

**Southern California Edison**  
**Stakeholder Comments (Revised)**

**CAISO Energy Imbalance Market (EIM)**  
**Year 1 Enhancements Draft Final Proposal**  
**Dated February 11, 2015**

Submitted by	Company	Date Submitted
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Southern California Edison’s (SCE) herein comments on the California Independent System Operator’s (CAISO) Energy Imbalance Market (EIM) Year 1 Enhancements draft final proposal dated February 11, 2015 (Proposal).<sup>1</sup> SCE has supported the development of the EIM and continues to support EIM design refinements and appreciates being involved in the stakeholder process. Many elements of the Proposal will improve the operation of EIM and create the same rules for participants in the day-of markets<sup>2</sup> between those located in the CAISO balancing authority area and those in the EIM Entity Areas. However, SCE has concerns and objects to the CAISO’s plan to implement a method whereby EIM participants can vary the quantity they are willing to have delivered into California as part of the EIM design.

**1. As a temporary measure, using a flag in the master file to prevent a resource from being dispatched to serve California is preferable to allowing a varying quantity**

The FERC order approving the EIM, required within a year, an implementation of a do not sell to California flag along with a cost based greenhouse gas (GHG) cost bid adder as the combination would support further expansion of the EIM.<sup>3</sup> In the EIM design paper dated November 10, 2014, CAISO discussed using a flag in the master file that would prevent any power dispatched in EIM from being included in the assigned EIM Transfer into California.<sup>4</sup> However, in the draft final Proposal dated February 11, 2015, the CAISO plans to allow EIM

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<sup>1</sup> [http://www.caiso.com/Documents/DraftFinalProposal\\_EnergyImbalanceMarketYear1Enhancements.pdf](http://www.caiso.com/Documents/DraftFinalProposal_EnergyImbalanceMarketYear1Enhancements.pdf)

<sup>2</sup> Day-of markets are the Fifteen Minute Market and the five minute Real Time Dispatch market.

<sup>3</sup> FERC Order in ER14-1386, dated June 19, 2004, paragraph 240.

<sup>4</sup> [http://www.caiso.com/Documents/IssuePaper-StrawProposal\\_EnergyImbalanceMarketYear1Enhancements.pdf](http://www.caiso.com/Documents/IssuePaper-StrawProposal_EnergyImbalanceMarketYear1Enhancements.pdf).

Participating Resources the ability to submit a megawatt amount they are willing to sell to California which can change hourly.<sup>5</sup> The amount they are willing to sell to California can be less than the amount they are willing to sell to the rest of the market. SCE strongly objects to this element of the proposal as it goes beyond the reasons specified in the FERC order to accommodate entities that cannot comply with California's regulations on greenhouse gas (GHG) emissions. If a generator is willing to be subject to possible GHG compliance, then there is no reason to allow them to limit the amount they are willing to sell to California. It also introduces possible intentional withholding or gaming opportunities which would be detrimental to the market.

At the February stakeholder meeting, two reasons for allowing bidding an amount to sell to California were verbally mentioned by the CAISO. The first reason is multiple ownership of a resource when one owner does not want to comply with California's GHG regulations. The second reason is some renewable resources may have a requirement to serve a state's native load. Neither of these cases requires an option whereby they have the ability to vary the amount of energy they are willing to sell California. In the first case of multiple ownership, the party willing to sell into California can agree to be responsible for GHG compliance. In the second case, having a varying quantity to sell to California does not achieve the objective to serve their native load. Today that power can flow to any of the states located in the PacifiCorp balancing authority as part of the EIM dispatch, yet California is being singled out for a withholding option. If there is a requirement to serve native load, then there needs to be an option to prevent sales to all other balancing authorities, such as PacifiCorp East to PacifiCorp West or Nevada Energy. For the above reasons, it should be an all or nothing option to sell into California.

For the aforementioned reasons, SCE does not support the latest proposal to allow hourly bidding of amounts that represents a willingness to sell to California. Instead, SCE supports, for an October 2015 implementation, the use of a flag in the master file as discussed in the November 10, 2014, proposal and referenced in the FERC Order, dated June 19, 2014, in ER14-1386.

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<sup>5</sup> Proposal, page 10.

