

# **Filing Receipt**

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#### PROJECT NO. 53911

AGGREGATE DISTRIBUTED \$ PUBLIC UTILITY COMMISSION ENERGY RESOURCE (ADER) ERCOT \$ OF TEXAS

### COMMENTS OF OCTOPUS ENERGY ON ADER PILOT NEXT STEPS

Octopus Energy, REP License #10262, files these Comments to provide input regarding next steps in the aggregate distributed energy resources (ADER) pilot project and activities of the ADER Task Force (ADER TF). Specifically, Commissioner Glotfelty filed a memo in this Project on August 14, 2024, asking that the ADER TF consider four specific issues to move the pilot project forward. Octopus Energy currently has approximately 15 MW of thermostats that we want to aggregate with other dispatchable resources and offer into the ADER pilot, but ERCOT telemetry requirements and Smart Meter Texas (SMT) shortcomings are major barriers to qualifying the aggregation for market readiness. These and other issues need to be addressed to move the ADER pilot project forward. Octopus Energy responds to the four issues below and looks forward to discussing these in greater detail in future ADER TF meetings.

## RESPONSE TO COMMISSIONER GLOTFELTY'S FOUR COMMENTS AND QUESTIONS

1. Every consumer should be able to select their VPP provider regardless of their equipment. While there are other examples, the one that comes to my mind is that Tesla Powerwalls can only participate in a VPP thru the Tesla Retail provider and VPP. This should change. I would ask the Task Force to make recommendations on what needs to happen to ensure this goal is met.

This issue goes beyond batteries, and open communications standards should be explored for other controllable devices such as smart thermostats, heat pumps, controllable water heaters, electric vehicles, and other smart home devices. The key issue is providing Retail Electric Providers (REPs) the ability to control a customer's device (with the customer's permission, of

course) to optimize value to the customer pursuant to the terms and conditions of the retail electricity plan in which the customer is enrolled. The REP needs to have visibility into the operations of specific devices and ensure that those devices are not being operated in ways that are counterproductive to optimizing value for the customer (which relates to Question 2 below). It is critically important that the original equipment manufacturers (OEMs) provide device-level control. Currently, not all thermostat OEMs provide the necessary device-level control, with some OEMs allowing commands to be sent only to a group of thermostats, rather than to each individual thermostat. This limitation presents a barrier, as developing personalized control strategies enables Octopus Energy to maximize our DR performance, including predictability, reliability, and overall capacity, while meeting the thermal comfort needs of each customer. We develop a customer's personalized strategy based on device-level experimentation and understanding of the thermal envelope of the building and preferences of the customer. Further, Octopus Energy has experienced situations in which an aggregator of one particular type of customer device, such as a smart thermostat, takes actions that interfere with the energy management optimization that Octopus Energy is executing for its customer pursuant to the retail plan in which the customer is enrolled. We suggest that incentive mechanisms could be developed to drive appropriate behavior to encourage device manufacturers to allow access and control of their devices, such as requiring open access and control as a condition to participation in ERCOT markets. See also our response to Question No. 2.

## 2. The Task force should look at if it is possible for a consumer to select a VPP provider that is not their Retail Electric Provider.

Currently, it is possible for a customer to select a demand response aggregator that is not their REP, which Octopus Energy has found to be problematic at times, even where the aggregator has been focused on provision of Emergency Response Service (ERS) while Octopus Energy is optimizing for energy and other ancillary services. Past work of ERCOT's DREAM Task Force<sup>1</sup> has demonstrated the possibility, but extreme complexity, of allowing multiple players using devices at the same premise to simultaneously participate in markets. However, while it may be *possible* to have customers selecting VPP providers that are not their REP, Octopus Energy disagrees that this would be the preferred outcome from a customer or market efficiency and reliability perspective.

