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PROJECT NO. 49125

REVIEW OF ISSUES RELATED TO ELECTRIC VEHICLES	§ § §	**PUBLIC UTILITY COMMISSION OF TEXAS**

Texas Commercial Energy Customers'
Responses to Commission Questions

Texas Commercial Energy Customers (TCEC)[1] appreciates the opportunity to provide responses to the Public Utility Commission of Texas' (PUC's) Questions regarding electric vehicles (EVs). The installation and operation of electric vehicle charging stations available to the public are often located on the property of an existing commercial customer. As such, commercial customers have an important role to play in expanding the deployment of charging stations in a manner that facilitates use of electric vehicles across the State.

Commercial businesses can successfully work in a collaborative way with the Transmission and Distribution Utilities (TDUs) and the provider of the charging station through a variety of structures that make good business sense. There are even more opportunities in the competitive retail electric market in Texas for commercial deployment of these charging stations.

1. **As a matter of policy, which entity or entities should be permitted to own or operate an electric vehicle charging station in the Texas competitive electric market? Is a different ownership structure appropriate for service areas not open to retail competition?**

As the number of EVs increase in the market, the essence of the policy of ownership and operation should be to encourage innovation and competition. In the competitive portions of the market, any entity, except for TDUs, that meets safety interconnection standards should be able to own and operate EV charging stations. In non-competitive areas across the state the charging station ownership should be broadly available to competitive entities with the cooperation of the retail electric utility to whom the area is certificated.

The actual sale to the end-user would be made by a Retail Electric Provider (i.e., Electric Vehicle REP - "EV REP"). The PUC with stakeholder input should develop a different REP

[1] Texas Commercial Energy Customers (TCEC) is a business league representing commercial customers of energy in the Texas energy markets. All of the comments are reflective of TCEC as an organization and individual members may have different viewpoints and may file their own comments related to those issues.

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Option (possibly Option 4) for an EV REP and institute a rulemaking for applicable registration requirements for these entities and certain applicable consumer protection rules for EV REPs, ensuring to incorporate principles promoting low barriers to entry.

Utilities in non-competitive areas (non-opted in cooperatives, municipally-owned utilities, and TDUs) should be encouraged to work with EV facility providers in a competitively neutral manner. The cost of the EV facilities should not be in utility rate base, and the utility should work with the EV facility provider to accomplish the sale of electricity as a commodity at the charging station to the end-use customer.

2. Is the operation of an electric vehicle charging station a retail sale of electricity?

Yes, by its very nature EV Charging is a retail sale because a consumer is purchasing a kWh to utilize in their EV. This is no different than going to a gas station and filling up your tank with gasoline. In addition, title of the kWh of electricity passes to the consumer from the seller when the vehicle is charged. This would also be where taxes including sales and use taxes would be collected by the supplier from the consumer. As there will be many EV REPs in the marketplace, the competitive forces will bring prices down and reduce the need for regulation.

One exception would be a commercial entity using an EV charging station for its own fleet of vehicles owned by it or its corporate parent which would not be a separate sale. This self-use provision would be the same as using electricity from the grid for its operations and charging for example forklifts in its warehouses. From the fueling point of view, this is also analogous to farmers today purchasing diesel at wholesale for their own use to run the tractors on the farm. These types of self-use are exempt from the definition of regulated utility service.

In the future as technology enables vehicles to sell electricity back to the grid (Vehicle to Grid – V2G) or bid into the ancillary services market (black start, voltage support, non-spin, regulation), a portion of the EV charge / discharge would be viewed as wholesale load. Ultimately, guidelines should be developed for vehicles that participate in the wholesale operations as to what percentage of a vehicle's load is for retail purposes and what percentage is for (potential) resale back to the grid, or develop metering capabilities to measure the charge and discharge of the vehicle.

3. **As a matter of policy, how should the cost of the distribution system infrastructure associated with an electric vehicle charging station be recovered in the Texas competitive electric market?**

The full cost of the distribution system infrastructure should be passed on to the competitive owner/operator of the EV charging stations. This will incent an owner/operator to price its product properly without cross subsidies from other consumer groups. For example, the owner/operator will have to make choices on the amount of local battery storage/distributed generation resources they have on-site to mitigate demand charges, or they may design innovative pricing plans that discourage charging during the peak periods (e.g., Real-Time pricing + a demand charge pass through) and encourage charging by providing lower pricing during the off peak periods.

As the EV deployments increase, the Commission may want to consider a separate EV charging station rate class in TDU tariffs for this category of service. It is unclear whether the demand charges currently in place for commercial service will actually result in a match between the cost of facilities and the associated utility charges. Electric vehicle charging prices, just like gasoline pricing, is highly price elastic. From a grid operations standpoint, it is possible to flatten the usage curve by a combination of hardware technology and pricing by sending the right price signals to consumers.

4. **Is the answer to Question 3 different for an electric vehicle charging station located in a remote area, primarily for use by long-distance rather than local motorists**?

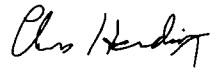
As long as the full cost of the distribution system infrastructure is passed on to the owner/operator of the EV Charging station, there should be no difference between the remote rural and local urban stations.

CONCLUSION

TCEC appreciates the opportunity to work with the Commission and interested stakeholders on measures to facilitate deployment of electric vehicle charging facilities in a manner that makes good business sense within the Texas market design model.

Submitted on behalf of

TEXAS COMMERCIAL ENERGY CUSTOMERS



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