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PROJECT NO. 49125

REVIEW OF ISSUES RELATING	§	**BEFORE THE**
	§	**PUBLIC UTILITY COMMISSION**
TO ELECTRIC VEHICLES	§	**OF TEXAS**

ENVIRONMENTAL DEFENSE FUND RESPONSES TO SECOND REQUEST FOR COMMENTS

Environmental Defense Fund of Texas, Inc. ("EDF") files these comments in response to the Second Request for Comments of the Public Utility Commission of Texas "(Commission" or "PUCT") as published in the Texas Register on August 14, 2020.[1] EDF is a non-profit, non-partisan, non-governmental environmental organization that combines law, policy, science, and economics to find solutions to today's most pressing environmental problems. EDF appreciates the opportunity to provide these comments.

RESPONSES TO QUESTIONS

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?

In the areas of the ERCOT region that are open to retail competition, the market design the Texas Legislature established over 20 years ago is based in part on the principle that competitive businesses and services should be provided solely by private companies and the regulated electric utilities should not participate in markets for competitive services.[2] Since non-utility companies have led the development and operation of electric vehicle ("EV") charging stations in the areas of the ERCOT region that are open to competition to date, this might, without more information,

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1 45 Tex. Reg 5691 (Aug. 14, 2020)

2 See Utilities Code § 39 051(a) (separation of regulated utility services from competitive customer energy services) and § 39.105(a) ("After January 1, 2002, a transmission and distribution utility may not sell electricity or otherwise participate in the market for electricity except for the purpose of buying electricity to serve its own needs ")

indicate this is a competitive business and service that should not be provided by regulated electric utilities.[3]

However, the Texas Legislature has enacted provisions that allow regulated electric utilities in the ERCOT region to participate in what otherwise would be a competitive market in certain instances. For example, Section 39.905(i), Utilities Code, allows electric utilities to provide rebates or incentive funds directly to customers in rural areas when the utility's energy efficiency goals cannot be met by retail electric providers ("REPs") or competitive energy service providers. A similar approach may be appropriate when it comes to the development of EV charging stations, especially in rural and underserved communities where the competitive market may fail to develop charging stations needed to support the availability of EVs to citizens in these communities because of a perceived lack of demand. EDF respectfully submits that allowing electric utilities to own and operate charging stations in these limited areas would not undermine the competitive electricity market that has served Texans so well. Even if all the charging stations in these otherwise underserved areas were owned by the local regulated electric utility, the utility's facilities would only be a fraction of the charging stations developed in its service territory – aside from helping to drive EV adoption more equitably across the state. Additionally, such a model can increase competition by allowing customers in these underserved regions to select from more charging station options for service than they otherwise would have available.

A different ownership structure is appropriate in those regions of the state that are not open to retail electric competition, including areas served by municipal electric utilities and electric cooperatives in ERCOT that have not opted to open themselves to retail electric competition and the areas located outside of the ERCOT region. In those areas, the prohibition against participation

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[3] Regulated electric utilities may have affiliates that provide competitive services, though

of an electric utility in competitive businesses is not applicable. As a result, these entities may be able to own and operate EV charging stations. At the same time, though, these entities should not be allowed to exclude competitive providers from also being able to own and operate EV charging stations in their service areas. As discussed below, the provision of EV charging service should not be classified as the retail sale of electricity, so incumbent utilities should not be concerned that allowing other parties to own and operate EV charging stations in their service areas is the same as allowing retail competition to occur inside their service areas.

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

No, the operation of an EV charging station should not be defined as a retail sale of electricity.[4] To the contrary, the operation of the charging station and the charging of an EV battery is a service that is provided in the competitive market, just like a traditional gas station. While it takes electricity to charge an EV battery, the mere fact that electricity is transferred from the charging station to the EV battery where it is then used to move the vehicle and power its various on board systems is very different than the provision of electricity to a customer's home