The ERCOT market design is best suited to allow REPs to have the customer relationship for economic efficiency, reliability, and a better customer experience. For example, customers who enroll in an Octopus Energy plan do so on the basis that they will get a lower rate in exchange for allowing Octopus Energy to control certain customer devices in response to market signals. However, if another device like a battery or a smart thermostat is also participating in another program where Octopus Energy does not have insight or control, the activities undertaken by that other aggregator can interfere with our ability to optimize service to our customer. The practical outcome is that the customer's outcomes are not aligned with their expectations. They may even feel like they are in a "bait and switch" situation, because they have no idea what is happening with the non-REP device (and may have forgotten they agreed to allow it to be controlled by another entity) and meanwhile they are not getting the lower prices they expected to receive from their REP.

We are encouraged to see new collaborations announced, such as the recent Vistra/Sunrun virtual power plant (VPP) arrangement<sup>2</sup> announced within the past two weeks. However, the

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https://www.ercot.com/committees/inactive/dreamtf.

https://investor.vistracorp.com/2024-09-11-Vistra-Partners-With-Sunrum-on-Residential-Battery-Aggregation-Program.

ADER pilot needs more REPs participating so that ERCOT has the opportunity to fully evaluate participation of ADERs in ERCOT markets. Two years into the pilot project, we are only scratching the surface of what is possible. To that end, Octopus Energy recommends that ERCOT focus on finding ways to streamline the process to qualify ADERs offered by load serving entities (LSEs). As an LSE working with ERCOT to move through various QSE qualifications, we can attest to the fact that these processes are highly complex. To offer one example, SCED testing generally requires responding to set points in the proper amount of time, evaluating whether a resource can ramp fast enough, and whether the resource can respond for the duration of the service, e.g., four hours for Non-Spin. When the size of an aggregation (under current ADER pilot parameters) is so small compared to the overall system, this level of complexity is "overkill" and constitutes a barrier to entry to ADERs. It would be more reasonable to require testing when the aggregation gets to one MW or even five MW. Smaller LSEs do not likely have the resources to devote to such a complex set of processes. More can and should be done to simplify and streamline these qualification processes to get more LSEs and their aggregations into the pilot.

3. The task force should provide a roadmap for the commission on how we get to eighty MWs of participation and what is next beyond that. It was my hope when we set this up, that these aggregated resources would be a permanent fixture in the ERCOT software as their Energy Management System was upgraded. Are we there yet? If not, what needs to be done?

Octopus Energy recommends that the Task Force focus on several areas to grow the ADER pilot project and transition from pilot to full market operations:

- Streamline and simplify qualification processes for LSEs (discussed above in response to Question 2);
- Move Smart Meter Texas (SMT) to ERCOT so that its capabilities can be modified more easily. For example, SMT is limited to 1000 meter reads per day

per TDU, and two meter reads per hour from a given ESI ID (the first of which is required for baselining). More frequent reads are needed for REPs to manage ADER/VPP operations. Functionally, REPs are limited to a maximum of 500 participants and/or one hour of performance at the current SMT limits;

- Remove real-time telemetry requirements for any offering that is de minimis for ERCOT, and instead use SMT meter data to validate once settled to reduce complexity and technical requirements. (We can "validate" the actions off our forecasted load curves for relevant customers);
- Remove two- and four-hour duration requirements on ancillary services that ERCOT procures on an hourly basis;
- Investigate participation models that allow for more "blocky" responses;
- Explore adoption of a more flexible ERCOT ADER service, such as one modeled
  on the UK's Demand Flexibility Service, to encourage response during the
  appropriate time periods and considering the capabilities of ADERs;
- Digitize distribution circuits to allow additional feeder-by-feeder transparency, e.g., microsensor phasors can provide data on power factor and volt-var at the premise level; and
- Explore additional value streams related to the distribution system and allow utilities to develop new distribution service markets.

We look forward to discussing these issues in greater depth in future Task Force meetings.

### 4. How does this project expand to allow for larger units, across ERCOT zones to be included?

Octopus Energy does not have specific recommendations on this issue at this time. Larger units, such as those 1 MW and larger, can already participate in ERCOT energy and ancillary markets as individual resources. We look forward to hearing from larger DERs regarding what they are interested in achieving through the current pilot project with respect to aggregations.

### **CONCLUSION**

Octopus Energy appreciates the opportunity to provide these Comments and looks forward to working with the Commission, ERCOT, and the ADER TF members on these issues as work continues on subsequent phases of the ADER pilot.

Respectfully submitted,

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