Southern California Edison
Stakeholder Comments (Revised)

CAISO Energy Imbalance Market (EIM)
Year 1 Enhancements Phase 2 Straw Proposals
Dated June 30, 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 Phase 2 Strawman proposal dated June 30, 2015 (Proposal).[1] SCE has supported the development of the EIM and continues to support EIM design refinements and appreciates being involved in the stakeholder process.

1. SCE recommends a matrix to compare the various EIM transmission rate options

Currently, transmission used to support EIM is not charged by the CAISO as an export for EIM Transfers nor by the EIM Entity to their transmission customers for an EIM dispatch. The cost of transmission is still recovered from the native cost recovery mechanisms. Transmission used to support EIM Transfers is using existing transmission capacity and EIM does not explicitly cause additional transmission costs. These are existing costs that will be recovered from the native customers without EIM. The principle for this was reciprocity of between parties making transmission available to support EIM and therefore received benefits.

The four proposals are discussed at a high-level and do not discuss in detail the nuances of how transmission costs would be recovered in the CAISO's and EIM Entity's tariffs which are different of who pays for transmission. CAISO recovers transmission costs from energy off-take from the CAISO controlled grid either through load or exports to other balancing authorities. Generators supplying power into the CAISO grid do not pay transmission access charges. PacifiCorp has a different model for transmission cost recovery whereby both load and

[1] http://www.caiso.com/Documents/IssuePaper-StrawProposal_EnergyImbalanceMarketYear1Enhancements-Phase2.pdf

generators pay for transmission as transmission customers. The matrix needs to compare how transmission costs will be recovered from EIM participants, Non-EIM participants, and CAISO customers.

Careful evaluation needs to occur on the amount of projected energy flow between balancing authorities to determine if the current situation is inequitable and whether one of the alternatives would be an improvement. The exchange pattern and volume may be very different between CAISO and PacifiCorp, PacifiCorp and NV Energy, CAISO and NV Energy, and future participants of Arizona Public Service and Puget Sound. In addition, the effort to implement these options may not be warranted should the party decide to join the CAISO as a participating transmission owner, or—given the voluntary nature of EIM—a party decides to withdraw from EIM which would trigger a complex unwinding of a transmission cost recovery mechanism.

2. Flow entitlements needs a study to determine if this is a problem that is significant enough to resolve

Currently, the real-time congestion offset costs are allocated based upon where the constraint is located. The reason is because if a base schedule has unresolved congestion any cost to resolve the congestion should remain within the EIMs' or CAISO's balancing authority area. However, one EIM Entity's base schedule can cause congestion in a neighboring balancing authority. In this case, the entity causing the congestion is not assigned the cost. The flow entitlement would allocate a portion of congestion from one area to another area. The Proposal acknowledges this is not easily implemented, and SCE agrees. SCE recommends the CAISO perform a study to determine if this is a significant problem that needs resolution. In addition, the study will also have to look at NV Energy data, once it is available, as this could be a significant issue for NV Energy but not PacifiCorp.

3. Changes to real-time congestion revenue allocation on EIM transfers needs more justification

Currently, real-time congestion revenues on the EIM transfer are shared equally between the balancing authorities sharing the constraint. CAISO proposes to change the allocation when the intertie scheduling limit is different than the EIM Transfer limit. There also have been arguments of transmission rights to an intertie as opposed to across an intertie should have

different allocation treatment.[2] The CAISO has not provided sufficient justification for this change in allocation and has not explored the adverse incentives it may create. The CAISO suggests because the EIM transfer limit is less than the interface limit, then a different allocation method is warranted, but provides no further explanation of the reason or principles of why a change is needed. Nor has the CAISO explained if the proposal is appropriate for the use of available transmission capacity to support EIM Transfers with NV Energy.

The concept of EIM is to treat energy exchanges as if they were in a single balancing authority. In this case, the congestion revenues for the EIM transfer should be treated the same as any internal constraint within the CAISO or EIM balancing authority. Currently, the real-time congestion offset account within the CAISO is allocated to scheduling coordinators based upon Measured Demand. For example, if there is congestion on the Path 26 which is between SCE and PG&E, the congestion revenues are not allocated solely to SCE or PG&E. Furthermore, SCE recommends the CAISO review if the current 50/50 sharing is still appropriate considering one participant may have significantly higher load than the neighboring participant.

