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PROJECT NO. 56517

REVIEW OF ENERGY EFFICIENCY PLANNING	§ §	PUBLIC UTILITY COMMISSION OF TEXAS

RECURVE ANALYTICS, INC. RESPONSES TO QUESTIONS ON REVIEW OF ENERGY EFFICIENCY PLANNING

Recurve Analytics, Inc. (Recurve) is an industry leader in meter-based demand flexibility. Recurve provides transparent, accessible analytics to track changes in energy consumption and demand for individual buildings and in aggregate to inform planning and facilitate performance-based and market-based transactions for the value delivered from targeted interventions. Recurve supports pay-for-performance market-based delivery models for demand flexibility to accelerate scaled investment in demand-side resources to make a meaningful contribution to the grid. Recurve's analytics and settlement platform provides utilities, regulators, state agencies, retail electric providers, and other competitive aggregators with transparent, consistent visibility into the impacts of demand-side interventions.

On April 23, 2024, Commission Staff filed a memo posing several questions to inform the Commission's previously approved blueprint for wholesale electric market redesign, which includes consideration of setting higher performance standards for energy efficiency programs.[1] We appreciate the opportunity to inform the framework and next steps of blueprint implementation and offer other energy efficiency-related suggestions to ensure investments in demand flexibility can be visible, synergized, and optimized with performance-based accountability. Recurve has been tracking and engaging in the Energy Efficiency Implementation Plan (Project 38578) proceeding and, based on that engagement, provide three core recommendations for the PUCT to consider in accelerating investment in demand flexibility, which we will expand upon in our answers to Staff's questions:

- **Adopt a principle of measurement** as the default for tracking demand flexibility initiatives;
- **Integrate the implementation of energy efficiency and demand response** rather than operating them as separate initiatives and

[1] See Project No. 56511 - Review of Energy Efficiency Planning Item 3

- **Adopt a competitive market pilot to complement existing proposals** and accelerate the scale of investment in flexible, measured demand-side resources in Texas.

Responses to Questions from Staff:

1. *Should certain hours of the day be considered more valuable within the design of standard offer or targeted market-transformation programs offered by utilities?[2] Please discuss your rationale in detail.*

Yes. Energy efficiency and demand response programs should be oriented to avoiding energy use at the most valuable hours of the day and days of the year and drive toward long-term load reductions to enhance flexibility and drive costs down for all customers. It is appropriate to include the value of reducing overall load in parts of the distribution system that are expected to have high load growth due to population growth, economic development, and strategic electrification. By pushing load reductions and improved efficiency to those places where they deliver the greatest value to the grid it will reduce costs for customers overall in addition to providing direct benefits for participants. Other policy objectives can also be improved with time-delimited valuation.

Those directly participating in energy efficiency and demand response also experience direct benefits anchored in time-delimited value for every hour of the year. Efficiency and demand response can reduce the overall cost of energy and create value streams for participants by actively participating in the reliable operation of the grid. The time-delimited value that utilities and retail energy providers capture from short and long-term demand flexibility investments can be shared with consumers via direct payments. Many customers are simply looking to improve their own comfort, resilience, and safety, and energy savings are a distant consideration. Other customers are actively looking for ways to reduce their energy bills and improve their comfort and safety with shell improvements. In both cases, the customers will have varying direct benefits as individuals, and the system will generally benefit from the overall load reductions and increased affordability.

[2] Public Utility Regulatory Act §39.905(a)(2) states that "all customers, in all customer classes, will have a choice of and access to energy efficiency alternatives and other choices from the market that allow each customer to reduce energy consumption, summer and winter peak demand, or energy costs".

Performance-based programs are best suited to deliver time-delimited value because they can have the flexibility to offer a range of technologies and solutions at a single site that optimizes against the hourly value for any hour of the day or of the year and are structured for a utility to buy the resource (energy or capacity) directly. Market transformation programs, on the other hand, are designed to overcome market barriers like first cost or availability of high-efficiency products. They are typically operationalized as fixed rebates per technology. Market transformation programs can still be valued for their delivered impacts even if incentives are fixed by technology type and can complement performance-based incentives. The time-delimited value becomes the market signal to align investments with grid needs when and where they are needed most.

