

Residential Demand Response Program
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Submitter's Information	
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Comments

Texas Industrial Energy Consumers (TIEC) strongly supports market-based demand response for all customer classes as a key element of a reliable grid and successful competitive market. In many instances, demand response is the most cost-effective way to increase operating reserves and support reliability. TIEC's members are large, sophisticated customers who provide thousands of megawatts of demand response to the ERCOT market. TIEC's member companies help balance supply and demand in real-time by reducing their usage based on price signals, making additional energy available to the market. In addition, many TIEC members provide Responsive Reserve Service (RRS), and some also participate in the Emergency Response Service (ERS) program. TIEC recognizes that significantly expanding residential demand response would help manage peak usage on the grid and potentially avoid the need for additional infrastructure or generation resources. However, TIEC maintains its concerns with ERCOT's Residential Demand Response Program because: (a) the program is not market-based or competitively neutral; (b) this type of initiative is better suited for competitive offerings from retail electric providers (REPs) and other load-serving entities (LSEs); (c) the program appears to be an end-run around statutory requirements governing energy efficiency mandates, and (d) the proposed payments are excessive and

will harm other customers—including non-participating residential and small commercial customers.

A. The Residential Demand Program is not market-based.

ERCOT's proposal is entirely out-of-market, and therefore fails to comply with PURA's mandate that the Commission rely on competitive methods to the greatest extent feasible.¹ Unlike the design of all other Ancillary Services, this proposal is not based on a particular operating characteristic, but is explicitly limited to one type of resource and is not competitively bid. As a result, the proposed Residential Demand Program will likely be inefficient and costly.

Under ERCOT's proposal, REPs and Non-Opt-In Entities (NOIEs) will receive a capacity payment (or incentive payment) based on the amount of energy curtailed through smart devices. The payments are not competitively bid but would be set by ERCOT at some multiplier of an estimated cost of new entry (CONE) for generation up to a 500 MW seasonal compensation cap. Critically, this proposal is an out-of-market action that arbitrarily compensates LSEs (a portion of which may or may not flow through to a subset of residential consumers) in an attempt to incentivize more investments in smart devices. Traditionally, when designing an ancillary service, ERCOT identifies specific resource characteristics that are needed for a defined, quantified reliability objective, and resources compete to provide the service at the lowest possible cost. This proposal, however, is limited to one particular customer class—residential customers—and one “technology”—smart devices (HVAC controls). As discussed below, ERCOT's proposal is fundamentally another energy efficiency program, but without the statutory requirements and customer protections under PURA §§ 39.905 and 39.919. Again, while TIEC supports efforts to expand residential demand response, ERCOT should not be administering a program that effectively bypasses statutory spending limits for energy efficiency by creating a targeted program only for a certain type of residential load control.

Further, ERCOT's Residential Demand Response Program is unnecessarily costly. There has been no analysis that suggests a multiplier of CONE is a cost-effective

¹ PURA § 39.001(d).

payment for this type of residential demand response, and this is not a market-based or competitively bid price. During the workshop on June 16th, ERCOT explained that the CONE value would result in a \$1-\$2/event payment, which “**seemed** to be something that would be reasonable” to provide a marginal incentive to customers.² It’s also unclear whether LSEs would actually pass through \$1-\$2/kwh reduction to its customers, and if so, how this would be done. ERCOT also suggested that while it reviewed the designs of programs in other jurisdictions, it has not done an analysis to show what level of compensation consumers would be willing to accept to participate.³ Notably, LSEs will already receive additional energy market revenues and avoided ancillary service and other market costs from residential demand response that could be used to develop a payment for participating customers.

During the workshop, ERCOT also attempted to justify that a multiplier of CONE is reasonable because the Demand Response Program will act as a new, incremental resource.⁴ This argument is based on a capacity construct, and under ERCOT’s logic any demand response or new generator should automatically receive some multiplier of CONE because it is bringing new resources into the market. Contrary to ERCOT’s argument, resources in the energy-only market only receive the market clearing price based on the energy they provide to the grid. There is no guarantee resources will earn CONE in a given year. Furthermore, CONE is a planning metric that represents the estimated revenue a new generation resource would need to earn in order to recover its capital investment and fixed costs. CONE is unrelated to the actual avoided market costs of (i) new or brownfield generation development, (ii) reducing demand, or (iii) the costs LSEs incur to invest in controllable devices.

² Grid Monitor, Residential Demand Response Workshop at 51:01-55:03 (June 16, 2025) (available at: <https://dash3.gridmonitor.com/sharing/?token=fac357aa-a788-499e-b978-c8e812723927>).

³ Grid Monitor, Residential Demand Response Workshop at 1:05:02-1:06:39 (June 16, 2025) (available at: <https://dash3.gridmonitor.com/sharing/?token=0622dd31-d070-401a-bf86-8cb0ad401c2f>) (“We do not have a lot of interaction with residential customers. To some extent, that’s why we’re all here today is we’re really looking for the expertise of those who do have the interaction with residential customers to help us in the development of this program.”).

⁴ Grid Monitor, Residential Demand Response Workshop at 51:01-55:03 (June 16, 2025) (available at: <https://dash3.gridmonitor.com/sharing/?token=fac357aa-a788-499e-b978-c8e812723927>).

Rather than awarding resources a multiplier of CONE, ERCOT should use a competitive bidding process. Specifically, ERCOT should identify the market needs, consider the performance requirements of the resources that can meet that need, and determine the quantity of that service needed. With these essential determinations, all resources capable of meeting that need can then compete to supply the identified quantity of service. Importantly, using this type of competitive bidding process harnesses market forces to decrease the cost of the service because resources will compete to provide the service at the lowest possible price.

B. The Residential Demand Response Program is an end-run around cost protections on energy efficiency programs.

ERCOT's Residential Demand Response Program is almost identical to a program established by the Commission after the 88th Legislative Session. Under the Commission's substantive rules, REPs can receive funding from energy efficiency programs for investments in responsive device programs that comply with certain evaluation, measurement, and verification requirements.⁵ Similar to ERCOT's proposal, the purpose of the Commission's program is aimed at reducing residential consumption through the use of REP's responsive device programs. The main difference between ERCOT's proposal and the Commission's existing program is that the Legislature limited the funding for the Commission's program to protect customers against unjustified costs. Under PURA, utilities providing energy efficiency incentive programs can only use up to 10% of their budgeted spending for REP demand response programs.⁶ In light of the Legislature's directive to the Commission, ERCOT's proposal seems to bypass PURA § 39.919(d) by allowing REPs to receive unrestricted funding from ERCOT for responsive device programs, including programs that may not comply with evaluation, measurement, or verification requirements.

If ERCOT's Residential Demand Response Program moves forward, ERCOT and the Commission also need to establish protections to ensure that the programs are not double counting the same demand response. The Legislature specifically directed the

⁵ 16 TAC § 25.186(f).

⁶ PURA § 39.919(d).

Commission to establish a goal to reduce the average total of residential load, design a program that includes REP demand response programs, and create a method for calculating the reduction in residential load to evaluate whether the Commission is meeting its goals. If ERCOT develops an identical program it will be difficult to determine which curtailments are associated with each program, and it would be unclear whether the Commission is achieving its goal of reducing the average total residential load by 0.25 (i.e., a 20% reduction in load by participating residential customers) as set out in its substantive rules and in PURA § 39.905.⁷ As such, ERCOT would likely need to separately track which customers were deployed for each program. Similarly, REPs that received funding from the Commission should not receive additional payments from ERCOT associated with reducing the same residential load.

ERCOT's Residential Demand Response Program could also undermine the existing Aggregate Distributed Energy Resource (ADER) Pilot Project. Notably, the ADER Pilot Project was established by PUC directive in Project No. 53911. Although participation in ADER programs has been limited, ERCOT is in the process of developing Phase 3, which will allow controllable load with the capability of 1 MW or less to participate.⁸ This could open up ADER participation for loads, even residential loads that are controllable. It is therefore critical that there is coordination between the ADER Pilot Project and ERCOT's Residential Demand Response Program.

C. It is unclear whether ERCOT's Residential Demand Response Program adds enough value to justify its implementation.

TIEC remains skeptical that the Residential Demand Response Program will significantly increase participation in demand response more than existing market incentives. LSEs can, and should, develop programs to incentivize residential demand response in a way that is digestible and accessible for their smaller customers. Although PURA requires small customers to be on fixed price products where they are not exposed to real-time prices, all LSEs are exposed to real-time prices, and these prices are an

⁷ 16 TAC § 25.186(d)(3).

