

## **Comments of Xcel Energy/Public Service of Colorado (“PSCo”)**

### **On the CAISO Energy Imbalance Market**

#### **Year 1 Enhancements Phase Two Issue Paper and Straw Proposal**

Thank you for the opportunity to comment on CAISO’s Year 1 Enhancements Phase Two issue paper and straw proposal.

Xcel Energy comments will address two topics: first, the potential EIM-wide transmission rate; second, flow entitlements for base schedules/day-ahead schedules; and second, EIM transfer limit congestion treatment.

#### **Potential EIM-wide transmission rate**

As outlined in the issue paper we support Alternative 1: Reciprocity in the use of transmission made available by rights-holders in EIM Entities (EIMs). We support a tariff practice of EIM Entities and the CAISO mutually waiving the incremental transmission charges for real-time market dispatch to increase utilization of the transmission system and improve wholesale market efficiency. This method has the further benefits of simplicity and mutuality which argues for its adoption. PSCo has been supportive of similar tariff policy proposals in other markets including MISO Joint Operating Agreements for seams coordination and the proposed PSCo Joint Dispatch Agreement within its own Balancing Area (BA).

#### **Flow entitlements for base schedules/day-ahead schedules**

The current CAISO proposal regarding the Real Time Congestion Offset (RTCO) may address the immediate problem of EIMs resolving their own congestion in base scheduling. But it is unclear if the proposal incorporates a tool (for example, such as the Peak Reliability Enhanced Curtailment Calculator or ECC) to address the congestion that EIMs may have on neighboring areas. We are also concerned that potential congestion impacts within EIMs and CAISO caused by external, non-market flows should have curtailments coordinated through a similar mechanism to avoid inappropriate charges levied in the RTCO.

We understand that for EIM base schedules, the CAISO provides advisory to the EIM if congestion is anticipated. The advisory provides the EIM the opportunity to adjust base schedules to resolve congestion and avoid RTCO costs. As we understand it, the allocation of RTCO within the EIM is not a CAISO issue, but is left to the EIM to administer.

However, we are concerned that lack of a consistent methodology for the EIMs to allocate RTCO while respecting and considering base schedule transmission service curtailment priority is an unresolved equity issue in the broader EIM design, made increasingly risky from an equity perspective as multiple EIMs join the real-time market dispatch. Due to the lack of a standard and equitable RTCO allocation tool and settlement process amongst the EIM Entities, we have concern with the inconsistent allocation of the RTCO when there is unresolved congestion in the RTD due

to any of numerous causes in routine operations, including unmodified infeasible base schedules, sudden transmission outages that create binding constraints, or external (outside market, off-path) flow impacts that contribute to infeasibility within the EIME or CAISO footprints.

A seams management tool could establish a consistent practice among various EIMs that respects base schedule curtailment priority, making it possible for RTCO to be appropriately allocated to the non-firm schedules before firm schedules that impacted the constraint, both within the EIMs and between EIMs. Further, a seams coordination tool could evaluate the contribution to the market constraint from external sources of flow impact and identify an obligation for provision of relief to these external impacts. This could mitigate the equity concern that the RTCO may include inappropriate costs due to the external flows contributing to the market dispatch constraint without curtailment responsibility allocation to the external party.

For EIM Base Schedules, this same seams tool could also maintain a record of schedule curtailments to be used in settlements for RTCO allocation at the EIME level.

So to reiterate: for all internal and external schedules the seams tool would ensure a comparable basis for curtailment coordination as well as a consistent evaluation of EIM base schedule impacts. For schedule curtailments on monitored elements outside the EIM, the seams tool would presumably mitigate lower-priority EIM market flow contributions ahead of all others. Then the seams tool would calculate the tagged and un-tagged curtailment obligations or remaining relief requirement after EIM market component is removed. If there is a difference in real-time market flow transmission service curtailment priority between internal CAISO market delivery impacts and the EIM market dispatch flow impacts outside CAISO, a seams tool would be required to make this sort of differentiation.

One may envision many scenarios, but for sake of an example, let's consider this one: Assume three parties have flow impact on a binding dispatch constraint within the EIM footprint. Assume two parties are internal to the market but in two different EIMs while the flow impact from the third party sources and sinks external to the EIM. Equity requires any of the non-firm schedule components should be removed prior to the firm. (Note that for Qualified Paths as defined by WECC, the off-path components should be removed before the comparable on-path components.) However as long as the market has sufficient capability to address the constraint through economic dispatch no physical interruption of the internal deliveries need occur. Instead these base schedules can simply be allocated a schedule curtailment from the seams coordination tool in order to induce an energy imbalance settlement and thereby accept the cost allocation for re-dispatch through a targeted RTCO allocation. There is only a need for a physical curtailment of the internal schedule if no re-dispatch can be provided from the market.

As we understand it, failure to recognize these issues in the EIM may result in an inappropriate RTCO allocation to the EIME. It would potentially preclude the EIME or its transmission customers from using the EIM to provide re-dispatch as an efficient alternative to physical curtailments, and potentially would require each EIME to establish their own basis for sub-

allocation of the RTCO within their area. The schedule curtailment information should be used to benchmark an obligation to provide flow relief, which can be realized by an appropriate allocation of EIM congestion costs when the established bilateral schedule contributes to a binding constraint. This would mitigate potential inappropriate allocation of RTCO in comparison to some other basis such as load ratio share.

Failing to accept this design change would result in two problems: increased RTCO due to failure to remove external contributions to the constraint and a failure to allow market re-dispatch in a way that would allocate RTCO cost to the first-curtailed transmission flow impacts (i.e. the non-firm schedules ahead of the firm). And it may create a regulatory liability for either CAISO or the EIME if schedules are either curtailed or allocated congestion costs without regard to the underlying physical curtailment priority of the schedule (non-firm/firm and off-path/on-path).

We believe that the CAISO should anticipate the need to be accountable for Market-to-Market coordination. We recommend continued engagement by CAISO in the western interconnection to expand and enhance the seams coordination role of the ECC tool for all electric transmission users, as this may be one method to achieve the seams objective. We have seen other regional market operators expand their interface to seams coordination tools like the ECC in order to represent marginal unit dispatch impacts on distribution factor calculations of flows causing congestion. We offer no comment on whether there is an immediate need for this level of capability, but regional seams integration via the ECC should be a development goal for CAISO, particularly as the ECC capabilities expand to evaluate both tagged and un-tagged flow impacts on defined elements.