Smaller Load Zones

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Creating smaller Load Zones

- **Load Zones establish price signals for load response**

- **The four competitive Load Zones have not changed since 2003, despite significant changes in congestion patterns**

- **Smaller Load Zones can be utilized in a participation framework for distributed resource aggregations that permit energy injections and withdraws**
  — Advances DER participation in line with other organized markets (i.e., FERC Order 2222)

- **Considerations for creating smaller Load Zones**
  — New zones must be subdivisions of existing competitive Load Zones
  — Will allow existing LZ settlement values to be calculated
  — Based on prevailing congestion patterns (i.e.,"cluster analysis")
  — All load will be settled against the new load zone values
    — 4-year soak in period for Load Zone changes per ERCOT Protocol section 3.4

LMPs often diverge within the current Load Zones, which can result in price signals that are not aligned with efficient load response

Example of Intrazonal Constraint in South LZ
-August 18, 2022 ~1:30PM-
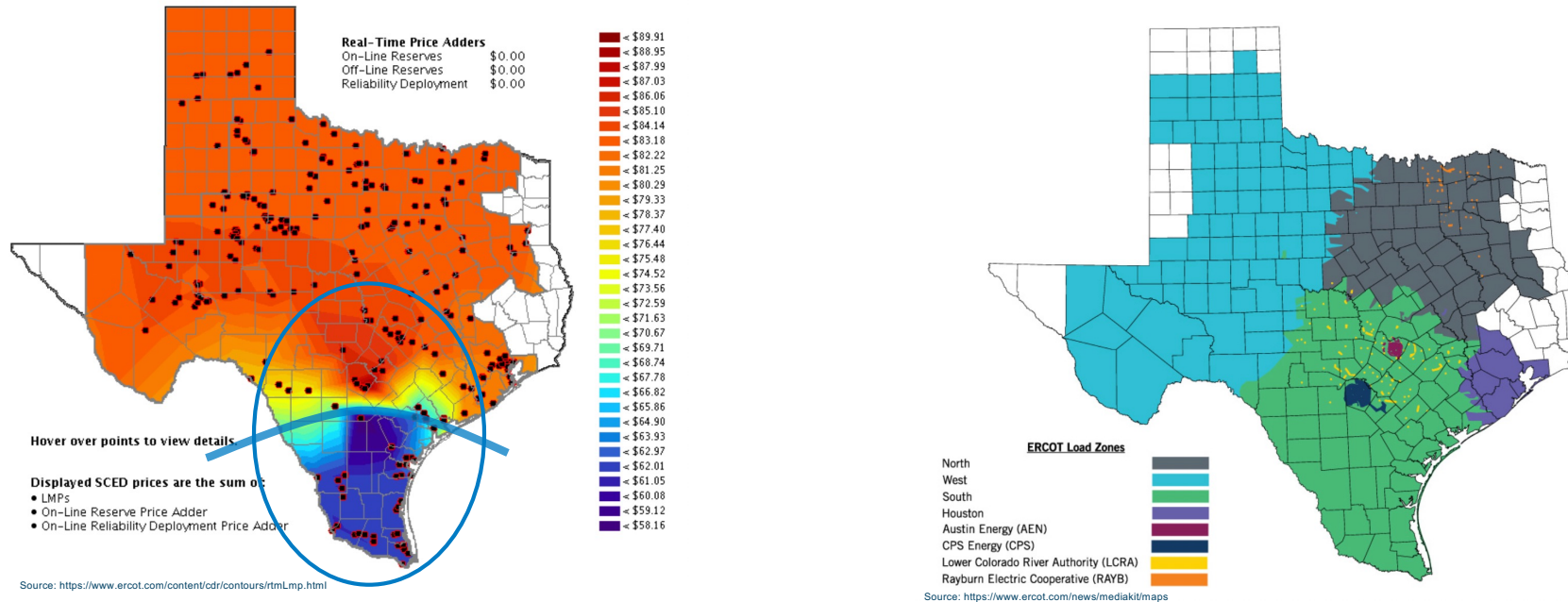
- **Load bus LMPs in the Lower Rio Grande Valley are lower relative to load bus LMPs Central Texas, however the load in both regions settle at the same South Load Zone price**

- **Under severe congestion the LRGV load might curtial to avoid the Load Zone price and make the local congestion worse**

Creating smaller Load Zones promotes market efficiency and can be utilized to establish zonal boundaries for distributed energy resource aggregations

Benefits of Smaller Load Zones

- **Smaller Load Zones that recognize key transmission constraints would align pricing incentives with efficient load response**
  — Price responsive loads would receive more accurate price signals, which are not diluted through bulky aggregation points
  — Price responsive load would not receive a price signal that potentially works cross purpose to resolving congestion

- **Increased congestion management efficiency**
  — More granular shift factors improve the precision of redispatch

- **Smaller Load Zones can be utilized to establish a participation framework for distributed energy resource aggregations**
  — CAISO uses Sub-Laps to set aggregation boundaries and settles DERAs using distribution factors of constituent pricing nodes
  — Other ISOs/RTOs are proposing more granular aggregations
    — NYISO's Order 2222 proposal is to roll up aggregations to the Transmission Node level, which is estimated to be 115 points
    — MISO and SPP compliance filings for Order 2222 proposed single node aggregations
      — FERC is seeking more information on these participation frameworks