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[4] To date, 34 states, the District of Columbia, and Austin, Texas have decided that EV charging is not a utility service or a retail sale of electricity See Alabama, Docket No. 32694; Arkansas Code § 23-1-101(9); Arizona Docket No. RU-00000A-18-0284; Cal. Pub. Util. Code, § 216(I); Colo. Rev. Stat. § 40-1-103.3(2), CT Section 16-1 of the 2016 supplement to gen. statutes; D.C. Council Bill 19-749 and Code §§ 34-207, 34-214; Delaware PSC Docket No 19-0377, Order No 9516; Fla. Stat. § 27-366 94; Haw. Rev. Stat. § 261-1(2); Idaho Code § 61-119; Ill. 220 ILCS §§ 5/3-105(C), 5/16-102; Iowa Docket No. RMU-2018-0100; Kentucky Case No 2018-00372; Massachusetts Case D.P.U. 13-182-A; Me. Rev. Stat. Ann. Tit. 35, §§ 313-A, 3201(5), 3201(8-B); Md Code Pub. Utils §§ 1-101(J)(3), 1-101(X)(2); Michigan Case Nos. U-17990 & U-20162, Final PSC Order, Consumers & DTE service areas; Minn. Stat.§ 216B.02 (Subd. 4); Missouri PSC File No. ET-2016-0246, and HB 355 (2019). RSMo 386.020; Nevada SB145, NRS 704.021 (11.); New Hampshire RSA 236·133 as amended by SB 575 of 2018; New Jersey S 2252 (c 362, 2019); New Mexico HB 521 (2019); NY PSC Case No. 13-E-0199; North Carolina HB 329; Oklahoma OAC 165:35-13-1(c); Or. Rev. Stat. § 757.005(1)(B)(G); PA PUC Order R-2014-2430058, M-2017-2604382; Rhode Island R.I.G.L. Section 39-1-2(20); Utah Code §§ 54-2-1(7)(C), 54-2-1(19)(J); Texas (Austin Energy Territory Only) City Code Section § 15-9-121; Vermont Sec 39. 30 V.S A. § 203 as amended by Act No. 59 of 2019; Va. Code Ann § 56-1.2:1; Wash Rev Code § 80 28 310; W Va. Code § 24-2D-3 This week, the Administrative Law Judges at the California PUC issued a proposal for decision to clarify that charging of medium- and heavy-duty electric vehicles also is not a retail sale of electricity and subject to regulation as a public utility. Order Instituting Rulemaking to Continue the Development of Rates and Infrastructure for Vehicle Electrification, Rulemaking 18-12-006, Proposed Decision (August 24, 2020), available at https //docs cpuc.ca.gov/PublishedDocs/Efile/G000/M345/K416/345416730.PDF.

or business where it is used for multiple purposes at the same time. To classify EV charging service as a retail sale of electricity would raise the question of whether the sale of charged batteries from any store to a customer also is a retail sale of electricity. In many ways, these are the same transactions, although they differ in the size of the battery at issue and whether the customer receives a pre-charged battery or is receiving a recharge of their battery.

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?

In the areas of the ERCOT region that are open to retail competition, the cost for distribution system infrastructure associated with connection of an EV charging station to the electric grid should be recovered in the same manner as the costs associated with the connection of any other load to the electric grid. While the charging station may have a different load profile than other loads, it is still a load.

If the intent of this question is inquire about the cost of electric infrastructure behind the meter, such as wiring necessary to provide electricity to several charging bays at a public charging station or to charge a fleet of vehicles, this is a cost that normally is borne by the customer (the EV charging station) and would not be provided by the customer's electric utility. While EDF is not advocating that the Commission change the normal ownership structure in ERCOT, it may help encourage the development of charging stations if the Commission were to allow electric utilities to install the wiring behind the meter to the individual charging locations and use on-bill financing to recover the cost of this service from the customer. This financing strategy could be in addition to the application of any rebates or other incentives that could be available from utilities as well as other funds managed by the state, such as VW settlement funds. This payment structure may provide a low cost and convenient way to finance behind-the-meter investments.