In addition, allocating the congestion revenues to the entity that controls the amount of the available EIM transfer also creates incentive issues because they can withhold transmission capacity to create congestion and collect additional revenues. This is contrary to an energy market to encourage open transmission access to support additional commerce.

4. SCE supports the dynamic assessment for market power mitigation to include EIM transfer constraints and recommends review of the reference bus in the market power test.

As correctly recognized by the Proposal, EIM transfer constraints cannot be characterized as structurally competitive and they should not be treated differently as any other internal constraint with regard to market power mitigation. SCE supports the CAISO proposal that, as with all internal constraints within the ISO and within the EIM BAA, EIM transfer limits continue to be tested for competitiveness when the constraint is binding.

[2] If party A has rights to an intertie but not across the intertie, then another party B would have rights on the other side of the intertie for a transaction to occur. Should congestion revenue also be provided to Party B's role to enable the transaction?

SCE recommends the CAISO should further review whether the current selection of the reference bus[3] is effective for EIM transfer constraints and internal constraints in expanded market footprint, and clarify how a resource's flow contribution to an EIM transfer constraint is calculated[4]. The Proposal should discuss the selection of the reference bus in the market power mitigation process for NV Energy and future EIM entities in addition to PacifiCorp.

5. SCE supportive of bringing more supply into the market, but is cautious considering the complex settlement rules

Allowing bids at external EIM interties would provide additional supply into the market which has obvious benefits. However, the settlement rules are highly complex depending on the source and sink and should an e-tag be approve or not approved by the balancing authority. This complexity creates opportunity for gaming behavior as settlement a price spread exists due to one settlement using FFM prices and another settlement using RTD prices. It may be possible for a party to submit a transaction knowing there is a high likelihood of the E-tag being denied in combination of expected price differentials between FMM and RTD. In this case, transaction are submitted to exploit the settlement. SCE recommends the Market Surveillance Committee offer an opinion on this proposal of the potential risks. In addition, the Proposal should examine the need for lower of pricing in settlement to remove gaming incentives.

6. SCE does not support providing compensation via a transfer cost to third party transmission owners to support EIM transfers

In the phase 1 enhancements, the CAISO is going to use a small (less than $0.1/ MWh) transfer cost to optimize the transfer path for EIM transfers. The Phase 2 Proposal suggests using the transfer cost for the purposes of compensating a third party that makes transmission

[3]The Reference Bus used in the existing Market Power Mitigation process is set to be either: (1) the Midway 500kV bus if Path 26 flow is from north to south; or (2) the Vincent 500kV bus if Path 26 flow is from south to north, "Because the Midway and Vincent 500KV buses are located close to the center of the California transmission grid with sufficient generation and roughly half of the system load on either side of the path, they are considered to be least affected by local market power." (p.11, Local Market Power Mitigation Enhancements, Draft Final Proposal, May 6, 2011, available at http://www.caiso.com/Documents/DraftFinalProposal-LocalMarketPowerMitigationEnhancements.pdf.)

[4] Different from other transmission constraints where shift factors are used to calculate flow contributions of resources, EIM transfer constraints are modeled based on loss penalty factors (p21. Technical Bulletin on Pricing Logic for Scheduling Point-Tie Combination, March 2, 2015, available at http://www.caiso.com/Documents/TechnicalBulletin_PricingLogicforSchedulingPoint-TieCombination.pdf). The CAISO should clarify whether this creates inconsistency issue for the market power mitigation process.

available for EIM. This creates two problems. First, it creates a transmission rate pancaking that should be avoided to obtain the least cost dispatch. Second, because the transfer cost becomes embedded in the location marginal price (LMP), the revenues collected are likely to exceed the compensation necessary for the transmission holder. This will create a new problem of how to allocate these revenues. For these reasons, SCE does not support compensation for third party transmission owners via the use of a transfer cost. This issue is an element that should be included in the of the EIM wide transmission cost options.

7. The CAISO should assume no liability for outage reporting to the Peak Reliability Coordinator

The CAISO is proposing to forward to the Peak Reliability Coordinator information that the EIM Entity submits into the CAISO's Outage Management System. SCE does not object to CAISO providing this service to the EIM Entity. However, should there be any liability or penalties associated with this action, they must not be recovered from other CAISO customers. Instead, the EIM Entity should indemnify and hold the CAISO harmless for any liability incurred as a result of offering this service.