In our answer to question 5, we outline an alternative model for setting goals that utilize the hourly monetized system benefits as the primary metric, which is another means of ensuring that the time-delimited value of efficiency and demand response can be more easily translated to market action and aligned with system needs.

2. *What metrics should be used to track the success of low-income and hard-to-reach programs under 16 Texas Administrative Code (TAC) §25.181?*

The impact of energy efficiency and demand response interventions should apply to all customer classes, but additional metrics for low-income and hard-to-reach customers are appropriate to consider. It may be appropriate to consider how efficiency and demand response interventions are achieving bill savings, reducing energy burden, and improving health and comfort (or reducing risk from extreme weather) for consumers in this classification. It is important to recognize that even with different metrics, their success is not detached from system optimization, and therefore, the base value of delivering impacts to low-income communities should reflect the grid value, and added incentives can be used to ensure interventions are flowing toward these customer classes and provide meaningful impacts.

As such, performance-based, data-driven models for delivering services help ensure that aggregators are accountable for delivering quality service to low-income and hard-to-reach customers and are compensated as partners to meet these goals. While seemingly simpler, deemed incentives, which are averages by technology, miss the opportunity for aggregators to deliver the highest quality service and deliver the greatest impacts to customers in these categories.

3. Avoided cost of capacity and energy:
    a. *Existing 16 TAC §25.181(d)(2) calculates the avoided cost of capacity. Should this calculation be revised in a future energy efficiency rulemaking? If so, how? Please discuss your rationale in detail.*

The primary challenge with the current value used for the avoided cost of capacity is that it is not time-dependent either on a daily, seasonal, or locational basis. Rather, it is an annual average cost, which inherently disconnects it from more granular time periods and locations, even when it is clear that available capacity in Texas is variable within the day, across the year, and in different locations in the system. The resource mix continues to evolve to a greater variety of generation technologies, load growth has accelerated, and the value of distributed resources like efficiency and demand response are important strategies to compensate for this variability and should be valued in a symmetric way. The avoided cost of capacity currently used reflects a historic "peak" planning assumption despite the realities of the current system and the potentially great opportunities for efficiency and demand response to support reliability and affordability in the long term if valued in a commensurate way.

As such, updates to the avoided capacity value should reflect the value of resources on the system at any time of the day and alternatives for serving load in the long term, including flexible demand-side resources. Texas has demonstrated unequivocally that there are many other options beyond the current default "combustion turbine-industrial frame" that is currently used. The value of avoiding energy use should instead be tied to the overall value of capacity for the whole system (technology neutral). Supply and demand are two sides of the same equation and, therefore, can provide equivalent value.

In addition, the avoided cost of capacity for the distribution system should be included. The TDUs are uniquely positioned in Texas to solve grid constraints with demand-side deployments because they are accountable for optimizing distribution system operations. In other jurisdictions, targeting demand-side resources is used to drive incentives to customers that can deliver the biggest grid impacts based on their proximity to constrained feeders. The value of offsetting those problems is directly related to the cost of upgrades and mitigated disasters and should be closely aligned with managing load growth.

To update the current framework, the Commission could request proposals from the utilities for consideration by the PUCT and ERCOT in a public process. The avoided cost of capacity they propose should reflect the costs of the current resource mix and the localized value to the

distribution system now and over the next 5 to 10 years. The PUCT and ERCOT could review and adopt values annually to reflect the actual value of capacity today and into the future.

b. *Existing 16 TAC §25.181(d)(3) calculates the avoided cost of energy. Should this calculation be revised in a future energy efficiency rulemaking? If so, how? Please discuss your rationale in detail.*

ERCOT's latest update to the avoided cost of energy was encouraging, and it recognized that energy efficiency investments could help address extreme weather resilience for customers and the reliability of the full system. However, as noted in our answer to part (a) of this question, the key challenge of the value of the avoided cost of energy is that it too, does not reflect the strong variation in the cost of energy at different times of the day or days of the year. It also does not reflect the localized value of avoiding energy use in particular places to mitigate constraints (which could be captured in the capacity value), much less other co-benefits of avoided energy use like affordability (for specific groups or overall).

