

Missouri Electric Vehicle Task Force

INVESTOR-OWNED UTILITY TASK FORCE QUESTIONS

Investor-owned Utility Task Force Questions

Q: Removal or mitigation of barriers to electric vehicle charging, including strategies, such as time-of-use rates, to reduce operating costs for current and future electric vehicle owners without shifting costs to electric ratepayers who do not own or operate electric vehicles;

A: The primary barriers related to electric vehicle (EV) charging for drivers are the following:

- **Lack of sufficient number of DC fast chargers along highway corridors that enable safe and convenient long-distance EV travel.**
- **Lack of sufficient number of DC fast chargers in communities that enable renters to conveniently charge an EV.**
- **Lack of sufficient number of Level 2 chargers in communities and at destination locations, such as hotels, stores, workplaces, etc., that would create a robust EV charging ecosystem.**

Investor-owned Utility Task Force Questions

Q: Strategies for managing the impact of electric vehicles on, and services provided for electric vehicles by, the electricity transmission and distribution system;

A: Most utilities view EVs as a very flexible resource that offer opportunities to increase the utilization of existing infrastructure and the potential for integrating customer-owned batteries for the benefit of grid reliability.

- That said, there will be impact, and limitations can occur at any given level or multiple levels of the grid which already happens today with other non-EV related loads.
- Utilities are aware of these potential constraints and are studying them to adequately plan for them and proactively mitigate them through integrated planning.
- It is critical that utilities remain front and center in the facilitation of EV infrastructure development and delivery.
- One of the tools that utilities have to help take advantage of the flexibility of EV loads is customer programs that reward EV-owning customers for charging their vehicles at times of low demand (TOU).

Investor-owned Utility Task Force Questions

Q: Electric system benefits and costs of electric vehicle charging, electric utility planning for electric vehicle charging, and rate design for electric vehicle charging;

A: There are many benefits to EVs proliferating in our communities. EVs are a flexible resource in that they can usually charge at home or workplaces. Both of these locations are well-suited for utility-promoted charge management that can help to optimize charging to match grid conditions. Better utilization of the existing grid will increase revenues with low additional investment, thereby causing downward rate pressure for all electric customers.

Electric utility planning occurs decades in advance due the complexity of interrelated factors and electric transportation is a key and growing element of consideration when developing utility integrated resource plans.

Rate design is an important function of utilities in developing, through a rigorous regulatory process, equitable rates for all electric utility customers

Investor-owned Utility Task Force Questions

Q: The appropriate role of electric utilities with regard to the deployment and operation of electric vehicle charging systems;

A: States and utilities have taken a variety of approaches to the utility role in EV charging deployment.

While Missouri has no policy that prevents regulated utilities to own and operate EV charging stations, there is now legal precedent that EV charging can be considered part of utility infrastructure (Missouri Court of Appeals Western District WD80911, August 7, 2018).

Utilities that invest in EV charging stations can accelerate the deployment of charging and help to solve the "chicken and egg" problem of EV charging vs. the vehicles and also ensure a geographically diverse, equitable, and timely deployment of charging.

Investor-owned Utility Task Force Questions

Q: How and on what terms, including quantity, pricing, and time of day, charging stations owned or operated by entities other than electric utilities will obtain electricity to provide to electric vehicles;

A: For Missouri's regulated utilities, the business customer that owns the charging stations can set the fees they want to charge to EV drivers and collect those fees.

Those transactions are completely separate from the fees and rates the utility customer will pay to their utility.

Utilities have set rates based on several factors and those are the rates that charging station owners will pay on their monthly electric bills.

Investor-owned Utility Task Force Questions

Q: Options to address how electric vehicle users pay toward the cost of maintaining the state's transportation infrastructure, including methods to assess the impact of electric vehicles on that infrastructure and how to calculate a charge based on that impact, the potential assessment of a charge to electric vehicles as a rate per kilowatt hour delivered to an electric vehicle, varying such per-kilowatt-hour charge by size and type of electric vehicle, and phasing in such per-kilowatt-hour charge;

A: Utilities agree that the state's transportation infrastructure users should contribute to the payments for maintaining such infrastructure.

Currently, Missouri Department of Revenue requires an Alternative Fuel Vehicle sticker fee for EVs that will escalate in cost as petroleum taxes also increase over the next several years. The current payment for an EV sticker is more than the equivalent gasoline vehicle when considering the efficiency of EVs.

Trying to assess fees at the EV charging stations based on the vehicle size and type is problematic. Also, because up to 95% of EV charging will happen at home or work, it is not possible to collect enough taxes through retail stations.

Staying with an Alternative Fuel Vehicle sticker fee for EVs may be the best long-term approach due to electric meter limitations at home and workplace.

Investor-owned Utility Task Force Questions

Q: Strategies to encourage electric vehicle usage without shifting costs to electric ratepayers who do not own or charge electric vehicles; and

A: If an EV drives 10,000 electric miles per year, it will consume at least 250 kWh/yr. which translates into ~\$250 per year in additional utility revenue, in rough numbers. The estimated MO 19,000 vehicles @ \$250 is a very conservative \$4.75M of additional revenues each year with very little utility investment needed.

This revenue causes a "downward pressure" impact to all utility customers. It is a fact that EV drivers are providing a significant benefit to other non EV-owning customers, not a cost.

This fact signals that utilities should be making some investments to encourage EV adoption by their customers

The pending IJA funding is a great opportunity for Missouri to establish strong EV corridor and community charging that will reduce a significant barrier to adoption.