**a. The default California Bid amount should match their maximum energy bid—instead of zero--to maximize the supply offered to the market**

Should the CAISO proceed to allow varying the amount bid to California, the plan should be designed to encourage the maximum amount of energy available to the market. The proposal states that for each participating resource the default that can be deemed to sell to California is zero unless the participant bids another quantity. Rather, to maximize the quantity into the market, the default amount should be the maximum energy bid amount.

**2. SCE supports the cost based bid limit on the CA Bid Adder**

The FERC in issuing the order approving the EIM design required the implementation of a GHG bid adder based upon the compliance cost of California's GHG program. In the Proposal, the CAISO plans to use the similar rules for calculating a resource's default energy bid to calculate a maximum amount of GHG cost.<sup>6</sup> EIM participants can bid a value between zero and calculated maximum GHG cost. SCE supported a cost based bid adder in the stakeholder process to design the EIM and supports this element of the Proposal.

**3. CAISO should consider superior options to resolve GHG compliance that does not result in a reduction of power than can flow into California**

California's GHG regulations complicate the EIM design as any power that is imported into California is subject to regulations that may require the purchase of GHG emission allowances. Currently, the CAISO notifies the generation source with the amount of energy that was deemed to support any EIM transfer into California. As a result, the generator would have the responsibility to comply with California GHG regulations as the agent that delivered the power to California. The CAISO should review other options that do not require generators located outside California to comply with California's GHG regulation.

In the EIM Enhancement Phase 2 process, the CAISO should seek input on the following straw proposal: The energy with a GHG compliance deemed to support an EIM transfer into California should be assigned to schedule coordinators (SC) in the CAISO balancing authority that are the purchasers of imbalance energy. For example, if a SC scheduled less than their actual load which resulted in a purchase of imbalance energy real-time, then they would get a

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<sup>6</sup> See Proposal, slide 11.

portion of any net EIM transfer into California. Or should, a generator fail to deliver their scheduled amount, the SC would also get an allocation of the GHG behind an EIM Transfer. This approach is analogous with current rules in which the first importer of power has the GHG compliance obligation. The EIM Transfers to California are simply treated as imports brought in by the consuming California SCs. Along with the energy allocation for GHG compliance, the SCs would also get a matching portion of the GHG revenues from the GHG bid adder. The CAISO would continue collect revenue for any GHG costs that supports the EIM transfer to California from CAISO buyers, but external sellers, since they no longer have the GHG compliance obligation, would not receive the GHG adder on top of their energy payments. The GHG Bid Adder for participating units in the EIM Entity Areas would be automatically established by the CAISO using the GHG component from their default energy bid. EIM participants would not submit a GHG Bid Adder. There would be no change in the optimization. Under this design, generators in the EIM Entity Areas would never have to worry about an EIM Bid adder or GHG compliance. The compliance responsibility would be on Schedule Coordinators doing business in California that already have to manage compliance with California's GHG regulations. This design would remove the complex design elements that ultimately result in a reduction of supply that could be sold into California. This would be a superior economic outcome because there is increased trade.

**4. The change to EIM Administrative Fee is reasonable as it aligns similar treatment between all market participants**

The Proposal changes current fixed EIM Administrative fee to be the Market Services Rate and System Operations rate charged to current participants in the CAISO balancing authority. SCE supports the principle of similar treatment for all market participants, so SCE supports this element of the Proposal. With the voluntary nature of the EIM design, the CAISO should establish a minimum fee to ensure sufficient revenue to recover the fixed costs of EIM operations.

**5. Applying the Resource Sufficiency test to CAISO would treat all balancing authorities equally**

The California Public Utilities Commission and the CAISO both have programs to make available sufficient resources to meet both peak demand and flexibility needs. Therefore, an

additional resource sufficiency test is not necessary for the CAISO balancing authority. While SCE does not object to the sufficiency test's application to the CAISO, SCE is concerned that CAISO's resources would be better served working on other more important issues, such as addressing a long-term fix to the GHG design.

