deliveries from sources with relatively lower emissions for electricity deliveries from sources with relatively higher emissions to reduce its emissions compliance obligation."<sup>9</sup> ISO market dispatches do not meet this definition because they are not a plan, scheme or artifice undertaken by a first deliverer of electricity. The proposed language signals to an entity participating the EIM that it may face compliance risks associated with the prohibition against resource shuffling. Second, the proposed regulatory changes are internally inconsistent because they state that electricity imported through the EIM is not exempted from resource shuffling provisions. However, ARB's regulations maintains a safe harbor from the prohibition against resource shuffling for ISO real-time market transactions.<sup>10</sup> The EIM is the ISO's real-time market extended to other balancing authority areas in the West. ARB should eliminate the proposed language in the cap-and-trade regulation that excludes EIM transactions from the resource shuffling safe harbor provisions.

**IV. ARB should eliminate its proposal to make the ISO a reporting entity under its regulations.**

ARB's 15 Day Notices continue to propose that the ISO become a reporting entity under the mandatory reporting regulation for purposes of the EIM.<sup>11</sup> ARB has not justified the need for this change. Other, less burdensome, methods exist for ARB to obtain information necessary to verify data that is reported by emitting entities covered

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<sup>8</sup> See proposed changes to cap-and-trade regulation at 17 CRR Section 95852(2)(a)(10).

<sup>9</sup> 17 CRR Section 95802(a)(336).

<sup>10</sup> California Government Code Section 11349 requires that proposed regulations do not conflict with or are not contradictory to existing law.

<sup>11</sup> See proposed changes to 17 CCR Section 95111(h).

under ARB's regulations. Under the California Global Warming solutions Act of 2006 (AB 32), ARB has the authority to require reporting from greenhouse gas emission sources.<sup>12</sup> The ISO is a market operator and transmission planning entity. In conducting these activities, the ISO is not a source of emissions under AB 32. Although the ISO may have possession of market data that may assist ARB in implementing its regulations according to AB 32, however, the ISO is not the appropriate reporting entity under ARB's regulations.<sup>13</sup>

ARB's regulations must be reasonably calculated to meet its statutory directive.<sup>14</sup> There must be substantial evidence supporting ARB's determination that the regulation is reasonably necessary to effect AB 32.<sup>15</sup> Earlier in this rulemaking, ARB asserted that it needed additional data from the ISO to ensure an accounting of greenhouse gas emissions.<sup>16</sup> However, ARB already receives all of the data associated with EIM transfers to serve California load from EIM participating resource scheduling coordinators.<sup>17</sup> These entities report quantities of EIM transfers attributed to its resources to serve California for each five-minute dispatch period. In order to calculate emissions under the bridging solution ARB has proposed, ARB can add reported data from EIM participating resource scheduling coordinators to determine the total EIM transfers in any given five-minute interval. ARB can then apply the emission rate for unspecified sources to this quantity.

ARB does not explain why it cannot use existing processes – including its subpoena authority – to obtain ISO market data for electricity imports that occur through the EIM. The ISO is not a reporting entity for other electricity imports that use ISO market processes to serve California load. Instead, ARB regulations apply to entities that appear on an e-Tag as the purchasing-selling entity on the last segment of the tag's physical path with the point of receipt located outside of California and the point of delivery located inside California.<sup>18</sup> ARB validates this information through a subpoena it has issued to the ISO and other balancing authorities operating in California. The ISO supports using this same model in the case of electricity imports that occur through the

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<sup>12</sup> California Health and Safety Code Section 38530(b)(1).

<sup>13</sup> California Government Code Section 11342 requires ARB's proposed regulations to be consistent with its authority under AB 32.

<sup>14</sup> California Government Code Sections 11342 and 11349.

<sup>15</sup> *Id.* at Section 11350.

<sup>16</sup> ARB Staff Report: Initial Statement of Reasons at 9.  
<https://www.arb.ca.gov/regact/2016/ghg2016/ghgisor.pdf>

<sup>17</sup> 17 CCR Section 95111.

<sup>18</sup> 17 CCR Section 95802(a)(122).



EIM. ARB should obtain information from electricity importers and subpoena data from the ISO, if necessary. To do otherwise would create inconsistent reporting formats for information under ARB's regulations.

In fact, ARB has already issued a standing subpoena to the ISO for EIM transaction data.<sup>19</sup> The ISO is willing to explain the steps it takes to collect responsive information to this subpoena as part of its affidavit of custodian of records. If appropriate, the ISO is also willing to enter into a memorandum of agreement with ARB to ensure that it has access to appropriate information to support the accurate accounting of emission associated with electricity imports. Such an agreement may also be useful to document how ARB plans to transition from the use of the proposed bridging solution described in its 15 Day Notices to the use of a resource-specific attribution of transfers based on the enhancements the ISO plans to make to its market optimization.

**V. ARB should eliminate its proposal to require reporting emissions of electricity exported from California through the EIM.**

As part of its 15 Day Notices, ARB has also proposed to make the ISO a reporting entity for EIM transfers that constitute electricity exports.<sup>20</sup> The ISO objects to this proposal for two reasons. First, the ISO does not need to be a reporting entity for ARB to obtain information about the total quantities of EIM transfers out of the ISO to serve load outside of California. The ISO makes this information available on its public open access same time information website. If necessary, ARB can also subpoena this information from the ISO. Second, the ISO's optimization does not attribute dispatches from participating resources that support EIM transfers from the ISO to serve EIM load.

In its assessment of benefits arising from the western EIM, the ISO prepares a quarterly benefits information report. This report quantifies the amount of avoided renewable energy curtailment in California realized through the use of the EIM. This report also estimates the amount of greenhouse gas emission reductions based on the fact that the ISO can transfer renewable output to external balancing authority areas using five-minute dynamic transfers that it may otherwise need to curtail. This output displaces production from external conventional resources. However, the ISO's report does not identify specific resources that support these EIM transfers. ARB's proposal would require the ISO to report emissions associated with EIM transfers without adequate guidance as to what emissions rate the ISO should apply. This proposed requirement lacks clarity and ARB should eliminate it as part of its next 15 Day Notices.<sup>21</sup>

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<sup>19</sup> <http://www.caiso.com/Documents/2015-04-01CaliforniaAirResourcesBoardSubpoena.PDF>

<sup>20</sup> See proposed changes to mandatory reporting regulation at 17CCR Section 95111 (h).

<sup>21</sup> California Government Code Section 11349 requires that ARB's draft its proposed regulations so that the meaning of regulations will be easily understood by those persons directly affected by them.

## VI. Conclusion.

The ISO supports efforts to accurately account for greenhouse gas emissions in California's electricity sector and will continue to work collaboratively with state agencies and stakeholders to advance this objective. The ISO supports ARB's proposed bridging solution to account, on an interim basis, for emissions from EIM transfers serving California load. However, ARB must make additional changes to the material posted as part of its 15 Day Notices. ARB should acknowledge that the bridging solution is interim until the ISO implements enhancements to its market optimization that more accurately accounts for emissions from EIM transfers to serve California load. ARB also should eliminate its proposed changes that exclude EIM transactions from the resource shuffling safe harbor. This language creates uncertainty for entities subject to ARB's regulation and it is inconsistent with other language in ARB's regulation relating to resource shuffling. ARB should also eliminate the proposal for the ISO to become a reporting entity under ARB's mandatory reporting regulation. ARB has not justified the need to make the ISO a reporting entity, and ARB can obtain information from the ISO to verify data reported by emitting entities through other methods.

Respectfully submitted,

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