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# *Public Utility Commission of Texas*

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## **Memorandum**

**TO:** Chairman Peter M. Lake  
Commissioner Will McAdams  
Commissioner Lori Cobos  
Commissioner Jimmy Glotfelty

Interested Parties

**FROM:** Ben Haguewood, Market Analysis

**DATE:** October 25, 2021

**RE:** Project No. 52373 – *Review of Wholesale Electric Market Design*

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Commission staff requests written comment on the following questions **by noon on November 1, 2021**. Please limit responses to 15 pages, excluding the executive summary. **Comments should include a clearly marked Executive Summary of up to two pages, labeled with the commenter's name, attached as the final page or pages of the submission.** Additional policy questions discussed during the Commission's October 21 work session will be addressed in future requests for comment.

1. The ORDC is currently a “blended curve” based on prior Commission action. Should the ORDC be separated into separate seasonal curves again? How would this change affect operational and financial outcomes?
2. What modifications could be made to existing ancillary services to better reflect seasonal variability?
3. Should ERCOT develop a discrete fuel-specific reliability product for winter? If so, please describe the attributes of such a product, including procurement and verification processes.
  - a. How long would it take to develop such a product?
  - b. Could a similar fuel-based capability be captured by modifying existing ancillary services in the ERCOT market?
4. Are there alternatives to a load serving entity (LSE) Obligation that could be used to impose a firming requirement on all generation resources in ERCOT?
5. Are there alternatives to an LSE Obligation that could address the concerns raised about the stakeholder proposals submitted to the Commission?

### **Load Serving Entity (LSE) Obligation**

6. How can an LSE Obligation be designed to protect against the abuse of market power in the wholesale and retail markets?
  - a. Will an LSE Obligation negatively impact customer choice for consumers in the competitive retail electric market in ERCOT? Can protective measures be put in place to avoid a negative impact on customer choice? If so, please specify what measures.
  - b. How can market power be effectively monitored in a market where owners of power generation also own REPs that serve a large portion of ERCOT's retail customers?
  - c. What is the impact on self-supplying large industrial consumers who will have to comply with the LSE Obligation and will it impact their decision to site in Texas?
  - d. What is the impact of an LSE Obligation on load-serving entities that do not offer retail choice, such as municipally owned utilities or electric cooperatives?
  - e. Can market power be monitored in the bilateral market if an LSE Obligation is implemented in ERCOT? Can protective measures be put in place to ensure that market power is effectively monitored in ERCOT with an LSE Obligation? If so, please specify what measures.
  - f. Should the LSE Obligation include a "must offer" provision? If so, how should it be structured?
7. How should an LSE Obligation be accurately and fairly determined for each LSE? What is the appropriate segment of time for each obligation? (Months? Weeks? 24 hour operating day? 12 hour segments? Hourly?)
8. Can the reliability needs of the system be effectively determined with an LSE Obligation? How should objective standards around the value of the reliability-providing assets be set on an on-going basis?
  - a. Are there methods of accreditation that can be implemented less administrative burden or need for oversight, while still allowing for all resources to be properly accredited?
  - b. How can winter weather standards be integrated into the accreditation system?
9. How can the LSE Obligation be designed to ensure demand response resources can participate fully and at all points in time?
10. How will an LSE Obligation incent investment in existing and new dispatchable generation?
11. How will an LSE Obligation help ERCOT ensure operational reliability in the real-time market (e.g., during cold weather events or periods of time with higher than expected electricity demand and/or lower than expected generation output of all types)?
12. What mechanism will ensure those receiving revenue streams for the reliability services perform adequately?

13. What is the estimated market and consumer cost impact if an LSE obligation is implemented in ERCOT? Describe the methodology used to reach the dollar amount.
14. How long will the LSE Obligation plan take to implement?
15. If the Commission adopts an LSE Obligation, what assurances are necessary to ensure transparency and promote stability within retail and wholesale electric markets?
16. Are there relevant “lessons learned” from the implementation of an LSE Obligation in the SPP, CAL-ISO, MISO, and Australian markets that could be applied in ERCOT?