Overall, the avoided cost of energy value currently recognized by ERCOT and the PUCT is not commensurate with the actual value of load reductions and load shifting capability of targeted demand flexibility and removing energy waste from the system at any hour of the year. This value should be included in the avoided cost of energy, and a time-dependent value could be tied to existing reference points in the market.

The Commission could consider adopting a process like that outlined in the National Standard Practice Manual for Distributed Energy Resources[3] to factor in all appropriate benefits and operationalize it in a publicly accessible open-source code base to enable full transparency.

4. *Existing 16 TAC §25.182 calculates utility performance bonuses. Should this calculation be revised in a future energy efficiency rulemaking? If so, how? Please discuss your rationale in detail.*

Utility performance bonuses should be tied to delivered impacts that bring tangible value to the system and optimize distribution system operations. Adopting a measured paradigm, instead of deemed with evaluation review, for the portfolio can align the achievement of overall and local

[3] The National Standard Practice Manual provides a comprehensive framework for cost-effectiveness assessment of DERs. The manual offers a set of policy-neutral, non-biased, and economically-sound principles, concepts, and methodologies to support single- and multi-DER benefit-cost analysis (BCA) for: energy efficiency (EE), demand response (DR), distributed generation (DG), distributed storage (DS), and (building and vehicle) electrification. It is intended for use by jurisdictions to help inform which resources to acquire to meet their specific policy goals and objectives.

system benefits to performance-based payments to utility administrators, Retail Energy Providers, aggregators, and customers that support the delivery of those benefits.

5. *Existing 16 TAC §25.181 addresses energy savings and demand reduction goals. Should these existing goals be revised in a future energy efficiency rulemaking? If so, how? Please discuss your rationale in detail.*

We recommend that the Commission adopt a system-benefit goal structure rather than an energy savings and demand reduction goal. A monetized system benefits goal will allow for greater synergies across the market in achieving the multiple goals of managing load, enhancing flexibility, resilience, and improving affordability.

Setting goals and communicating impacts in relation to the "total system benefits" is a useful construct for assessing the performance of the efficiency portfolio and is already the basis of the utility performance incentives. This goal construct is anchored in having a monetized value for the multiple benefits that may be derived from distributed energy resource aggregations and was outlined in the Electricity Journal article entitled *One metric to rule them all: A common metric to comprehensively value all distributed energy resources.*[4] It offers a useful strategy for using time-delimited valuing, tracking, and reporting of DER performance, especially for long-term capacity and emissions reduction value.

As renewable penetration on the grid increases, the value of DERs, including efficiency and demand response, becomes increasingly time-dependent. To avoid energy, capacity, transmission & distribution investment, the time in which savings occur significantly impacts the value of the savings achieved. "Traditional energy metrics, like annual savings for energy efficiency measures, don't capture this temporal variation."[5] In addition, the value of just responding to the short-term peak load reduction may not be enough to capture the broader value of demand response capabilities.

To solve the problems of siloed DER implementation and lack of time valuation, the Total System Benefit (TSB) metric for goals can be adopted to guide DER proceedings, including, but not exclusive to, EEIP. TSB is simply the monetized value of the energy savings for each hour of

[4] The Electricity Journal, 35 (2022) 107192, Mohit Chhabra, *One metric to rule them all: A common metric to comprehensively value all distributed energy resources.* https://www.sciencedirect.com/science/article/abs/pii/S104061902200118X

[5] Chhabra at page 1.

the year multiplied by the expected long-term impact of those interventions on future capacity needs.