⁸ *Aggregate Distributed Energy Resource (ADER) ERCOT Pilot Project*, Project No. 53911, ERCOT letter Regarding ADER Pilot Project Phase III Report (June 24, 2025).

incentive to reduce retail demand when prices are high. This exposure makes reducing peak demand a critical strategy for avoiding high-cost hours, preserving budget stability, and protecting their rate base. As a result, both REPs and NOIEs should already be managing the risk in their portfolios and actively investing in reducing residential demand if it is cost-effective. For example, many REPs and NOIEs already actively market controllable devices (i.e., smart thermostats) to their customers to reduce their peak demand to avoid 4CP charges and lower their exposure to high prices.

As proposed, the Residential Demand program is an additional profit stream for LSEs to do *what they should already be doing*. While it could arguably incentivize some smaller REPs or NOIEs to invest in controllable devices, it's unlikely to have a significant effect. NRG (Reliant and affiliates) and Vistra (TXU Energy and affiliates) control 75-80% of all residential usage, and they are sophisticated enough that they do not need subsidies to manage their energy pricing risk. For example, Reliant has already put forward a Smarter Home Bundle aimed at using advanced technology (i.e., smart thermostats) to conserve energy and reduce residential demand,⁹ and TXU Energy is investing \$100 million to develop energy efficiency and conservation products to help residential customers use less energy.¹⁰ These large and very profitable entities are already making market-based decisions to manage their portfolios (new generation vs. purchases vs. demand response). They do not need capacity payment solutions to manage the risk of their residential customer portfolio.

Generally, REPs and NOIEs will manage price risk in the most cost-efficient way, so if they are not sufficiently reducing residential demand, that means there are cheaper alternatives. ERCOT should more clearly explain why it believes there is a market failure in this area and should tailor any market changes to meet that specific failure, rather than creating a new payment program based on arbitrary capacity payments to large,

⁹ BusinessWire, *Smarter Together: Reliant and Vivint Introduce Smarter Home Bundle* (April 15, 2025) (available at: <https://www.businesswire.com/news/home/20250415496905/en/Smarter-Together-Reliant-and-Vivint-Introduce-the-Smarter-Home-Bundle>).

¹⁰ TXU Energy, *Why to Switch from Green Mountain Energy to TXU Energy* (available at: [https://www.txu.com/why-txu-energy/switch-from-green-mountain-energy#:~:text=We%20sponsor%20the%20National%20Energy%20Education%20Development,technology%20and%20energy%20lessons%20to%20the%20classroom.&text=TXU%20Energy%20is%20investing%20\\$100%20million%20to,save%20money%20and%20help%20the%20Texas%20environment.](https://www.txu.com/why-txu-energy/switch-from-green-mountain-energy#:~:text=We%20sponsor%20the%20National%20Energy%20Education%20Development,technology%20and%20energy%20lessons%20to%20the%20classroom.&text=TXU%20Energy%20is%20investing%20$100%20million%20to,save%20money%20and%20help%20the%20Texas%20environment.)).

sophisticated market REPs. Instead of continuing forward with the proposed out-of-market capacity payments, ERCOT should rely on competitive, market-based solutions for the services it procures. This will ensure the solution is dependable, cost-effective, and compatible with PURA.

Reliant Energy Comments on the ERCOT Residential Demand Response Program

July 4th, 2025

Reliant Energy (Reliant) appreciates this additional opportunity to provide feedback on ERCOT's proposed Residential Demand Response Program, which takes into consideration issues raised during the second workshop on June 16th, 2025. Reliant continues to strongly support ERCOT's efforts to develop a demand response program for residential customers. The competitive retail market holds the most potential to increase residential demand response capability, and Retail Electric Provider (REP) administered programs that can harness and maximize this potential should be the focus when considering how to grow demand response in ERCOT. REPs are certificated and regulated by the Public Utility Commission of Texas (PUCT), which ensures sufficient customer protections will be followed in implementing ERCOT's program.

As explained in prior comments, the focus of demand response programs developed at ERCOT historically have been to the benefit of mid-to-large commercial and industrial consumers with programs such as Emergency Response Service (ERS) and participation in ancillary service products for Load Resources. Load Resources can now provide Responsive Reserve Service (RRS), ERCOT Contingency Reserve Service (ECRS), and Non-Spinning Reserve Service (NSRS). The largest driver for demand response in the ERCOT region is the 4 Coincident Peak (4CP) transmission cost allocation mechanism, which is exclusively available to larger commercial and industrial consumers in the competitive service territories along with Non-Opt-In Entities (NOIEs). It is therefore long overdue to design a program focused on residential consumers in the competitive market. Given increased adoption of smart energy devices in the home such as smart thermostats, aggregations of residential customers have great potential to be a meaningful and readily accessible resource in the near term to help address resource adequacy.

Reliant supports the initial framework proposed by ERCOT given the desired expediency in implementation and offers the following guideposts for program design consistent with ERCOT's proposal:

- To maximize participation as quickly as possible, the program must be simple and flexible to allow REPs to design and market retail products to customers to encourage their participation.
- The program design should minimize technical complexity (such as use of telemetry).
- Program incentives should be aligned with times of the greatest need and ensure deployment to addresses resource adequacy needs.
- Program costs should be allocated reasonably and equitably.
 - Because the program will benefit the ERCOT grid as a whole, ERCOT's proposal to allocate costs based on hourly load ratio is both reasonable and equitable.

Reliant acknowledges the concerns expressed at both workshops and presumably in written comments regarding the potential conflict of this program design with the energy-only market and price formation. As experience has shown since the implementation of the competitive wholesale market in ERCOT, carefully crafting a market solution that utilizes energy price formation

to successfully attract new resources, including demand response, on a timeline necessary to avoid grid emergencies (which meets the public's expectations for reliability) has proven difficult to say the least. Considering the prevalence of price suppressive policies and factors that plague the ERCOT market (see below), it is time to look to other options that are more likely to succeed. That said, further evolution of the program design should be considered in a subsequent phase to incorporate market pricing adjustments or other market design improvements to offset price formation impacts from this program and the many others that exist.

ERCOT included a 500MW cap on the compensation mechanism in the initial design to address market design concerns and limit potential impacts. To encourage more robust participation, Reliant recommends a higher cap of 1,000MW in the initial implementation, or an alternative figure based on a cost-benefit analysis with a phased-in approach to a higher cap as the program grows. ERCOT should be more concerned about the overwhelming load growth in the coming years than potential pricing impacts from this program. ERCOT's Adjusted Load Forecast recently approved by the Commission¹ estimates a peak demand of 150GW in 2031 which equates to over 64GW of load growth compared to the current peak demand record (85.5GW²), or 6,000MW of load growth per year through 2031. When facing this amount of load growth or even a fraction of it, worrying about energy price impacts from a relatively modest amount of residential demand response is misguided. However, Reliant does understand the frustration expressed by other market participants given the rollout of this proposed program and the already-existing disassociation between the current market design and its ability to meet the future reliability needs of the ERCOT market.

To be clear, the difficulty of the current market structure to properly incentivize sufficient resources through energy price formation has existed for decades and will continue regardless of whether this program is implemented or not. The existing and significant price suppressive impacts result mainly from policies and objectives unrelated to energy market design, some of which are listed below, and they cannot realistically be contained nor their long-term impacts on resource investment decisions reversed.

List of "Out of Market Actions" that Impact Price Formation in ERCOT's Energy-Only Market:

- Transmission Cost Allocation and Rate Design
- Subsidies for Renewable Generation
- Subsidies for Energy Storage Generation
- Subsidies for Thermal Generation
- Energy & Ancillary Service Offer Caps below VOLL
- Energy Offer Mitigation below VOLL
- Subsidized Energy Efficiency Programs (TDU, Muni, Coop)
 - State and local rebates for HVAC system upgrades – peak demand reduction
- Conservation Appeals

¹ [PUCT Order Granting Good Cause Exception for ERCOT's 2025 Adjusted Load Forecast](#)

² [ERCOT Yearly Peak Demand Records](#)

The policies listed above each bring their own corresponding benefits but they serve purposes that contradict the energy-only market design. This reality cannot be ignored. The idea that the integrity of price formation can somehow be preserved or restored is unrealistic. When facing this reality, Reliant prefers to be pragmatic and supports the implementation of ERCOT's residential demand response program to help address the significant reliability challenge coming to the ERCOT market. Compared to the significant price suppressive impacts listed above, the impact of a residential demand response program on prices will be minimal, while the benefits could be meaningful. In fact, Reliant sees great potential in residential demand response and encourages stakeholders to focus on how to evolve the overall ERCOT market design going forward to provide investment incentives for the resources we want to attract through market mechanisms that can realistically help achieve the reliability standard in a cost-effective way.

