

Review of: "Evaluating EV User Behavior on Aggregator Smart Charging with ESS and Real-Time Pricing-Based Demand Response"

Shermila Crespo¹

¹ Anna University

Potential competing interests: No potential competing interests to declare.

While the study addresses the pressing issue of rising global electricity consumption and the integration of electric vehicles (EVs) into energy markets, several critical points warrant consideration.

Firstly, the evaluation of EV aggregator strategies using a smart charging method is theoretically sound but lacks empirical validation. The reliance on simulations in Quito's distribution system may introduce uncertainties regarding the real-world applicability of the findings, particularly given the variability in local infrastructure and consumer behavior.

Moreover, while the study explores demand response strategies for residential areas and investigates the potential of EVs as energy storage through vehicle-to-home and vehicle-to-grid options, it overlooks significant practical challenges. These include the scalability of V2H/V2G technologies, regulatory barriers, and consumer adoption rates, which can significantly impact the feasibility and effectiveness of these strategies.