> *"The TSB is calculated by multiplying the DER load-shape by the hourly avoided costs through the DER's effective life. For dispatchable demand response initiatives, the lifetime equals the number of demand response events being analyzed. To the extent that the avoided cost calculator accounts for the various benefits of energy savings and how they vary over time…the TSB will capture the complete value stack of DER."*[6]

For the best alignment of value with actual impacts, the combined benefits (as defined based on local avoided cost value) delivered by each DER should be aligned with rigorously measured changes in energy consumption patterns on an hourly basis.[7]

The hourly changes in energy consumption, measured at the utility meter, are summed for each hour and can be used to represent a technology and fuel-agnostic price to the market through a pay-for-performance open market model for procuring demand flexibility. Existing examples of this model provide an open solicitation for aggregators to identify and provide the designated benefits to customers and the grid in exchange for the Commission-approved valuation.[8] This open-market model would be similar to 'standard offer' programs offered by TDUs, with the key difference being that payments would be based on the performance of the interventions relative to the approved hourly value (or a market reference value).

This innovation in investing in demand flexibility over traditional programs provides several advantages. First, it is cost-effective by design. Payments are capped at or just below the designated value of the benefits, meaning that ratepayers would no longer take the risk of non-performance of programs, and aggregators would assume that risk as they do in other Texas markets. Second, it allows aggregators to opt into the program with low barriers to entry to accelerate their existing business models and customer reach. As customer behavior changes load shapes and avoids costs and value changes, the Commission can adjust the compensation offered at regularly defined intervals, and market actors can continue to adapt

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[6] Chhabra at page 3.

[7] A technical guide on implementing a Total System Benefit metric was developed by the California Public Utilities Commission: Total System Benefit Technical Guidance, Version 1.1, August 16, 2021; California Public Utilities Commission:
https://pda.energydataweb.com/api/view/2530/DRAFT%20TSB%20Tech%20Guidance%20081621.pdf

[8] Market Access Program model, regulatory background, program designs, and results. from the California Public Utilities Commission webpage
https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/energy-efficiency/market-access-program
Creating a Market Access Model to Unleash Solutions Providers and Scale Demand Flexibility, C. Best, R. Boehnke, M. Keasey, ACEEE Summer Study Proceedings 2022

and respond with innovative customer solutions. Third, the market access model can synergize funding from multiple sources to drive investment. Public and private funds can be combined to drive down overall costs on a project-by-project basis, and performance payments can drive overall shared outcomes and objectives like emissions reductions, economic development, or equity objectives.

6. *In the upcoming rulemaking to implement SB 1699, what other issues should be considered? Should the existing energy efficiency rules be restructured? Please discuss your rationale in detail.*

The open-market model described above could be implemented as a pilot in response to SB1699 to address the key consideration in the legislation to "reduce residential load." The legislation does not specify that it can only be traditional demand response, and as noted earlier, efficiency combined with demand response can provide a bigger "bang for the buck" in terms of co-benefits to the customer of comfort, health, affordability and the grid in the form of reliability and enhancing flexibility by having buildings that can better ride out extreme weather events directly supporting the health and safety of Texans.

7. What activities should the Energy Efficiency division prioritize over the next twelve months?

The Energy Efficiency division should prioritize actions over working groups by standing up for no-regrets pilots that will deliver demand-side resources to the state now to support near-term reliability needs and prepare for the next generation of investment in demand flexibility. Open-market pilots serve the dual purpose of testing new customer interventions, delivering impacts, and reducing risk to ratepayers because they only have to pay for delivered impacts. The open-market model is technology and vendor agnostic and has demonstrated the potential to deliver impacts in a short period of time, i.e., in just a few months.

By way of other priorities for the year, we offer three concrete recommendations to accelerate investment in demand flexibility in Texas to support reliability, affordability, and resilience in the state:

- **Adopt a principle of requiring measurement** for assessing demand flexibility;
- **Integrate the implementation of energy efficiency and demand response** rather than considering and operationalizing them as separate initiatives and

- **Adopt a competitive market pilot to complement existing proposals** and accelerate the scale of investment in flexible, measured demand-side resources in Texas.

1. Adopt a Principle of Measurement by Default

In both the utilities' energy efficiency program proposals and the REP Coalition's smart thermostat proposal, the Commission should set the expectation of measurement to understand the impacts of these investments relative to grid need and consumer impacts. Measuring actual savings and demand response achieved should be a fundamental element of program implementation to provide performance data to policymakers and regulators, retail energy providers, and utilities.

