

Understanding EV Owners' Preferences Towards Enrolling in Smart Charging Programs

by

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Abstract

Demand for electricity has been increasing in recent years, bolstered by growing adoption of electric vehicles (EVs). To smooth demand at peak periods, under demand response or “smart-charging” programs, power utilities can make electric vehicles extend or delay their charging. An EV owner can save money on their power bill by opting in to such programs. However, it is not well known if EV owners would actually be willing to opt-in, given the radically different refueling model between non-EVs and EVs. This investigation attempts to better understand EV owners’ preferences towards enrolling in a particular smart charging program. We do this by constructing an adaptive contingent valuation survey that gauges savings amounts, among other variables. Through this method, we are able to quantify that more than half of EV owners are willing to enroll in “smart-charging” for low monthly savings of five dollars or less.

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