El-Madhoun, Mohamed

From: Rick Arnett <rarnett@lglawfirm.com>
Sent: Wednesday, July 2, 2025 4:26 PM
To: King, Ryan; El-Madhoun, Mohamed
Cc: Mark Dreyfus; Thomas Brocato
Subject: Residential Demand Response Program - Eastland Second Informal Comments

***** **EXTERNAL Email** *****

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Ryan and Mohamed,

The City of Eastland (Eastland) appreciates the opportunity to provide these second informal comments on ERCOT's proposed Residential Demand Response Program (Program) on behalf of the Small and Large Commercial Consumer Segments. Eastland files these comments to re-urge ERCOT to adopt a *competitive* residential demand response program.

At the June 16, 2025, Residential Demand Response Workshop, stakeholders agreed that normal forces of competition should dictate or control the Program's incentives. Similarly, many stakeholders expressed concern that ERCOT's proposed Program may undermine the real-time and ancillary service markets. Some stakeholders even argued that the proposed design would undermine resource adequacy initiatives. Eastland generally share these concerns and recommends that ERCOT avoid a capacity design. The Program, as currently contemplated, would reward consumers for demand response availability during times of grid constraint, compensating them with an administratively determined price. Instead, the Program should be an energy market product that is more cohesive with ERCOT's energy only market. As recommended in Eastland's first comments, participating residential consumers' Load Serving Entities could bid aggregated demand response capacity into SCED. This ensures that competition controls the demand response capacity settlement price, ensuring a competitive outcome.

ERCOT's Residential Demand Response Program could provide a critical reliability tool. Eastland generally supports ERCOT's efforts but urges ERCOT to establish the Program as an energy market product. Eastland looks forward to working with ERCOT and stakeholders on this issue going forward.

Thank you,
Rick & Mark



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TAEBA Residential Demand Response Program Updated Proposal Reply Comments

TAEBA appreciates ERCOT providing stakeholders the opportunity to comment on the modified proposal for the Residential Demand Response Program presented at the June 16, 2025, workshop. We take the time to respond to some of those proposals in these comments.

TAEBA is comfortable with ERCOT's proposal to allow all LSEs to provide the Residential Demand Response Service. While we understand ERCOT's hesitation to allow direct 3rd-party aggregator participation, we feel that staff has not provided adequate insight into how 3rd-party aggregators can coordinate with LSEs to activate their resources for program participation. There should be an established structure which provides clear performance and administrative responsibilities of each party. This structure for QSE-QSE partnerships would enhance the program and get ERCOT closer to its ideal DR participation levels. In addition, TAEBA understands that direct 3rd-party participation introduces additional complexity around administration, customer protection, and tracking. However, we believe direct 3rd-party participation could also bring substantial benefits, increasing the ability for DR providers to enroll customers into this program at scale. We hope that a review of 3rd-party aggregator participation in the Residential Demand Response Program post program implementation.

TAEBA also has concerns about introducing a program participation cap. We understand that ERCOT staff are balancing the desire to have program participation levels which are both effective for delivering reliability and concerns over unintended consequences of large amounts of DR participation. We find, however, that introducing a program cap itself has some unintended consequences. A program cap unnecessarily increases the administrative burden of the program, in direct conflict with ERCOT's stated desire for a DR program which is easy to administer. Additionally, a program cap on the amount of DR response which can qualify is also a cap on potential peak load shaving and therefore a cap on potential reliability gains the system can gain under emergency conditions. This constraint also limits the program's ability to keep ERCOT from experiencing emergency grid conditions. With our opposition to a cap acknowledged, should a cap be introduced into the program, TAEBA agrees with staff's stated position that "any cap should be able to support growing participation and ensure a degree of predictability around cost." Ideally, any introduced cap should be reevaluated regularly and ideally updated seasonally in line with the settled settlement schedule for the program. Any initial cap that is introduced should also leave enough participation headroom to account for projected resource participation with a 5-year

outlook minimum. This will allow the program to grow while evaluations are made regarding cap increases for future seasons. While TEABA understands ERCOT's concern about possible low participation leading to errors in baseline accuracy, we anticipate the risk of participation at levels which cause accuracy errors much lower than the risk of losing reliability by designing a program which has capped participation and benefits. There is a high likelihood that ERCOT's proposed baseline participation of 2,000 households will be met.

TAEBA is also supportive of ERCOT's proposal to base program cost recovery on seasonal load ratio share. This keeps program settlements simple for ERCOT and allows LSEs flexibility in how to compensate their participating households. Participation incentives which drive program enrollment in one region may not have the same impact in another region, and allowing LSEs flexibility to attract participants will help the program reach higher participation levels.

Regarding submission requirements, TAEBA is comfortable with requiring 15-minute premise-level data for all premises participating in the program. We also appreciate ERCOT's acknowledgement that 100% of total residential customer data at 15-minute premise-level is not required. We also agree that a 100%-meter data requirement may not be realistic for participating residences across the state.

TAEBA also agrees with ERCOT's proposal that actual net load be utilized as the program trigger. Staff's concerns that predicting net load would be difficult are reasonable, and allowing the program to trigger based on the actual net load will ensure that real-time performance is awarded. In conjunction with this position, it is reasonable that ERCOT uplift program costs on a seasonal load ratio share basis. Assessing program performance and settlement on a quarterly seasonal basis is also reasonable.



Texas Public Power Association's Comments on ERCOT's Proposed Residential Demand Response Program

The Texas Public Power Association (TPPA) appreciates the effort ERCOT staff has dedicated to developing the proposed residential demand response program, including the multiple stakeholder workshops and the dedicated call held to discuss the proposed program's implications for NOIEs. However, at this time, TPPA respectfully recommends that ERCOT pause further development of the program. TPPA offers the following recommendations for consideration.

1. Pause further development of the proposed ERCOT residential demand response program.

- ERCOT is already strained with implementing other statutorily required initiatives – to the point that it is even delaying revision requests that have been approved by stakeholders, the ERCOT Board, and the Commission.
- Other legislatively mandated sources of demand response will provide larger, more reliable assistance to the grid and should take priority over this proposed program.
- Given the potential impact of other regulatory developments, moving forward with the proposed residential demand response program at this time is premature.
- Evaluation of the proposed program against ERCOT's market design objectives reveals significant shortcomings.

2. If ERCOT chooses to proceed with the proposed residential demand response program, TPPA recommends that the funding mechanism exclude MOUs that elect not to participate.

- MOUs already operate successful demand response programs and do not need more incentive for maintaining their programs.
- The proposed program would impose additional costs that undermine MOUs' existing, self-funded programs, which are already delivering significant system-wide reliability benefits without relying on market subsidies.
- ERCOT's proposed data requirements would impose unjustified costs and operational burdens on MOUs, rendering the program unworkable for most MOUs.

The following sections offer additional analysis and recommendations reflecting ERCOT's current priorities, regulatory obligations, and practical considerations for program implementation.

1. Pause further development of the proposed ERCOT residential demand response program.

ERCOT is already strained with implementing other statutorily required initiatives – to the point that it is even delaying revision requests that have been approved by stakeholders, the ERCOT Board, and the Commission.

ERCOT has repeatedly advised stakeholders to hold off on proposing new market and reliability enhancements due to the volume of legislative mandates and the demands of RTC implementation. Most recently, at the June 23 ERCOT Board meeting, ERCOT highlighted that it is pausing its work on non-RTC initiatives not mandated by the legislature or the ERCOT Board.¹ Additionally, the PRS is currently reviewing all approved but unimplemented revision requests to identify which should be prioritized and which are unlikely to be implemented at all.² ERCOT has also introduced a new Market Design Framework to assess the necessity of proposed enhancements, which one of its aims is to ensure that ERCOT's efforts are focused on high-impact items, given that current resource constraints allow work only on those with significant system value.³ Even DRRS, which has a statutorily defined timeline that has already passed, is still in development by ERCOT and stakeholders.⁴

Other legislatively mandated sources of demand response will provide larger, more reliable assistance to the grid and should take priority over this proposed program.