Currently, energy efficiency programs undergo evaluation at the end of the cycle to quantify impacts and performance incentives. While this is important, it does not provide the type of dynamic feedback or direct accountability that an embedded measurement requirement could enable. Establishing measurement as the default means of assessing impacts and using integrated impact analysis rather than fixed estimates from "deemed" savings would provide new and improved flexible demand markets with ongoing analytic insights to deliver grid-optimized benefits (i.e., tied to a value that more accurately represents avoided cost and distribution system value) and customer bill reductions.

The Kansas Corporation Commission recently expressed its "strong preference" for measurement in a new energy efficiency proceeding. They cited the importance of leveraging investments in Advanced Metering Infrastructure (AMI) and providing greater accountability and visibility of the impacts of adopting this stipulation for the efficiency portfolio.

> *"The Commission expresses a strong preference for "measured savings," as opposed to "deemed savings" approaches. And more specifically, meter-based data should be used in every instance where it is feasible and cost-effective."* [9]

[9] In Docket No. 22-EKME-254-TAR the Kansas Corporation Commission approved Evergy's energy efficiency portfolio adopting the "preference" and requirement to use measurement where feasible and cost effective in assessing the portfolio.

Similarly, Louisiana, in Docket No. R-31106 adopted a definition of energy savings that states deemed estimates can only be used when *"measurement and verification (M&V) activities are infeasible or impractical."* [10]

Texas arguably has the best energy consumption data infrastructure in the country and would be able to relatively easily implement an expectation set by the PUCT to measure the impacts using meter data. Furthermore, by measuring the impacts, the PUCT, ERCOT, REPs, TDUs, and all other stakeholders would have better visibility of the impacts. This information would enable data-driven decisions on accelerating investments where they have the biggest impact on system reliability and bill reductions. Standardized meter-based measurement and verification can be directly integrated into program design and execution to accurately assess the impact of energy investments and be used to enable market-based models like pay-for-performance.

To take a first step toward pay-for-performance for demand flexibility, we recommend that the PUCT require TDUs to include measurement where feasible and cost-effective in their portfolio implementation plans and as part of SB1699 implementation. Texas has already set a precedent of using ex-post evaluation and a robust technical reference manual for efficiency programs. In implementing the 2024 program plan, the Commission can take the next important step and require TDUs to incorporate measurement and conduct meter-based analysis for tracking program performance for all projects and programs in the portfolio. Measurement would provide valuable insights into program efficacy, enabling optimization and alignment with performance objectives in the subsequent years.

Once program administrators have visibility into performance-based results, they could transition to programs that rely on measured results, using deemed only where measurement is not feasible or cost-effective. As measurement becomes a default part of the portfolio operations and outcomes, it will enable Texas to shift into a market-based model for delivering long-term efficiency and demand flexibility. Tying compensation to the demonstrated value to the distribution grid, bulk transmission system, wholesale markets, and retail consumers would enhance accountability, widen contractor participation, and facilitate affordability for all consumers.

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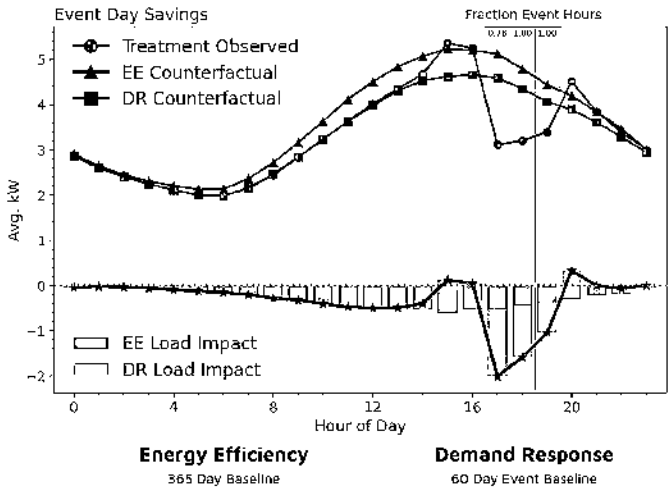
[10] In GENERAL ORDER: Docket No. R-31106 In re: Rulemaking to study the possible development of incentives for the promotion of energy efficiency by jurisdictional electric and gas utilities. See "Deemed Savings" definition, Page 4-5 of the ruling, page 21-22 of the PDF file.

