

Electricity Rate Design for EV Charging: Time-of-use

The new electricity load and flexible demand offered by electric vehicles (EVs) have major implications for the future of the energy system. By charging during hours of the day when there is the least demand on the grid, however, the EV transition could result in reduced electric rates for everyone, as the revenue generated exceeds overall costs of the electricity supply. To ensure that EV charging realizes these cost savings and grid benefits, state utility regulators can require utilities to design opt-in programs, like managed or “time-of-use” rates.

Policy Applicability

☒ Passenger Cars ☒ Medium- and Heavy Duty

What jurisdictions have approved special rates for EV charging?

While many utilities voluntarily implement time-of-use rates for EV charging, some jurisdictions have required (whether via legislative action or the independent authority of the utility regulator) utilities to implement special rates for off-peak EV charging. Some utilities also offer a “whole house” time-of-use rate that can achieve the same objectives as an EV-specific rate, and doesn’t require a separate electricity meter.

States that require their utilities to offer EV time-of-use rates: VT, NY, MN, MA, OR

States that impose specific considerations or analysis for utilities in considering EV time-of-use rate proposals: RI, NH, CT

Example policies to consider

In Vermont, [Section 33 of Act 55 \(2021\)](#) directed electric distribution utilities to develop rates that manage loads for greater cost containment, encourage customer participation, and promote EV adoption. Utilities were required to offer EV rates to their customers by June 30, 2024.

[New York Public Service Law §66-O](#) required utilities to file a residential rate for EV charging by April 2018. Utilities must report to the NY Public Service Commission the number of customers using the rate and the amount of electricity used.

Other resources

Synapse Energy: [EVs are Driving Rates Down](#)