BILL ANALYSIS

BACKGROUND AND PURPOSE

The bill author has informed the committee that Texas is experiencing rapid growth in electric vehicle (EV) adoption and that as of March 2025, there are over 362,000 EVs registered in Texas. According to the Texas Department of Transportation, projections suggest adoption could exceed one million vehicles by 2031. The bill author has informed the committee that despite this growth, there is currently no clear regulatory pathway for EV owners to sell stored electricity back to the electric grid. Existing statute does not explicitly authorize vehicle-to-grid transactions, and it lacks a framework for aggregating EVs as distributed energy resources. As a result, individual EVs cannot participate in the ERCOT market, either directly or through aggregators. This absence of statutory authority may create legal ambiguity for the Public Utility Commission of Texas (PUC), limit innovation in EV-grid integration, or prevent Texans from unlocking the full economic and reliability benefits of EV battery storage. The bill author has also informed the committee that while ERCOT's Aggregated Distributed Energy Resource pilot project demonstrates growing market readiness, enabling broader EV participation requires legislation that removes barriers and clearly defines roles. C.S.H.B. 3511 seeks to address this issue by authorizing the PUC by rule to establish safety, technical, and performance standards for the interconnection of electric vehicles in the ERCOT power region and by requiring the PUC, in adopting the rules, to ensure that the standards do not conflict with applicable industry standards.

CRIMINAL JUSTICE IMPACT

It is the committee's opinion that this bill does not expressly create a criminal offense, increase the punishment for an existing criminal offense or category of offenses, or change the eligibility of a person for community supervision, parole, or mandatory supervision.

RULEMAKING AUTHORITY

It is the committee's opinion that rulemaking authority is expressly granted to the Public Utility Commission of Texas in SECTION 1 of this bill.

ANALYSIS

C.S.H.B. 3511 amends the Utilities Code to authorize the Public Utility Commission of Texas (PUC) by rule to establish safety, technical, and performance standards for the interconnection of electric vehicles in the ERCOT power region and to require the PUC, in adopting the rules, to ensure that the standards do not conflict with applicable standards published by the Underwriters Laboratories, the National Electrical Code, the National Electrical Safety Code, and the Institute of Electrical and Electronics Engineers. The bill defines "electric vehicle" by reference as a vehicle that is propelled by one or more electric motors using energy stored in the form of a rechargeable battery and "interconnection" as the right of an electric vehicle owner to physically connect the electric vehicle to an electricity distribution system and the technical requirements, rules, or processes for the connection.

C.S.H.B. 3511 authorizes the PUC by rule to establish a program to allow an electric vehicle owner to do the following:

- make electricity stored by the electric vehicle available for sale in the wholesale energy and ancillary services markets through a registered aggregator or load serving entity; and
- participate in ERCOT market mechanisms, including ancillary services, virtual power plant programs, and aggregated distributed energy resource programs, through such an aggregation.

EFFECTIVE DATE

September 1, 2025.

COMPARISON OF INTRODUCED AND SUBSTITUTE

While C.S.H.B. 3511 may differ from the introduced in minor or nonsubstantive ways, the following summarizes the substantial differences between the introduced and committee substitute versions of the bill.

The substitute replaces the introduced version's requirement for the PUC by rule to establish safety, technical, and performance standards for electric vehicles that may be interconnected with a requirement for the PUC by rule to establish such standards for the interconnection of electric vehicles in the ERCOT power region. The introduced required the PUC to consider standards published by certain entities and codes in adopting the rules, while the substitute requires the PUC instead to ensure that the standards do not conflict with applicable standards published by those entities and codes in adopting the rules.

While the introduced and the substitute both authorize the PUC by rule to establish a program regarding electric vehicles, the introduced authorized the PUC by rule to establish a program to allow the sale of electricity stored by an electric vehicle to the transmission grid and distribution system and authorized the rules to authorize an electric utility or retail electric provider to contract with an electric vehicle owner for the following purposes, which the substitute does not do:

- electricity stored by the electric vehicle is made available for sale to the transmission grid and distribution system;
- the value of that electricity is credited to the electric vehicle owner; and
- electric vehicles are eligible to participate in ERCOT market mechanisms, including ancillary services, Virtual Power Plants (VPPs), and Aggregated Distributed Energy Resource (ADER) programs, ensuring their full integration as grid assets.

However, the substitute authorizes the PUC by rule to establish a program to allow an electric vehicle owner to do the following, which the introduced did not do:

- make electricity stored by the electric vehicle available for sale in the wholesale energy and ancillary services markets through a registered aggregator or load serving entity; and
- participate in ERCOT market mechanisms, including ancillary services, virtual power plant programs, and aggregated distributed energy resource programs, through an aggregation described by the substitute's provisions.