**Attachment A – Excerpt from Chairman Lake’s October 20, 2021 memo**

| Concept         | Details   | Problem Targeted   |
|-----------------|---|--|
| ORDC Reform     | <p>Move MCL to 3,000 MW.<br/>           HCAP = VOLL = \$4,500.<br/>           No change to Standard Deviation.</p>  | <ul style="list-style-type: none"> <li>- Market-based mechanism to bring units online sooner during scarcity events (as opposed to non-market RUC action).</li> <li>- Increases revenues to reliable assets able to be dispatched during scarcity events.</li> </ul>   |
| LSE Obligation  | <p>Steady state, no trigger provision.<br/>           Physical obligation.<br/>           Accreditation based on reliability standard by resource type.<br/>           Accreditation accounted for w/ credit system by resource for each operating day.<br/>           Three year forward requirement<br/>           Obligation: 100% of LSEs load share ratio of ERCOT forecast net peak load (3 years from operating day = 50% of load share ratio, 2 years = 70%, 1 year = 90%, 6 months = 95%, 1 month = 100%).<br/>           Penalties: Levied on LSE for lack of adequate credits, levied on generator for lack of performance + obligation to procure amount short in RT market.<br/>           Transparency: ERCOT maintains bulletin board where all credit transactions are posted w/ counterparties, volume, &amp; price. IMM has full authority to investigate market manipulation .<br/>           Phase-In: Consider phased implementation w/ temporary price caps, limited penalties, etc. as market adjusts.</p> | <ul style="list-style-type: none"> <li>- Realistic accounting of reliability of each resource type.</li> <li>- Ensure LSEs procure the electricity they have promised to their customers.</li> <li>- Provide price formation information years in advance of operating day to give investors real data points on which to base investment financing.</li> <li>- Potentially provide financial reward for meeting weatherization standards w/o having to build new AS markets.</li> </ul> |
| Demand Response | <p>Upgrade hardware &amp; software to improve frequency of telemetry data.<br/>           Change demand response pricing from zonal to LMP.</p>   | <ul style="list-style-type: none"> <li>- Enhance demand response capabilities system-wide.</li> <li>- Improve transparency of price signals for load resources.</li> </ul>   |

| Concept                           | Details  | Problem Targeted   |
|-----------------------------------|--|--|
|                                   | Establish higher performance standard for energy efficiency program.   | - Improve precision level of load shed.  |
| ERS Reform                        | Move ERS deployment to new MCL. All ERS should be deployed before a conservation call is needed/issued. Set a quantity of MW to be procured by season rather than a fixed dollar amount. | - Provide an additional margin of safety during scarcity events.<br>- Provide a clear and consistent revenue stream for reliable demand response resources.  |
| ECRS (Ramping Ancillary Service)  | Continue on current implementation schedule.<br>Assign costs to IRRs responsible for sudden, substantial drops in generation capacity.   | - Provide operational flexibility to ensure resource adequacy during evening drop in solar generation and periodic drops in wind generation.   |
| FFRS                              | Continue on current implementation schedule  | - Enhance frequency stability.   |
| Voltage Support Product           | Develop a voltage support product similar to other ISOs.<br>Assign costs to resources that do not provide grid supporting capabilities.  | - Ensure voltage support to maintain grid stability as more inverter-based resources come online.  |
| Winter Ancillary Services Product | Develop a stand-alone, auction-based winter weather product (procured in a manner similar to Black Start program).   | - Provide revenue support for dispatchable resources that meet a higher standard of (“firm”) winter weather resiliency and reliability.<br>- If weatherization cannot be incorporated into an LSE Obligation (or an intermediate product is needed during implementation), this product can serve as a stopgap to ensure winter reliability. |