TPPA recognizes that one of ERCOT's Board-approved Objectives, Key Results, and Commitments (OKCs) is the development of a demand response program. TPPA also notes that Senate Bill 6 (89R), which was signed into law by the Governor last month, mandates the creation of a demand response program specifically for large loads.⁵ In light of ERCOT's resource constraints and the growing number of legislatively required initiatives, TPPA recommends that ERCOT fulfill its demand response OKC by prioritizing the implementation of the SB6-mandated large load program, rather than pursuing this proposed residential demand response program.

ERCOT's proposed residential demand response program initially aims to enroll 2,000 households to provide up to 500MW demand response. While ERCOT hopes to grow this program significantly beyond this initial target, equivalent demand response could be achieved by engaging just a handful of large loads. These customers tend to be price-responsive and often have backup generation – making them more likely to participate

¹ June 23, 2025, ERCOT Board of Directors Meeting, Item 6.3, Real-Time Co-Optimization Update, slide 15.

² June 11, 2025, PRS meeting, Item 4, PRS_June_2025_Project_Update, slide 7-9.

³ April 25, 2025, Market Design Framework Workshop, 04232025 Framework Discussion FINAL, slide 5-6.

⁴ HB1500, Section 51 requires DRRS to be implemented not later than December 1, 2024.

⁵ Public Utility Regulatory Act (PURA) § 39.170(b).

consistently in demand response than residential customers who frequently override smart thermostats. Further, a large load demand response program is required by statute, and ERCOT’s proposed residential program is not. Given delays due to other statutorily required programs, TPPA recommends that ERCOT instead focus on developing the SB6 large load demand response program in lieu of its residential demand response program.

Given the potential impact of other regulatory developments, moving forward with the proposed residential demand response program at this time is premature.

This proposed program will award demand response over the net peak load intervals which currently align closely with 4CP intervals. SB6, however, requires the PUC to reevaluate 4CP and how transmission costs are allocated. Depending on the results of this evaluation, a change away from 4CP will likely lead to conflicting incentives on when to deploy demand response. Accordingly, it would be most reasonable to delay this program until the Commission determines its transmission cost allocation approach.

Moreover, starting in January 2026, ERCOT will be required to conduct its periodic reliability assessment.⁶ The proposed residential demand response program will increase uncertainty in that assessment and undermine its accuracy, as ERCOT will not have significant lived experience with the program’s operation and performance.

Evaluation of the proposed program against ERCOT’s market design objectives reveals significant shortcomings.

TPPA offers this evaluation of the proposed program in response to ERCOT’s recommendation that Market Participants apply the Market Design Framework currently under development.

Attribute	Proposed Program	Notes
Flexibility	- - -	Dispatch would occur only through an LSE, with ERCOT having limited control over dispatch volume and timing.
Dependability	- - - -	The program relies heavily on customer willingness to respond consistently and avoiding fatigue. As proposed, LSEs may not have clear indicators for when to deploy the program, leaving ERCOT with little certainty regarding the availability or magnitude of the response.

⁶ 16 Texas Administrative Code (TAC) § 25.508(c)

Availability	- - - -	The program relies heavily on customer willingness to respond consistently and avoid fatigue. Moreover, as proposed, LSEs may not have clear indicators for when to deploy the program, leaving ERCOT with little certainty regarding the availability or magnitude of the response.
Resiliency	-	The program's practical value is limited by unclear deployment protocols that restrict ERCOT's ability to rely on it during critical grid conditions.
Quality		The program does not appear to harm market operations but also provides limited measurable benefit to the broader grid.
Efficiency	- -	As proposed, LSEs lack clear direction on when to deploy the program, leaving ERCOT without a reliable expectation of the timing or quantity of response.
Location		The program may reduce peak demand in high-population areas but is unlikely to relieve congestion elsewhere.
Affordability		While potentially less costly than some alternatives, the program compensates LSEs for services they already provide without compensation.
Competition	- - -	The program creates significant barriers to entry for NOIEs and may advantage large providers with existing demand response programs.

TPPA's evaluation does not include any assumptions related to price compression. However, the proposed program raises concerns about muting price signals that are essential for incentivizing new dispatchable generation and preserving existing resources – both of which are central to broader market reliability objectives.

2. If ERCOT chooses to proceed with the proposed residential demand response program, TPPA recommends that the funding mechanism exclude MOUs that elect not to participate.

MOUs already operate successful demand response programs and do not need more incentive for maintaining their programs.

Many MOUs operate long-standing, nationally recognized programs that are fully funded by their customers through local rates and have delivered measurable benefits to the broader ERCOT system. On October 1, 2024, ERCOT filed a demand response and energy efficiency

report which ERCOT commissioned from Texas A&M University.⁷ The report highlights successful existing demand response programs run by CPS Energy and Austin Energy. Notably, the report’s recommendations did not include developing the currently proposed ERCOT residential demand response program. Instead, it emphasized that “REPs need to strengthen demand response programs in residential sectors.”⁸

This conclusion is borne out through ERCOT’s data. NOIEs, despite only serving roughly 25% of customers in ERCOT, have significantly more capacity and more households enrolled in demand response programs – by ERCOT’s figures, NOIEs have approximately 160MW and 160,000 households currently enrolled in demand response programs, while REPs provide approximately 50MW and 50,000 households.⁹

The proposed program would impose additional costs that undermine MOUs' existing, self-funded programs, which are already delivering significant system-wide reliability benefits without relying on market subsidies.

Applying the proposed program across all market segments risks weakening the price signals that currently support successful MOU programs while introducing redundant and potentially disruptive costs. As proposed, the program would be funded through a load ratio share mechanism. Given that MOUs have long operated effective, self-funded demand response programs without market subsidies, requiring them to contribute to this new program would impose duplicative costs with no clear benefit for their customers.

ERCOT’s proposed data requirements would impose unjustified costs and operational burdens on MOUs, rendering the program unworkable for most MOUs.

ERCOT currently lacks an established process to obtain the meter data necessary for MOU participation. The proposed approach – which would require transferring all of a participating MOU’s interval meter data using identifiers akin to ESI IDs – creates significant barriers. Many MOUs operate with electric departments focused solely on distribution system operations and maintenance, while customer care and billing fall under separate city administrative departments. These MOUs often lack the technical expertise and staffing capacity to develop, manage, and support the data infrastructure ERCOT’s proposal requires. Many MOUs would need to build entirely new systems, and some currently use meters that cannot record or export data in the required format. Even where meters are technically capable, they have not historically been used for external data sharing. The buildout of these new processes would be complex and costly.

⁷ Docket No. 38578 Item No. 135.

⁸ Docket No. 38578 Item No. 141, slide 26.

⁹ Residential Demand Response Workshop II, ERCOT Staff Presentation at 22 (June 16, 2025).

Requiring MOUs to fund a program that undermines their existing, successful demand response efforts – while imposing significant capital burdens in order to allow them to participate – would be inequitable and unreasonable.

Should ERCOT continue development of its residential demand response program, TPPA respectfully recommends that ERCOT revise the proposal to require funding only from REPs and MOUs that opt into participate. MOUs that choose not to participate should not be required to pay for the program.

