PROJECT NO. 56517

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REVIEW OF ENERGY EFFICIENCY PLANNING

PUBLIC UTILITY COMMISSION OF TEXAS

THE FLEX COALITION RESPONSES TO QUESTIONS ON REVIEW OF ENERGY EFFICIENCY PLANNING

<u>The Flex Coalition</u>¹ is comprised of 28 of the nation's leading commercial and residential demand flexibility providers, including energy efficiency, demand response, and behind-the-meter solar and storage. The Mission of the Flex Coalition is to provide educational support for policies that advance performance-based demand flexibility to enable markets for Virtual Power Plants (VPPs) as a grid resource. The comments below represent the views of the Flex Coalition but do not necessarily represent the views of any individual Coalition member.

The Flex Coalition submits these comments in response to the questions posed on April 23, 2024, in Project No. 56517, Review of Energy Efficiency Planning.

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?

Yes, certain hours of the day and year are more valuable than others and therefore the programs offered by the utilities should reflect that. How do we know this? ERCOT energy prices vary throughout the day and the year. Energy on a 100+ degree day at 4 pm in August is very likely to be much more expensive than an equal amount of energy at 4 am in April. And we know that reliability is much more at risk during a heat dome or a severe winter storm than it is during an average day.

Therefore, the energy efficiency and demand response programs offered by utilities or ERCOT should provide incentives to save energy at the times when it is needed most and provides most value to the grid and Texas ratepayers. Some types of demand-side investments provide more or less value at the peak times and should be rewarded accordingly. For example, investments in high efficiency office lighting provide year-round energy savings, some of which is on peak. But investments in high efficiency air-conditioning and building insulation, explicitly save the most energy when it is the hottest and therefore when the value of the energy savings are likely to be the highest.

Moreover, we now have the ability using smart meter data and data analytics to measure the actual savings during high-cost periods, rather than assuming a yearlong average or deeming certain hours to be generically more valuable.

¹ https://flexcoalition.org/

In addition to different values for different hours, the Commission should also consider different values for different geographic locations. Providing larger incentives for demand-side investments in areas that are transmission or distribution constrained or expecting significant load growth can improve reliability, reduce the risk of interruption, and save money for ratepayers by reducing the need to build more infrastructure.

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

No comments at this time.

- 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.
 - 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.

The calculations for both avoided capacity and avoided energy should be modified to keep up with the changing grid. They are currently flat, fixed avoided costs and should be moved to variable costs based on time of day and year. As described above in the answer to Question 1, there are a variety of reasons why different hours and different locations have different value to the grid. Again, ratepayers benefit when we incentivize the actions that have most value to the grid, not just provide generic incentives with average values that may save energy at times when it is least valuable.

Further, besides the values of energy and capacity in bulk to the grid, the avoided costs should take into account other values unique to demand-side resources such as avoided transmission and distribution (T&D) infrastructure costs. There are also benefits to consumers and communities as a whole that come from greater resilience in the face of extreme weather events.

We recommend that the Commission revise the avoided energy and capacity values to make them dynamically variable and include all the benefits derived from reductions in demand, including avoided T&D costs. The Commission should consider using the guidance from the <u>National Standard Practice Manual</u> (NSPM). The NSPM does not prescribe a particular outcome but provides a set of eight principles, and a process for applying them, so that a state can come up with the appropriate avoided costs and benefits given the particular policies of that state.

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.

No comments at this time.

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.

Yes, the existing goals, which have not been revised since 2012² should be revised upward given the major growth in demand for electricity and the more recent severe weather. More specifically, the South-Central Partnership for Energy Efficiency as a Resource (SPEER) estimates that the current goal for IOUs is 0.21% of statewide electricity sales and could be raised to 1% of sales and still be below the national average for states with similar targets.³

As indicated in our comments above, there are certain hours in the year when targeted load drop or demand response would be very valuable to the grid. The Commission should also consider having a second goal of an amount of flexible load that can be reliably dropped in response to grid conditions. SB 1699 requires the Commission to set a goal for *residential* peak demand response and will be discussed more in Question 6 below. Texas could achieve even greater benefits with a statewide goal and policy for flexible resources from all customer classes.

Our recommendation is that the current efficiency goal be at least doubled as an immediate priority. The Commission should also open a project to evaluate whether the efficiency goal should be increased further and set a goal for flexible load capability as well.

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.

Section 39.919 (a) of the Utilities Code, as added by SB 1699 states:

"The commission by rule shall establish goals in the ERCOT power region to reduce the average total residential load."

Subsection (b) further establishes the parameters for the Commission to include in the rules establishing the authorized demand response program. This is the most important task for the SB 1699 rulemaking. This also makes a great deal of sense from a grid perspective because residential air-conditioning, and residential electric resistance

² "SPEER Review of Texas IOU Energy Efficiency Programs 2005-2022", <u>https://eepartnership.org/wp-content/uploads/2022/09/IOU-Program-Review-SPEER-Report-2022_FINAL.pdf</u>, p. 5. ³ Ibid, p. 13.

heating are two of the biggest drivers of peak demand on very hot and very cold days. Having flexibility in residential demand goes directly towards addressing the problem rather than creating work arounds to make up for this demand.

