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PROJECT NO. 57743

REVIEW OF ENERGY EFFICIENCY	§	PUBLIC UTILITY COMMISSION
SUBSTANTIVE RULES	§	OF TEXAS

COMMENTS OF RECURVE ANALYTICS, INC. ON
REVIEW OF ENERGY EFFICIENCY SUBSTANTIVE RULES

Recurve Analytics, Inc. (Recurve) is an industry leader in demand flexibility software, providing essential analytic infrastructure to enable demand-side investments to provide a reliable, scalable resource. Recurve empowers utilities, retail providers, and regulators to strategically plan and optimize demand-side strategies by providing transparent, accessible analytics that identify the best opportunities for deploying distributed technologies, measure changes in consumption, and verify impacts for customers and the grid. Recurve's platform provides the visibility needed to inform strategic demand-side investments and scale them with confidence.

Recurve welcomes the opportunity to comment on substantive rules around cost-effectiveness for the Energy Efficiency Implementation Plans in Texas. In our discussions with stakeholders and participation in working groups, we have observed that updating the current cost-effectiveness calculations could amplify the value of this investment to the state as a whole. Specifically, the average fixed rate avoided cost currently used to value waste reduction and load management does not reflect the market realities for the resource. Incorporating a geographic or time dimension can unlock significant value. By sending an accurate signal of the value of demand-side resources for specific areas of the grid and times of the day, the avoided cost value can be used to animate market activity and improve reliability, affordability, and resilience. Aggregators, implementers, and consumers can deliver demand-side interventions at scale, helping Texas optimize investments that cut out energy waste and support load management as an integrated, grid-supportive resource.

Changes to Consider In Calculating Cost-Effectiveness

Cost-effectiveness is a key metric for assessing returns on public investments, ensuring that the costs of the initiative are lower than the benefits delivered:

16 Texas Administrative Code (TAC) § 25.181(d) defines - "Cost-effectiveness standard: An energy efficiency program is deemed to be cost-effective if the cost of the program to the utility is less than or equal to the benefits of the program." ". . .cost of a program includes the cost of incentives, EM&V contractor costs, any shareholder bonus awarded to the utility, and actual or allocated research and development and administrative costs. The benefits of the program consist of the value of the demand reductions and energy savings, measured in accordance with the avoided costs prescribed in this subsection. The present value of the program benefits shall be calculated over the projected life of the measures installed or implemented under the program."

A key challenge is **accurately capturing the value of the benefits** to allow a fair and appropriate comparison with the costs of an intervention aligned with the policy goals. Benefits should, to the extent possible, reflect actual value. Overly simplistic assumptions that inflate (or deflate) the value can lead to higher costs for ratepayers or lost reliability, affordability, and resilience benefits due to underinvestment. Finding accurate representative value aligned with investment objectives is crucial to driving intended outcomes. We provide comments on the discrete questions presented by the PUCT below. Our previously filed comments offer additional detail on the topics of avoided costs, goals, and optimizing delivery and accountability using meter-based performance in Project No. 38578 on the Energy Efficiency Working Group Summaries (2023) and Project No. 56517 on Review of the Energy Efficiency Planning (2024).

*i. Discuss changes, if any, that may be warranted to elements of the **cost** calculation, including measurement and allocation of costs.*

The **cost side of the equation is well aligned with Texas' policy objectives**. The Utility Cost Test (UCT) is the most representative test for comparing demand-side investments with other system resources. The utility costs of "*incentives, EM&V contractor costs, any shareholder bonus awarded to the utility, and actual or allocated research and development and administrative costs*" appropriately reflect the costs to run and motivate utilities to design and operate an effective portfolio. Budgets should be set relative to the achievable potential, and spending should be directly tied to the value delivered to the general ratepayer.

*ii. Discuss changes, if any, that may be warranted to elements of the **benefits** determination, including measurement and avoided costs.*

On the benefits side of the equation, we recommend an **update from an average fixed avoided cost value to a reference that can capture the time- and location-specific value** of energy waste reduction and load management efforts. The current approach generally undervalues these resources by relying on an average national capacity reference and a load-weighted average for energy, missing significant potential grid and consumer benefits for time and geographic optimization.[1]

An avoided cost value stream that includes a geographic and time-variable dimension could better **align with ERCOT and utility system needs and significantly amplify the impact of this class of demand-side investments**. Potential sources for defining a time-differentiated value include prior year Operating Reserve Demand Curve (ORDC) averages or other relevant system information as a directional indicator. A common time-variable value stream can be visible to all stakeholders in the planning process and market actors optimizing pathways to meet the goals. Current calculations result in a modest, flat avoided cost value that fails to capture the real-time and locational benefits of load reductions that could direct investments to areas of greatest grid need, reducing system costs and benefiting participants.