VST Feedback for ERCOT on Residential DR Proposal from 6/16 Workshop

Due Date: 7/11/25

Format: email to ryan.king@ercot.com & mohamed.el-Madhoun@ercot.com

Vistra appreciates the opportunity to provide additional feedback to ERCOT on its proposed residential demand response (DR) subsidization framework and ERCOT staff's engagement with Vistra and other market participants. Vistra continues to have significant concerns with ERCOT's proposal, specifically its incongruity with the ERCOT market design. Vistra stands by its initial comments submitted on May 23, 2025¹ and made at the workshops held on May 2, 2025 and June 16, 2025. To briefly summarize:

- **Vistra supports residential (and other) load flexibility *when integrated properly within an operationally and dynamically efficient market policy framework*.** Unlike other organized electricity markets, the ERCOT “energy-only” market design relies exclusively on the real-time energy/ancillary service markets to perform both of these functions.
 - Operational efficiency: competition among eligible resources ensures the identified need is met at least cost.
 - Dynamic efficiency: The combined effect of short-term and long-term market signals that ensures the full suite of market services are available to be provided at least cost.
- **ERCOT's residential DR proposal does not properly integrate with the ERCOT market policy framework and risks significant unintended long-term reliability consequences** that run counter to the state's policy goals of building more dispatchable generation.
- Any efforts to incentivize more **residential DR should be considered as part of a broader market design reform that incentivizes supply and demand with the same price signal.**
- Alternatively, if ERCOT insists on pushing forward a specific out-of-market program for residential DR, then it **must be designed to avoid and mitigate distortive effects on the ERCOT market.**

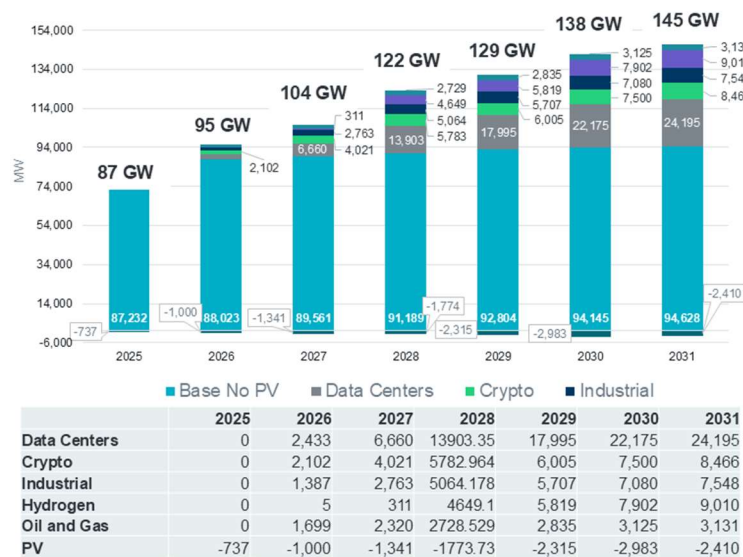
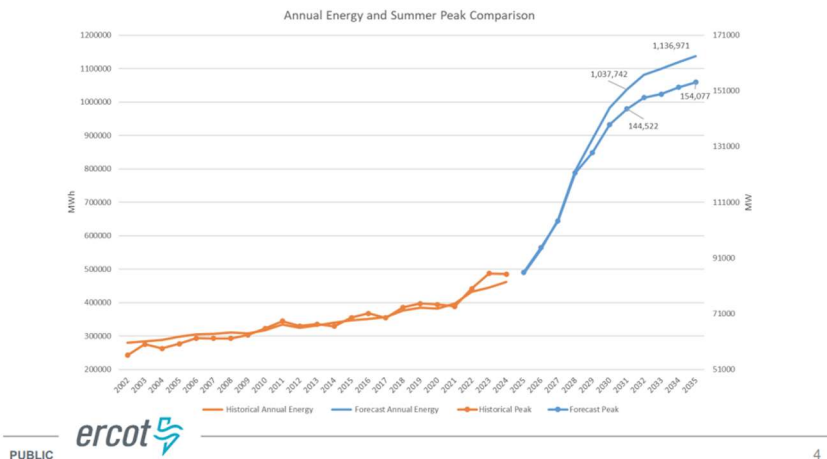
There may be other market-based approaches to supporting residential DR that Vistra could support, and Vistra hopes to have the opportunity to continue those discussions with ERCOT and stakeholders in the future. At present, however, ERCOT has asked that comments be limited to the proposal it has laid out. Therefore, in these comments, Vistra offers the following additional feedback specific to ERCOT's current residential DR proposal:

¹ Available here: https://www.ercot.com/files/docs/2025/06/24/Residential-DR-Stakeholder-Feedback_63025.docx

- **ERCOT's load growth forecast alone does not demonstrate the need for ERCOT's proposal, and ERCOT's key objective should be to support net generation resource growth to meet the reliability standard, not growing DR without regard to collateral damage to the ERCOT market design.**
 - ERCOT's first-order justification presented for its residential DR proposal is ERCOT's projected load growth, but **that load growth is commercial and not residential:**

Need for Residential DR

- With the anticipated growth in load, utilizing additional capacity, particularly at times of high net load will be critical.

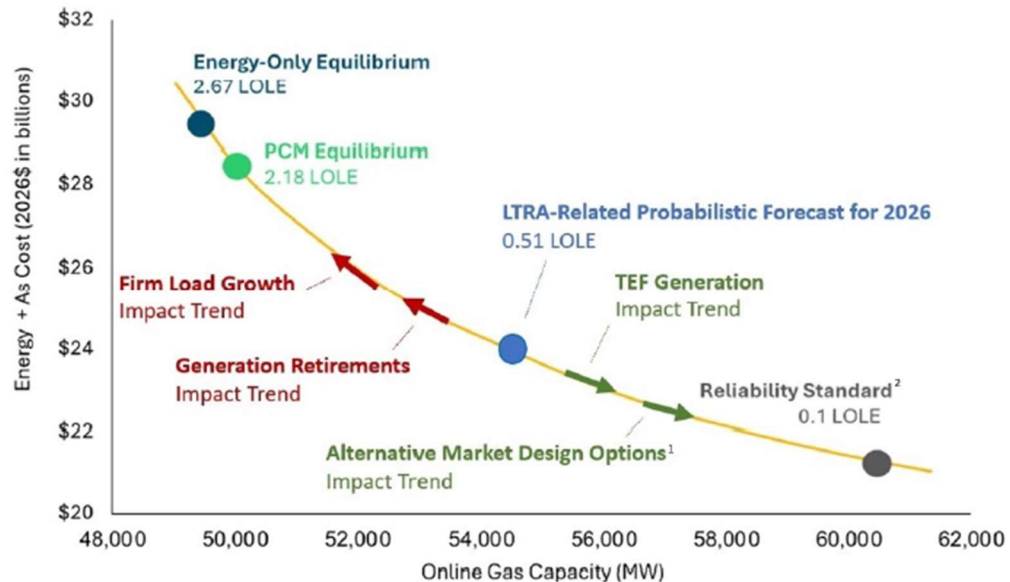


- However, **the ERCOT load forecast is not, in and of itself, a valid demonstration of need** for a residential DR program such as the one ERCOT has proposed.
 - This load forecast has been subjected to numerous revisions and should be expected to be further adjusted following implementation of certain Senate Bill 6 provisions, reflecting greater discipline of the

large load interconnection study request queue and standardization of TDSP officer letter load attestations.

- Furthermore, much of this load should be expected to be flexibly price-sensitive (e.g., cryptocurrency miners) and/or able to utilize backup generation during emergencies to limit strain on the grid during those time periods (for contractual and economic reasons, as well as following Senate Bill 6 requirements).
 - Setting aside for argument's sake those considerations, if ERCOT's load forecast were to materialize as currently shown, then the real-time wholesale energy price will provide a better and more equitable price signal for demand response – not just from residential consumers but from all flexible loads – and should also send investment signals for new generation capacity. That is, **load growth can help to support both demand response and generation investment. The question is whether the market design will support sufficient investment to meet the growth and support the reliability standard.**
- ERCOT's preliminary assessment in its December 2024 PCM analysis showed that **even today, the ERCOT market needs additional dispatchable generation resources to meet the reliability standard.** While the large load flexibility considerations noted above will help to address the “Firm Load Growth Impact Trend,” the “Generation Retirements” and “TEF Generation” Impact Trends will depend critically on market signals (see *Impact Trends in chart below*). With Real-Time Co-optimization expected to worsen the economic outlook for generation resources and the “Alternative Market Design Options” Impact Trend still far from final (and at this point, uncountable), **it is all the more critical to that objective that ERCOT not design incentives in a way that interferes with the market signals that generation investment and retirement decisions rely upon.**

**LOLE Comparison:
E3 Long-Term Study System and LTRA-Related Probabilistic 2026 Forecast**



1. Alternative Market Design Options could include use of DRRS as a resource adequacy tool, ASDC modifications, or other options.
2. In addition to an LOLE-based frequency criterion, the reliability standard also includes criteria for duration and magnitude.