2. Deliver Efficiency and Demand Response Together As Demand Flexibility

Across the country, short-term demand response and energy efficiency are siloed by regulatory proceedings, program delivery, and measurement. In Texas, utilities have peak demand goals, but most impacts are delivered from dedicated load-shedding programs without meaningful connection to energy efficiency. Integrating energy efficiency and demand response delivery can be accomplished with a streamlined market delivery model. If both aim to reduce load at particular times of day, the value for any hour of the day can be quantified in advance (for energy efficiency), and the value at a market price (day ahead or shorter than that) can be attributed for active response. By valuing both, more projects can be completed that also have long-term value for avoiding the need for load reductions and can ensure that when active response is needed, it can be done for longer periods with less harm to consumers. Imagine a well-insulated home riding out a heat wave by pre-cooling or staying safe in frigid temperatures if there was an outage.



While current energy efficiency portfolios already have combined goals, aligning the delivery mechanisms would maximize benefits to the grid and customers. It would also enable REPs to play a larger role in getting customers connected to energy efficiency solutions that are typically not in their primary interest to reduce short-term load driven by short-term market prices. By operationalizing them together, Texas can ensure optimal resource utilization, provide compensation mechanisms for participants, and ensure affordability by reducing customer costs.

Deployment of smart thermostats alone, as proposed by the REP Coalition, could benefit REPs' ability to offer residential DR. Still, deploying thermostats would be most effective when they are explicitly tied to load management strategies measured at the meter to demonstrate and quantify the impacts. The same is true of other technologies that could have much larger impacts due to the long-term value of higher efficiency technologies optimized with controllable loads, such as installing heat pumps, HVAC, and water heaters at scale across Texas.

3. Adopt a Competitive Market Pilot to Expand Investment in Demand Flexibility

This year, the concepts of measurement and delivering demand flexibility by integrating efficiency and demand response should be piloted to complement the existing proposed program portfolios. A competitive market pilot could ensure that implementation of SB 1699 isn't limited to a short-term deployment of smart thermostats but rather that the combined impact of demand response and efficiency are valued together based on meter-based, measured impacts.

Texas is facing staggering load growth and has limited options to serve that load soon. Since Winter Storm Uri, substantial focus has been placed on modifying supply-side market incentives to promote new large-scale dispatchable generation in the state. Still, new generation can take several years to implement and is subject to deliverability constraints as transmission infrastructure can take even longer to develop. Meanwhile, energy efficiency is available today, active load management is needed immediately, and together, they can make a substantial dent in reducing the cost and negative short-term adaptations to accommodate the rapid increase in load. Reliability is also an affordability issue, and demand flexibility is one of the ONLY resources that directly addresses costs for consumers by compensating them for active participation and providing them with means to upgrade homes and businesses to be more resilient in extreme weather. Texans should have access to this low-cost resource as a means of mitigating the worst reliability problems.

Other states have established "regulatory sandbox" models wherein they temporarily fund projects that can potentially deliver significant benefits. One of these examples was implemented in California after the 2020 reliability crisis. The California Public Utilities Commission adopted several strategies, including the "Market Access" model, which set aside $150 million in funds to enable an open-market peak-optimized efficiency program. The value stream was anchored in the avoided cost. Additional value was added to address the most stressed times of the day (4-9 PM peak and 7-9 PM net peak) and could also give additional value for reaching constrained pockets on the grid or reaching disadvantaged communities. Retail customers only paid for value delivered from the market model based on the meter-based impacts that were quantified using open-source measurement. Aggregators were qualified in the program (in Texas, aggregators could be REPs) and were paid for the avoided cost

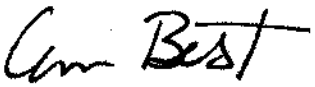
delivered at any hour of the year. The Market Access model lived outside of the existing energy efficiency program rules to allow for experimentation and delivery of truly incremental impacts.[11]

