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Electric Vehicles and Smart Grid Interaction

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Message from the Guest Editor

The interaction between EVs and smart grids is a key area for achieving smart, efficient and sustainable energy systems. The interaction between evs and grids refers to a deep integration and interaction to achieve the optimal allocation and shared use of energy resources. First, it can improve the convenience and flexibility of charging electric vehicles. By building an intelligent charging infrastructure and promoting vehicle-to-grid technology, electric vehicles can be remotely monitored, intelligently dispatched and flexibly charged, improving user convenience and charging efficiency. Second, the interaction between electric vehicles and the grid helps optimize grid load management. Through the application of intelligent charging systems, the charging load of electric vehicles can be monitored and adjusted in real time to avoid excessive pressure on the power grid. At the same time, charging strategies can be optimized according to the grid demand and user demand to realize the balance and optimal scheduling of the power system load. The interaction between electric vehicles and the grid cannot be achieved without the support of related technologies and applications.



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Message from the Editor-in-Chief

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