Once a charging station is operational, there is a question regarding how the rates it pays should contribute to cost recovery by the distribution utility. EV charging has been shown to place downward pressure on utility rates broadly by improving system utilization overall, but this outcome cannot be taken for granted. Rather, the EV infrastructure ecosystem, including the price signals experienced by vehicle owners, must be deliberately designed to achieve these outcomes. Overall, rates should facilitate electrification by providing an affordable, manageable value proposition to vehicle owners while incentivizing them to minimize the costs they impose on the grid and, ideally, to maximize the benefits they provide. Pricing of electric service has an essential role to play in ensuring the operation of EV charging stations is affordable; that the burden EV charging stations impose on the grid is not excessive; and that the broad benefits of vehicle electrification can be fully realized. For example, rate structures that encourage EV charging at times of abundant wind generation will maximize the environmental benefits of electrification and also encourage the presence of additional load that can increase stability of the electric grid at times that otherwise would be low net-load situations that requires the curtailment of wind generation. In addition, EV charging stations can support grid reliability during peak periods by providing demand response services that reduce power needs and, when supported by on-site storage and bidirectional capabilities, become a source of energy to meet peak demand.

In the areas of the ERCOT market that are open to retail competition, the Commission only sets the rates charged by utilities, so the following comments are focused on those rates and the principles the Commission should keep in mind to achieve the foregoing objectives:

- **Well-designed rates should help ensure the grid costs no more than it needs to, based on actual grid costs.**
    - *Pricing should encourage customers to keep their demand, including their demand at public charging stations, and especially their demand at times of peak system*

demand, from being excessive. To date, the Commission has not adopted for ERCOT utilities time-variant charges for distribution service. However, the use of such rate structures, especially coupled with time-variant rates offered by a REP, could help provide appropriate signals to contain demand and discourage charging at times of high system demand while encouraging charging when there is high production of renewable energy, especially abundant wind energy.

- *To encourage charging in areas of the grid where costs are especially low, incentives can be used.* In addition to temporal differences in costs, there are geographic differences as well; however, utility rates are generally uniform throughout a service territory. To the extent that EV charging could be especially beneficial at particular locations,[5] distribution price signals to encourage such beneficially-located charging could be incentivized via a geographically targeted incentive available outside the tariff.

- **To ensure rapid electrification occurs on a widespread basis, rates must allow vehicle operators to keep their bills manageable.**
  - *Demand-based rates can be challenging for some types of commercial charging customers – particularly publicly-accessible charging customers, but also fleet owners with potentially unpredictable, round-the-clock duty cycles.* Although volumetric rates are an option, the importance of managing demand for very large

[5] For developers of EV charging stations to be able to identify such locations, increased transparency regarding the needs and limitations of the distribution grid is necessary Other utilities in the country are providing this increased transparency *See* Sky Stanfield, "What Grid Transparency Looks Like," Interstate Renewable Energy Council (August 20, 2019), available at https //irecusa.org/2019/08/what-grid-transparency-looks-like/

customers means developing demand-based rates that can be made manageable for those customers should be a high priority.

- *Demand-based rates should be based on coincident peak demand.*[6] For customers who are able to charge mostly off-peak, this by itself may make demand charges manageable.
- *Innovations in demand-based rates can also make them more palatable.* For example, subscription charges that allow EV charging stations to specify a level of demand and try to stay below it, with new peaks not necessarily leading to permanently higher bills, provide an example of demand-based rates that might work well. Other methods that avoid punitive results from inadvertent overages may also be possible, such as assessing demand based on several high-demand periods rather than a single peak.

The development of more innovative rate structures for EV charging stations could help ensure that these facilities pay the cost for the incremental burden they put on the distribution grid, benefit from the efficiencies they can help the grid realize, and ensure that charging service is economic for customers.

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?

No. The same approach as described above should be applied to remote areas as well. While there may be cost differences applicable to these charging stations, those differences also

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[6] Coincident charges are applied from when the highest amount of energy is demanded across the relevant grid. Peak time energy usage on that grid will have the highest charges while off-peak times will have the lowest. Non-coincident charges are based on a customer's highest energy demand, regardless of when it occurs.

may encourage the co-development of other facilities to support the charging station more economically, such as local solar and electricity storage resources.

CONCLUSION

EDF appreciates the opportunity to provide these comments and looks forward to working with the Commission and interested stakeholders on these issues.

Respectfully submitted,

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