

Item 6: ERCOT Assessment of Independent Market Monitor (IMM) Recommendations

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### **IMM Recommendations.**

- 1. Key Recommendation: Prioritize implementation of Real-Time Co-optimization (RTC).
- 2. Key Recommendation: Implement an uncertainty product (2 to 4-hour ancillary service (A/S).
- 3. Eliminate the "small fish" rule.
- 4. Reevaluate net metering at certain sites.
- 5. Implement smaller load zones that recognize key transmission constraints.
- 6. Implement a Point-to-Point (PTP) Obligation bid fee.
- 7. Exclude fixed costs from mitigated offer caps.
- 8. Price A/S based on the shadow price of procuring each service.
- 9. Modify the allocation of transmission cost of service away from the Four Coincident Peak (4CP) method.



# **Key Recommendation: Prioritize implementation of RTC.**

- RTC is the co-optimization of energy and A/S in real-time. This feature exists in most ISO/RTO markets.
- It works by optimizing the awards of energy and A/S every 5 minutes through Security-Constrained Economic Dispatch (SCED).
- Currently, we award A/S in the Day-Ahead (DA) and hold it out of the market until deployment. Between DA and Real-Time (RT) many operating parameters change. RTC would allow for the movement of the A/S obligation in a way that would improve reliability, reduce costs and reward the units being co-optimized.
- IMM supports this change because it is the feature that would most improve the dispatch efficiency of the market.
- It also improves reliability by dispatching the mix of units in a way that minimizes the need for operator intervention.
- RTC will gain in importance as the mix of resources on the system changes. For example, currently batteries must manage their state-of charge based on the information that they posses. With RTC ERCOT can better manage and consider minute-to-minute changes in Resourcespecific capabilities, creating a framework for better utilizing all types of resources.



# Key Recommendation: Implement an uncertainty product (2 to 4-hour A/S).

- Recommended as a market design enhancement to address conservative operations. More frequent Reliability Unit Commitment (RUC) and increased procurement of Non-spin Reserve Service (NSRS).
- The recommendation centers on creating a product with defined characteristics to be procured in the same manner as other A/S. The service would cover cases when uncertainty leads to tighter RT operations.



#### **Eliminate the "Small Fish" Rule.**

- The PUCT Substantive Rule allows capacity that is a small portion of the overall capacity in ERCOT to be offered in above its marginal cost.
- The rule was implemented before the administrative pricing adjustments that are now part of the ERCOT market. Namely, the Operating Reserve Demand Curve (ORDC) and the Real-Time Deployment Price Adder (RDPA).



### Reevaluate net metering at certain sites to only be allowable if both load and generation are affiliated.

- With the passing of NPRR 945, loads that are behind the interconnection point are allowed to net any generation that is colocated with them.
- Netting provides several benefits to those loads by reducing charges for: ERCOT fees, A/S charges, and Transmission Cost of Service.
- The concern is that changing consumption for those reasons does not align with best congestion management practices or best support price formation.
- The IMM recommended solution is relative to CLRs: require unaffiliated combinations of netting to meter and settle the CLR separately.



### Implement smaller load zones that recognize key transmission constraints.

- The current ERCOT large load zones have not changed since the start of the nodal market. The aggregated price paid by load within the load zones distorts the local incentives for load to help solve congestion.
- If or when active load response grows, paying them the nodal price or a price nearer the nodal price is most efficient.
- Recommendation: re-evaluate load zones and create smaller zones that minimize intra-zonal congestion.



### Implement a PTP Obligation bid fee.

- Over the past few years there have been several instances where the Day-Ahead Market (DAM) has been delayed.
- Delays are disruptive to both the operators at ERCOT and market participants.
- A primary driver of these delays has been the increasing volumes for PTP Obligations.
- Currently there is no cost to entering PTP Obligation bids. This creates an incentive to put in a high number of bids that have little value and create risk to others.
- IMM recommends: a small fee be charged to DAM PTP Obligation bids.



#### Exclude fixed costs from mitigated offer caps.

- In the past, ERCOT has allowed some fixed costs in the verifiable cost process. One factor impacted by these costs are mitigated offer caps (the caps that mitigate or limit locational market power).
- Currently, fixed costs are not allowed, but there is a pending appeal at the PUCT requesting those costs be put back into the verifiable cost process.
- The IMM's recommendation is focused on two multipliers that are currently used in the mitigated offer cap process which can increase the offer prices in the cap, as these multipliers do not correspond to a resource's marginal costs.



# Price A/S based on the shadow price of procuring each service.

- This recommendation focuses on the fact that loads providing Responsive Reserve Service (RRS) do not contribute to pricing the service, based on the current design and incentives.
- The price is set for the service solely based on the generator offers. Load is then awarded up to the procurement limit and the awards to load are prorated, if the amount of offers exceeds the procurement limit.
- The IMM recommends that the procurement limit for load be directly considered in the service pricing in order to better incent offers to reflect the economic cost of providing the service.



# Modify the allocation of transmission cost of service away from the 4CP method.

- Currently Transmission Cost of Service (TCOS) is allocated to load based on their demand during the four coincident peaks (the summer months plus September).
- Consequently, there is value to reducing demand during 4CP and thereby reducing TCOS. You will hear ERCOT staff mention 4CP response over the peak.
- The IMM observes that the current methodology no longer reflects cost causation and creates incentives to interrupt when the system may or may not benefit from that interruption. Hence, they recommend TCOS allocation be changed.



#### Questions