Section 39.919 (d) of the Utilities Code as added to by SB 1699, limits the amount of funding a transmission and distribution utility (TDU) can provide to this program to 10% of their overall efficiency budget. Therefore, this cannot, nor should not, be used to replace the rest of the existing efficiency portfolio. However, there is one key restructuring that should be considered both for the efficiency portfolio and the SB 1699 residential demand response goal: both programs should be measured using actual meter data.

Using meter data from Smart Meter Texas, and data analytics, we can now measure the actual impact of both energy efficiency and demand response rather than estimating it using deemed savings or imperfect rules of thumb.

This approach has several benefits. It is more accurate than rules of thumb. It incents energy efficiency and demand response businesses to actually perform and improve their performance over time in order to maximize revenue. Finally, it pays for actual performance. This approach is philosophically more in line with the structure of the Texas energy market.

This methodology can be done because it has been done. The California ISO used this methodology to measure the actual demand response provided during an extreme heat wave in 2020⁴ and found that it was more accurate than previous methodologies.

Based on the success of existing programs, the California Public Utilities Commission has established normalized metered energy consumption (NMEC) as the default for certain energy efficiency programs in California.⁵

The federal Inflation Reduction Act (Sec. 50121) authorizes rebates for energy efficiency and specifically allows an option for states to use a "measured approach" which is essentially pay-for-performance as measured at the meter. It is expected that a number of states will choose this measured approach later this year.

Finally, one additional beneficial change to the energy efficiency rules would be to measure cost-effectiveness at the Portfolio level, not the individual program level.

⁴ "New Ways of Measuring Demand Response Being Explored", Jill Powers, Demand Response & Distributed Energy Sector Manager, California Independent System Operator, November 24, 2021,

https://www.caiso.com/about/Pages/Blog/Posts/New-ways-of-measuring-demand-response-being-explored.aspx.

⁵ California Public Utilities Commission Decision 23-06-055, "Decision Authorizing Energy Efficiency Portfolios for 2024-2027 and Business Plans for 2024-2031," p. 41,

https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M512/K907/512907396.PDF

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

Recommendation #1: The Energy Efficiency Division should make its top priority standing up the residential demand response goals and requirements of SB 1699 using pay-for-performance based on actual meter data. First, doing this is required by the legislature. Second, it directly addresses the reliability problem of heavy residential load on especially hot or especially cold days. Third, it is an excellent start to transitioning most demand-side resources to pay-for-performance based on meter data.

Recommendation #2: The Commission should set a general policy that the energy efficiency programs transition to a pay-for-performance basis where it makes sense. Not every demand-side program is a good candidate, but pay-for-performance as measured by meter data should be the general rule. If the rules on access to data from Smart Meter Texas need to be changed to accommodate this, that should also be part of this effort.

Recommendation #3: The Division should start studies to update the avoided cost of energy and capacity and evaluate the optimal level for the energy efficiency goals.

Conclusion

The Flex Coalition appreciates your consideration of the important issues discussed in our comments.

Respectfully,

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EXECUTIVE SUMMARY

The following summarizes The Flex Coalition's substantive recommendations:

Recommendation #1: The Energy Efficiency Division should make its top priority standing up the residential demand response goals and requirements of SB 1699 using pay for performance based on actual meter data.

Recommendation #2: The Commission should set a general policy that the energy efficiency programs transition to a pay-for-performance basis where it makes sense.

Recommendation #3: The Division should start studies to update the avoided cost of energy and capacity and evaluate the optimal level for the energy efficiency goals.

Responses to PUCT Staff Questions:

Q1. Certain hours of the day and year are more valuable than others and therefore the standard offer or targeted market-transformation programs offered by the utilities should reflect that.

Q2. No comment at this time.

Q3. The Commission should revise the avoided energy and capacity values to make them dynamically variable and include all the benefits derived from reductions in demand, including avoided T&D costs.

Q4. No comment at this time.

Q5. The current efficiency goal be at least doubled as an immediate priority. The Commission should also open a project to evaluate whether the efficiency goal should be increased further and set a goal for flexible load capability as well.

Q6. The Energy Efficiency Division should make its top priority standing up the residential demand response goals and requirements of SB 1699 using pay-for-performance based on actual meter data.

Q7. **Recommendation #1**: The Energy Efficiency Division should make its top priority standing up the residential demand response goals and requirements of SB 1699 using pay-for-performance based on actual meter data.

Recommendation #2: The Commission should set a general policy that the energy efficiency programs transition to a pay-for-performance basis where it makes sense.

Recommendation #3: The Division should start studies to update the avoided cost of energy and capacity and evaluate the optimal level for the energy efficiency goals.