The PUCT could adopt a similar model to test the ability to scale and offer no-regrets value to Texas ratepayers, program participants, and the grid. The regulatory framework is well within the authority of the Commission. It could be informative and complementary to informing future legislative action to update the utility programs and mechanisms for investing in demand flexibility. It also could be used to facilitate the implementation of the Inflation Reduction Act (IRA) HOMES programs in Texas, which can leverage open market measured approaches.[12]

Conclusion

It is an exciting time of innovation in Texas to meet the urgent needs of load growth, having a direct impact on reliability, resilience, and affordability. Demand flexibility is the resource that can be deployed most quickly, with benefits in all three categories. Texas has invested in incredible AMI infrastructure and a tradition of market-based delivery that drives accountability and ensures these resources deliver actual, measurable impacts. Texas can embrace innovation and adopt a measured approach to delivering energy efficiency and demand response together in a coordinated open-market model that aligns with Texas's competitive market ethos. These steps can usher in a new era of reliability, resilience, and affordability for all Texans in the face of unprecedented load growth and rising costs.

Respectfully submitted,



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[11] Decision 21-12-011 ENERGY EFFICIENCY ACTIONS TO ENHANCE SUMMER 2022 AND 2023 ELECTRIC RELIABILITY

[12] The Home Energy Rebate programs include a "measured" pathway in the HOMEs program. More detail can be found on the DOE website.

PROJECT NO. 56517

REVIEW OF ENERGY EFFICIENCY PLANNING	§ §	PUBLIC UTILITY COMMISSION OF TEXAS

RECURVE ANALYTICS, INC. RESPONSES TO QUESTIONS ON REVIEW OF ENERGY EFFICIENCY PLANNING

EXECUTIVE SUMMARY

Core Recommendations:

- Adopt a principle of measurement by default: Track and monitor all demand flexibility impacts for comprehensive data-driven performance analysis.
- Integrate energy efficiency and demand response: Create synergistic programs to enhance grid value, reduce costs, and improve reliability by avoiding separate operations of these initiatives.
- Implement competitive market pilots: Introduce market pilots to scale investments in demand flexibility, ensuring a technology and vendor-agnostic pathway to buy the resource based on measured performance.

Responses to PUCT Staff Questions:

1. Energy efficiency and demand response programs should be oriented to avoiding energy use at the most valuable hours of the day and days of the year, and drive toward long term load reductions to enhance flexibility and drive costs down for all customers.

2. Metrics for Low-Income Programs: Track bill savings, energy burden reduction, and health improvements with performance-based accountability to drive quality service. Performance-based, data-driven models for delivering services help ensure that aggregators are accountable for delivering quality service to low income and hard-to-reach customers and are compensated as partners to meet these goals.

3. Avoided Costs:

    a. The Commission could request proposals from the utilities for consideration by the PUCT and ERCOT in a public process. The avoided cost of capacity they propose should reflect the costs of the current resource mix and the localized value to the distribution system now and over the next 5 to 10 years. The PUCT

and ERCOT could review and adopt values annually to reflect the actual value of capacity today and into the future.

b. The Commission could consider adopting a process like that outlined in the National Standard Practice Manual for Distributed Energy Resources to factor in all appropriate benefits and operationalize it in a publicly accessible open-source code base to enable full transparency.

4. Adopting a measured paradigm, instead of deemed with evaluation review, can align the achievement of overall and local system benefits to performance-based payments.

5. Energy Savings and Demand Reduction Goals: Shift to a system-benefit goal structure using the Total System Benefit (TSB) metric to capture multiple benefits and long-term impacts and synergize with market needs.

6. The open-market model could be implemented as a pilot in response to SB1699 to address the key consideration in the legislation to "reduce residential load."

7. Recommended Priorities for the next 12 months:
   - Require measurement for demand flexibility impacts, leveraging Texas's advanced data infrastructure for real-time performance tracking.
   - Align delivery mechanisms for combined efficiency and demand response, maximizing benefits for the grid and customers.
   - Implement open-market pilots to test new interventions, ensuring measurable impacts and reduced ratepayer risk while informing future legislative actions.