Hourly and geographically tuned avoided costs **would provide an even more powerful reinforcing function when combined with standardized hourly quantification impacts** from waste reduction and load management efforts.[2] Access to these granular outputs would allow utilities, ERCOT, PUCT, and other stakeholders to directly view and monitor the value delivered to any part of the system at any specific time of day or day of the year. This approach would enable ongoing tracking of impacts rather than relying on a separate set of generalized compliance reports based on annual averages that require interpretation and justification at the end of each year. Hourly avoided costs and standardized measurement can also enable greater use of performance-based program designs that incentivize aggregators to deliver much greater value to consumers and consequently enhance demand flexibility's role in improving Texas' grid reliability, affordability, and resilience.[3]

Policies and valuation should be designed to encourage **utilities to leverage demand-side investments to optimize their localized systems.** Avoided costs should reflect the localized

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[1] See avoided cost of capacity adopted for 2025; and the avoided cost of energy adopted for 2025

[2] For more information: *Expanding Energy Efficiency Open Source Measurement Methods to Incorporate Demand Response for Grid Stability*. Joe Glass, Steve Suffian, et al. ACEEE Summer Study 2022 Proceeding paper.

[3] More detail on this program design and the value of granular avoided costs are included in our comments on Project No. 56517, Review of the Energy Efficiency Planning (2024),

benefit of these investments for avoided or deferred transmission and distribution investments.[4] The **utilities are well positioned to mitigate grid constraints with demand-side deployments** because they are accountable for optimizing distribution system operations. Many jurisdictions use targeted demand-side interventions to incentivize consumers who 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 avoided costs in the short term, the PUCT and ERCOT could request, review, and approve **utility proposals on more appropriate contemporary avoided costs** that better align with system value. Regular updates could ensure the values reflect current and future grid realities, enabling demand flexibility to more effectively support Texas' long-term reliability and affordability goals.

In the longer term, the Commission could **consider revisiting cost-effectiveness calculations in a more formal stakeholder process** like that outlined in the National Standard Practice Manual for Distributed Energy Resources.[5] This would allow all stakeholders to consider and factor in all appropriate benefits and operationalize the value stream in a publicly accessible open-source code base to enable full transparency.[6]

Appropriate Level to Compare Costs and Benefits

We have found that **portfolio-level cost-effectiveness frameworks offer the right balance of trade-offs and opportunities for utilities to optimize**. Utilities can allocate resources between new and established initiatives while socializing administrative and cross-cutting costs. This approach helps leverage economies of scale within the portfolio. Sector-level cost-effectiveness provides similar economies of scale, but residential and commercial portfolios will present challenging trade-offs given the cost of delivering services to residential customers for smaller impact versus large commercial interventions. Recurve supports portfolio optimization with goals

[4] In many jurisdictions utilities are allowed to actively use energy efficiency and demand response to reduce the cost or avoid T&D investments and can recoup costs in their general rate case as part of system infrastructure.

[5] 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.

[6] The Michigan PSC recently launched a Benefit Cost Analysis Collaborative for that purpose..

and cost tests applied to the full portfolio rather than individual programs, projects, or measures. Program administrators should be afforded flexibility in achieving the goals and optimizing system and consumer benefits.

Portfolio goals can also be aligned around benefits delivered instead of "savings" achieved. In comments filed on Project No. 56517, Review of the Energy Efficiency Planning (2024), we outlined a strategy for adopting "system benefits" as a goal. A monetized system benefits goal allows for greater synergies across the market in achieving the multiple objectives of managing load, enhancing flexibility and resilience, and improving affordability.

Texas has a long history of market-based solutions to optimize energy investments. **Accurate valuation is the key to market stimulus and optimized resource allocation**. Texas has a unique opportunity to recalibrate the value of demand-side investments to reflect their time-delimited and geographic potential in the avoided cost value stream, with outcomes tightly aligned with grid and consumer needs. Accurate values reflecting Texas' reliability needs will animate more investment and engagement in the state and provide visibility to the impacts across collaborating agencies, utilities and retail providers. Consumers will have more options for driving toward energy independence and improved resiliency, and the state will benefit from greater grid reliability at a lower cost than alternatives.

Respectfully submitted,

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