- The other rationale given in an attempt to justify the “need for residential DR” is that it “represents a resource that is not fully enabled today.” **Vistra agrees that it is not fully enabled, but the failure of the ERCOT energy-only market to enable it is a failure of the ERCOT energy-only market generally – the very same dynamic that has failed to “fully enable” investment in dispatchable generation sufficient to meet the state’s reliability objectives.** Therefore, lack of “full enablement” is neither unique to residential DR nor sufficient to demonstrate the need for out of market subsidies to support it – particularly in a format that will further undermine the ability of the ERCOT energy-only market to “fully enable” investment in dispatchable generation. To the extent ERCOT has identified unnecessary regulatory barriers aside from the fact that there is not a dedicated payment stream for residential demand response, Vistra is fully supportive of removing those barriers in a non-discriminatory manner.

Need for Residential DR

- Residential Demand Response (DR) represents a resource that is not fully enabled today
 - This includes increasing DR from 'smart' devices (ie thermostats, EV charges, batteries, water heaters and pool pump switches)
- There is an opportunity for ERCOT to collaborate with stakeholders to develop a program that can incent and grow residential DR capacity as an additional resource that can help support system reliability
 - Developing a Residential DR Program is a key ERCOT corporate priority for 2025
- Program design should aim to adhere to the following framework
 - ✓ **Quick to develop**
 - ✓ **Simple to administer**
 - ✓ **Popular to join**
 - ✓ **Cost-effective**



- Similarly, **stating that “there is an opportunity” to “grow residential DR as an additional resource” myopically prioritizes a single ERCOT corporate priority over a holistic review of the ERCOT market’s ability to attract and retain resources to support resource adequacy.** In short, ERCOT seems to have concluded that residential demand response would “win the race” before establishing the rules of the race and allowing all competitors to line up to run.
- Finally, Vistra appreciates ERCOT’s consideration of Vistra’s prior stated concerns regarding the impact that ERCOT’s proposal would have for the market and reliability performance of the market. **While Vistra agrees that “residential DR development and future market design is not an ‘either-or’ proposition” if integrated properly within an operationally and dynamically efficient market policy framework, Vistra respectfully disagrees that ERCOT’s current proposal satisfies that criterion and therefore is in fact an ‘either-or’ proposition.** An “all of the above” approach is an inefficient approach for an energy-only market that lacks a reliability market “safety net.” **The PCM has been “shelved” and while DRRS and firming may ultimately contribute to dispatchable generation support, neither are designed to provide that same safety net feature and stakeholders have expressed very mixed perspectives about them.** Therefore, it is imprudent to actively pursue an out-of-market program that will harm the market pricing signals that generators must rely on for investment and retirement decisions, particularly while those policies are pending finalization. Furthermore, **Vistra disagrees that the program design addresses the “barriers” that ERCOT identifies:**

- It does not bridge the Wholesale-Retail disconnect, rather it encourages wholesale market-distortive demand response behaviors regardless of actual need;
- Its ability to scale is only conjecture, but if it does scale it will only further harm the wholesale market;
- The program design cannot alleviate the weather-dependence of the residential load profile;
- It will actually *increase* customer fatigue if REPs are incentivized to over-deploy in order to reduce risk of missing the compensation hours; and
- “Underutilization” is subjective – the addressable market is far less than the “~7million residential customers” quoted in the presentation. Many residential customers may not want to participate in DR (at any price), others may not be able to afford even subsidized smart responsive devices, and renters may not be able to make upgrades to install such devices. In addition, contractual or technical exclusivity barriers may preclude REPs from leveraging certain customer hardware, even if they have a functional DR program and are eager to leverage the willing residential customer DR.

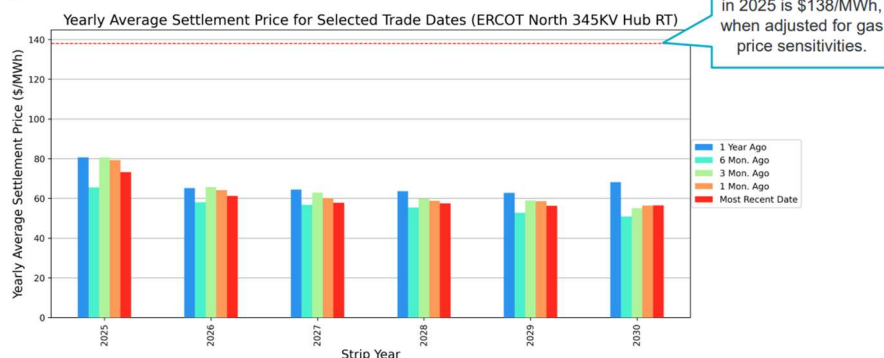
Market Impacts: Considerations for Residential DR

- Residential DR development and future market design is not an ‘either-or’ proposition
- Market design initiatives aimed at dispatchable generation (e.g DRRS, firming) continue to move forward
- Significant future growth warrants considering an ‘all of the above’ approach to meet ERCOT reliability mandate
- Program approach is meant to address barriers unique to residential DR
 - Wholesale-Retail disconnect
 - Lack of scale
 - Highly weather-dependent
 - Customer fatigue and inherent switching risk (in competitive areas)
 - Underutilization: 50,000 registered out of ~7million residential customers in competitive areas
- Implementation of proposed cap to (discussed in future slides) to help manage wholesale market concerns with further study of whether/how response can be integrated into future program evolution

- **Ex-post net load evaluation is a dangerous market distortion that interferes with price formation that the energy-only market structure critically depends upon for generation entry/exit signals, and must be rejected.**

- The ERCOT energy-only market depends critically on real-time energy price signals to inform the forward price expectations that in turn drive investment and retirement decisions for generation resources.
- As ERCOT recently presented to the ERCOT Board, forward prices have been trending lower since a year ago, and for that entire time have been far below the levelized cost of energy estimated to be needed to support new gas generation capacity. **ERCOT's residential DR proposal would only further widen that gap.**

Longer-Term Forward Prices Trends



Key Takeaway: In the past three months, the yearly average forward prices show a decreasing trend overall, well below prices from one year ago but higher than 6 months ago. These prices appear too low to support investment in gas peaking generation.

Item 9.3
ERCOT Public

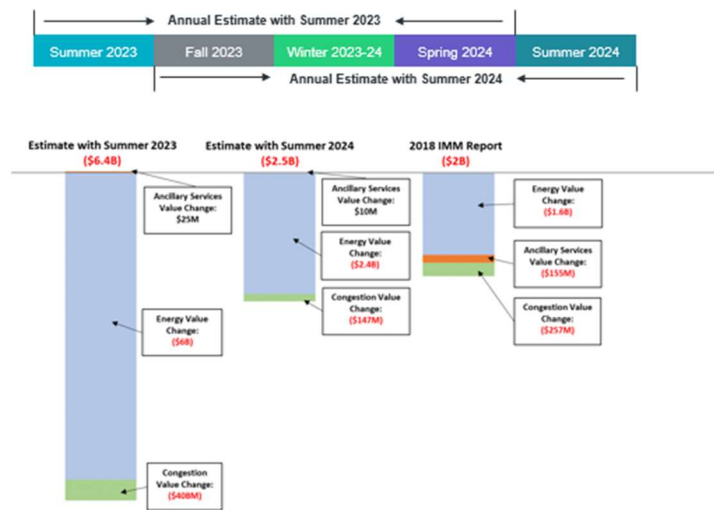


Strip year is an average of monthly ICE On-peak prices. The most recent data was captured at the beginning of June. LCOE data is from the Lazard+ Levelized Cost of Energy report published in June 2025.

6

- ERCOT has already backcast that **Real-Time Co-optimization will lower energy and ancillary services market revenues by billions of dollars per year** (unhedged). While it's unclear how much this expectation is reflected in the energy forwards and how actual market dynamics will differ from static backcasts, **this is critical context, particularly when ERCOT is proposing to pay residential DR up to the Cost of New Entry (CONE) for a thermal dispatchable generator that the ERCOT energy-only market is not currently delivering nor expected to deliver under Real-Time Co-optimization.**

Estimated Annual Savings of Real Time Co-optimization (RTC) Compared to 2018 Independent Market Monitor (IMM) Report



INTERNAL

7

- This is because Real-Time Co-optimization exhibits significant Operational Efficiency. Consider ERCOT's backcast of September 6, 2023 – the last time that ERCOT experienced an Energy Emergency Alert. **ERCOT estimated that Real-Time Co-optimization would have resulted in a material reduction in energy scarcity price signaling on a day that, objectively, experienced significant scarcity. In an energy-only market, this has a direct trade-off on the Dynamic Efficiency of the market: a potential investor in generation resources must now face significant additional uncertainty regarding their project revenue assumptions, and would furthermore not have the opportunity to compete for the revenue stream residential demand response would be promised under ERCOT's proposal.**

Case Study – Scarcity Case (09/06/2023)

Narrative

- Low levels of dispatchable capacity resulted in Real-Time system lambda going above \$1000/MWh for 70 SCED intervals between 15:00 and 20:15. System lambda was at \$5001/MWh for 24 of these SCED intervals.
- ERCOT frequency dropped as low as 59.769 Hz and was below 59.91 Hz for more than 15 minutes, which triggered a declaration of EEA 2.
- As much as 132 MW of NSPIN, 2600 MW of ECRS, and 1100 MW of RRS were deployed to manage grid conditions.