**6. The use of available transfer capability (ATC) is imperfect and creates issues that need to be addressed by the CAISO**

Currently, PacifiCorp is using their firm transmission rights to support EIM Transfers between their balancing authority areas and the CAISO. Nevada Energy is planning to use ATC to support EIM Transfers. Currently, the CAISO utilizes ATC to support imports into the CAISO balancing authority. The use of firm transmission rights has the advantage of certainty in determining the fifteen minute market (FMM) and real time dispatch (RTD) awards. The addition of using ATC to support EIM transfers allows for possible increased supply which is beneficial, however, it creates settlement issues related to timing of the FMM and RTD markets. This is because a transaction that does not clear at T-20 will be settled using different prices which could be profitable. If agents attempt to exploit this, then the revenue ends up in the neutrality account which then gets allocated unfairly to load. While not a problem exclusive to the EIM design as the problem exists in the current CAISO markets, but with more trade due to EIM the quantity of these transactions will increase, therefore the risk increases. Therefore, the CAISO should eliminate the incentives for transactions meant to exploit this design flaw in the CAISO markets. One suggestion is to settle on the lower of FMM and RTD prices to eliminate incentives for gaming transactions.

**7. SCE supports enforcing EIM transfer limit on each intertie as opposed to a net amount between the CAISO and the balancing authorities**

Currently, the optimization manages the EIM Transfer as a constraint between CAISO and the combination of the two PacifiCorp balancing areas using PacifiCorp's transmission rights. While this arrangement works with just PacifiCorp as an EIM Entity, it has problems when Nevada Energy joins the EIM. Instead, the Proposal describes the constraint of the EIM transfer will be managed by intertie point. As EIM grows with multiple balancing authorities and multiple transmission pathways, it makes sense to enforce each limit at the intertie as it is a more accurate representation of the network model.

**8. Bid Cost Recovery (BCR) for EIM Non-Participating Resources does not appear justified**

At the stakeholder meeting, the CAISO discussed that the payment of BCR to non-participants is the result of the calculation of optimal energy under certain circumstances. The issue is not unique to EIM and BCR can be awarded to self-scheduled power in the CAISO. While SCE supports consistent treatment between CAISO and EIM participants, it still does not justify awarding EIM non-participants and self-scheduled power BCR payment for energy that cannot be dispatched by the CAISO. These entities chose to be a price taker for any imbalances. This issue should be examined and resolved by an initiative that is not exclusive to EIM.

**9. Artificial costs needed for modeling purposes should not be passed onto customers**

At the stakeholder meeting on February 18, 2015, the CAISO discussed the use of a small transfer cost that is inserted into the objective function on EIM Energy Transfer Schedules.<sup>7</sup> During the meeting this transfer cost was described as being necessary for the optimization to generate a valid least cost solution. This transfer cost is not a real cost to recover transmission, losses, or congestion, but is a modeling artifact necessary for the math to function properly. Unfortunately, during the meeting the CAISO confirmed that this artificial cost would be imbedded into the location marginal price (LMP). It is inappropriate to pass on artificial costs needed to make the math work onto customers as it does not recover an actual cost. SCE is concerned because small costs time large volumes over a year can add up to significant dollars. However, if the cost is very small it may not be worth the cost to make the system changes to remove this artifact from the price formation. SCE recommends monitoring the cost impact to customer and if it should become significant, then the CAISO should remove cost artificial costs from the LMP. Another option is include this correction into the scope of work in another initiative related to price formation.

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<sup>7</sup> The use of the transfer cost was presented at the stakeholder meeting, but was not included in the draft of the February 11, 2015, Proposal as a phase 1 item.

**10. Changes to the allocation of congestion revenue in the Real-Time Congestion Offset needs additional study to determine the appropriate outcome**

At the stakeholder meeting on February 18, 2015, the presentation describes a proposal to change the allocation of the congestion revenue between CAISO and PacifiCorp included in the Real-Time Congestion Offset (RTCO).<sup>8</sup> This was the first time stakeholders were briefed on the issue as it was not included in prior drafts or meetings. This issue is related to holders of transmission rights and whether power can move, or not move, across the California-Oregon intertie (COI). SCE is studying the issue and does not have a position of support nor descent of the proposed change. SCE recommends careful study in order to achieve the right incentives in the market as Nevada Energy will be using a different approach to support EIM Transfers. There also may be unintended consequences with any change to the complex calculation of RTCO. As a result, changes to the RTCO should not be included in the Phase 1 enhancements for governing board approval in March. Changes can be made at a later date once the issue is reviewed by stakeholders.

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<sup>8</sup> This was presented at the stakeholder meeting, but was not included in the draft of the February 11, 2015, Proposal as a phase 1 item for the March board of governors' approval.