*Pre-RTC trendline includes ORDC Adders



Public

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- Note that the only time period where the Real-Time Co-optimization backcast does not severely undercut the actual scarcity pricing outcome is in the evening – during the net load ramp. That is, **the net load scarcity signal is one of the few scarcity pricing signals that survives Real-Time Co-optimization – precisely because Real-Time Co-optimization doubles down on the ERCOT energy-only market’s “crisis-based business model.”**
- ERCOT’s residential DR proposal specifically targets a significant out-of-market economic incentive at that remaining investment/retirement price signal.

Allocation

Issue Description

- How many net load hours should be considered and how should these be allocated?

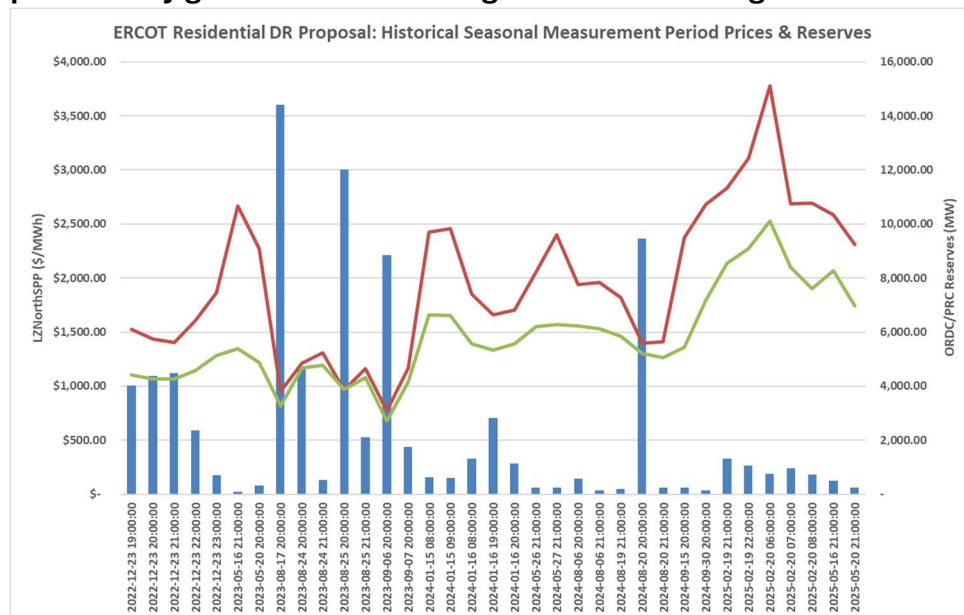
Option/Recommendation

- ERCOT seasonal allocation using a highest DR performance in x of y, for example:
 - Winter/Summer (best 3 of 5 highest net load hours)
 - Spring/Fall (best 1 of 2 highest net load hours)

Rationale

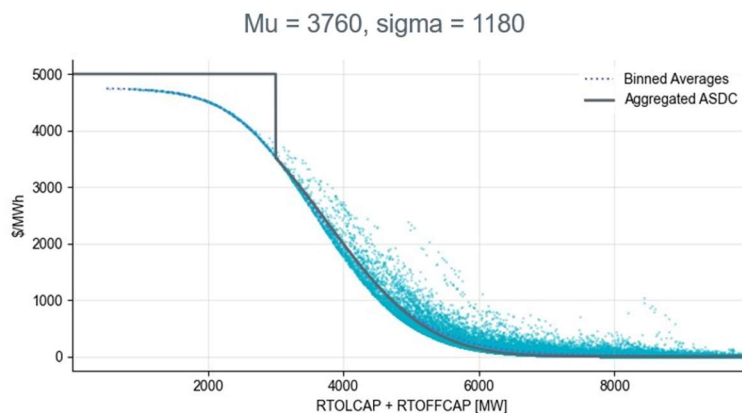
- Balance of some risk mitigation for participants against benefit to system

- ercot
- PUBLIC
- 13
- The data ERCOT posted for 2022-2025 following the first workshop bears this out: the NetLoad_HighestNperSeason examples show that **ERCOT's proposal would incentivize market-distortive DR responses during periods when reserves that count towards the ORDC averaged ~7,800 MW** and North Load Zone wholesale settlement price points averaged ~\$630/MWh – not fully without risk, but certainly **questionable whether those time periods exhibited a true “need” for residential DR, particularly given the acknowledged risk of DR “fatigue.”**



- **The proposed 500 MW seasonal cap is not a credible safeguard against the damage ERCOT's proposal would risk to the ERCOT market.**
 - Vistra sincerely appreciates ERCOT's proposal to limit the program to 500 MW in an effort to "help manage wholesale market concerns." Unfortunately, **the degree of incompatibility between ERCOT's proposal and the current ERCOT market design is potentially significant even at that level.**
 - Consider the current Operating Reserve Demand Curve (ORDC), which will be replaced in Real-Time Co-optimization by Ancillary Service Demand Curves (ASDCs) that, in aggregate, follow the same shape and structure. At the ORDC reserves of 7,800 MW (corresponding to the average in ERCOT's historical data), the ORDC adder is ~\$1.50/MWh; **500 MW down the curve, the adder is only ~\$0.30/MWh (~80% reduction).** At the lowest mode in ERCOT's historical data around ~4,000 MW of ORDC reserves, the ORDC adder should be ~\$2,000/MWh, but **a 500 MW reduction due to out-of-market subsidies and incentives would push the ORDC adder down to ~\$1,250/MWh (~38% reduction).** These are significant distortions in wholesale market price formation.

4) Apply LOLP = 1 to reserve levels < MCL



- Furthermore, Vistra is **concerned that the proposed 500 MW limit will be temporary – and that could have a chilling effect on investment in generation resources.** At the June 23, 2025 Board meeting **ERCOT reported to the ERCOT Board that** “one of the latest, potential design elements is to potentially limit the participation to 500 MW” but that **ERCOT sees “the potential to be gigawatts”.**
- It bears repeating that **Vistra does not oppose growth in residential DR, but cannot in good conscience support or silently acquiesce to a**

potential market distortion of this magnitude, particularly in an energy-only market construct.

- **Load ratio share cost recovery will not be competitively neutral, and would represent a regressive wealth transfer amongst residential consumers for ERCOT's proposed program.**
 - Vistra opposes load ratio share cost allocation for ERCOT's proposed program and notes that it is untethered to normal cost allocation principles such as "cost causation" or "beneficiary pays." **The only entity causing the cost of the residential DR program is ERCOT**, and as Vistra has noted throughout these comments, **the ERCOT market will suffer rather than benefit from ERCOT's proposal**. The **only beneficiaries are the recipients of the residential DR subsidy** under ERCOT's proposal, suggesting that a **principled approach to cost allocation should allocate costs directly back to the recipients of the payments**, neutralizing the program altogether.

Settlements

- ERCOT is proposing that the costs for the residential demand response program be uplifted on a seasonal load ratio share basis.
- Settle in a similar fashion as Emergency Response Service (ERS) by including demand response payments and charges on Real-Time Settlement Statements and Invoices
- The data submission for these options would follow the quarterly data submission timelines for the Responsive Device Program implemented in 16 Texas Administrative Code § 25.186.

- Furthermore, load-ratio share allocation would result in unjustified wealth transfers between REPs and between customers.
 - One key lesson from the ADER Task Force was that **"walled gardens" of contractual or technological exclusivity can be material and pervasive barriers to utilizing capabilities. Residential DR is no different**. If some REPs have such structural advantages by contract, by patent, and/or by selection bias of their customers, then a load-ratio share cost allocation means that other **REPs with different business models (and NOIEs) would be forced to subsidize their competitors**.

- Furthermore, the residential customers that are more likely to have “‘smart’ ‘devices (ie thermostats, EV charges, batteries, water heaters and pool pump switches)” *[sic]* are more likely to skew towards the higher end of the income distribution – meaning that, all else equal, **ERCOT’s residential DR proposal would represent a regressive wealth transfer from lower-income residential consumers to higher-income residential consumers.**
 - These considerations highlight that **ERCOT’s residential DR proposal touches on many public policy topics that are frankly outside of ERCOT’s purview** and more appropriately sit with the Commission and/or the Legislature.
- **ERCOT’s proposal is neither supported by ERCOT’s own market design framework nor ERCOT’s 2025 Objectives and Key Results (OKRs).**
 - ERCOT’s [Commercial Markets Update](#) to the ERCOT Board on June 23, 2025 included an update on ERCOT’s development of a market design framework for providing policymakers with a guide for understanding and assessing market design initiatives.
 - Slide 16 rightly concluded that “going forward it is crucial to focus on the development of market mechanisms that can move us towards the reliability standard.” Vistra fully agrees, with an emphasis on “market mechanisms.”

Need to focus on the reliability standard

- Reliability standard requires:
 - Frequency: must be equal to or less than one event per ten years on average
 - Duration: the maximum expected length of a loss of load event must be less than 12 hours
 - Magnitude: must be less than the maximum number of megawatts that can be safely rotated (dynamic value that is currently set to 16 GW)
- Going forward it is crucial to focus on the development of market mechanisms that can move us towards the reliability standard.
- Key attributes include **Availability, Flexibility, Dependability, and Resiliency.**
- Key initiatives to help meet reliability standard include:
 - Dispatchable Reliability Reserve Service as an Ancillary Service with Resource Adequacy capability (per PUCT guidance from December 12, 2024 meeting)
 - Residential Demand Response
 - House Bill 1500 “Firming” requirement

- That same slide, however, includes “Residential Demand Response” as a “key initiative[] to help meet the reliability standard.” As noted previously, residential DR can contribute to that end when properly integrated into market mechanisms; however, **ERCOT’s residential**

DR proposal is not a market mechanism – rather it is an “anti-market mechanism.”

- Similarly, slide 14 of that same presentation showed residential DR’s highest-scored attributes as “Quality,” “Availability,” and “Resiliency.”

Attribute and initiative comparison

Attribute	Real-time Cooptimization plus Batteries (RTC+B)	DRRS as Ancillary Service Only	DRRS as Ancillary Service and Resource Adequacy	Operating Reserve Demand Curve (ORDC)	ERCOT Contingency Reserve Service (ECRS)	HB 1500 Firming	Residential Demand Response
Flexibility	++	++++	++++	++	++	+	+
Dependability		++	++			++++	
Availability	--	+	++++	+++		++	++
Resiliency		+++	+++		++++		++
Quality					++	+	+++
Efficiency	++++			+	-		-
Location	++			+			
Affordability	+++		++			TBD	+
Competition	++	-	-	+++		TBD	

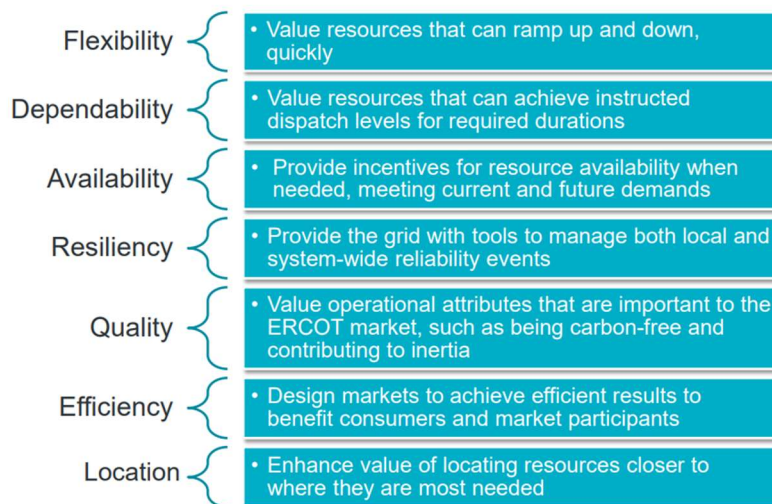
The rankings + and - are a relative measure compared to other initiatives. These rankings are largely intended to be illustrative and further refined as designs are developed. Under the proposed framework, it's expected that each of the attributes will have more specific metrics/measures associated with them.

- Comparing to the attribute definitions on Slide 12 (see slide below) shows that **residential DR is inappropriately scored within the market design framework**:
 - Quality: “Value operational attributes that are important to the ERCOT market, such as being carbon-free and contributing to inertia”
 - Residential DR does not, on its own, have operational attributes important to the ERCOT market any more than other resources do.** The voiceover was that it can be harnessed quickly, but as noted above, contractual exclusivity restrictions can undermine even that temporal quality valuation.
 - Availability: “Provide incentives for resource availability when needed, meeting current and future demands”
 - The market distortionary effects of ERCOT’s proposed framework will **work against generation resource investment incentives** – and therefore resource availability – and **does not even incentivize residential DR availability when needed.** Instead, the current proposal subsidizes residential DR deployment and price formation interference – regardless of whether it was actually needed at the time or not. **Thus, ERCOT’s**

proposal is questionable in its ability to meet current demands and is a hindrance to meeting future demands.

- Resiliency: “Provide the grid with tools to manage both local and system-wide reliability events”
 - First, in revisiting this definition, Vistra questions whether it accurately captures “resiliency” – which is more commonly understood to be the ability to recover from reliability events. By that definition, **residential DR offers little additional value, as involuntary load shed necessarily includes residential customers** (so residential DR does not provide incremental resource value beyond that).
 - Second, **ERCOT’s residential DR proposal provides no tool for “local” events.**
 - Third, and most critically, ERCOT’s residential DR proposal harms ERCOT’s ability to manage system-wide reliability events by undercutting investment and retention price signals, **over time resulting in more system-wide reliability events and greater reliance on residential DR. That, in turn, will encourage residential opt-out and eventually leave ERCOT with a system that is net less reliable** than when ERCOT first initiates a residential DR program (*all else being equal*).

Initial attributes



- ERCOT has presented the residential DR proposal as necessary to meet OKRs given by the ERCOT Board for 2025. The OKR in questions is likely

under Objective 2 and phrased as “Enhance demand response approach and programs.”

- First, **ERCOT’s residential DR proposal is not an “enhanced” DR approach or program**, for all of the reasons discussed previously. To the contrary, **its structure is antithetical to the current ERCOT market design**.
- Second, **ERCOT’s residential DR proposal undermines the broader Objective 2 to “Enhance the ERCOT region’s economic competitiveness with respect to trends in wholesale power rates and retail electricity prices to consumers”** due to its market-distorting impacts and ensuing disincentives for investment and retention of dispatchable generation in an energy-only market structure.
 - Intuitively, failure to incentivize adequate investment in generation resources will result in **worse reliability outcomes** that themselves will carry scarcity costs – outcomes that **do not support the ERCOT region’s economic competitiveness**.
 - While the same can be said for the OKR to implement key milestones for the RTC+B program, ERCOT’s residential DR proposal goes several steps further by **undermining the ability of co-optimized Ancillary Service Demand Curves and energy dispatch to send efficient price signals when generation or other DR resource investment (or retention) is needed** (because the residential DR in ERCOT’s proposal will be incentivized by a price signal that sits entirely outside of the ERCOT market framework).
- Third, ERCOT’s residential DR proposal undermines Objectives 1 & 3 as well.
 - Objective 1 (“Be an industry leader for grid reliability and resilience”) would be undermined for all the reasons discussed previously. Forging forward with ERCOT’s residential DR proposal despite the **obvious internal conflicts with ERCOT’s more important objectives would degrade, rather than build ERCOT’s stance as an industry leader for grid reliability and resilience**.
 - Objective 3 (“Advance ERCOT, Inc. as an independent leading industry expert and an employer of choice by fostering innovation, investing in our people, and emphasizing the importance of our mission”) would be undermined because ERCOT’s residential DR proposal is fundamentally incompatible with the rest of ERCOT’s market design. **ERCOT’s leadership as an industry expert is bolstered by supporting innovation through markets as a platform for innovation. ERCOT would therefore be better served by incentivizing**

residential demand response *through* the ERCOT market design and not *in spite of* it.