

## عنوان مقاله:

Optimal management of controllable loads in a microgrid presence renewable sources

## محل انتشار:

کنفرانس بین المللی تحقیقات بنیادین در مهندسی برق (سال: 1396)

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## خلاصه مقاله:

Electric Vehicles (EVs) have made possible increase the penetration level of renewable sources in smart grids by mitigating their intermittency. Besides EVs, other controllable loads such as air conditioning and washing machine can be managed in smart grids to improve power system performance. In this paper, a method is proposed to optimize cost and energy losses considering power system and EV constraints in a smart grid framework. Vehicle-to-grid (V2G) of EVs is used to as a storage for renewable energy. The modified IEEE 31-bus test system is used to test and evaluate the proposed methodology.

## کلمات کلیدی:

Optimal energy management; vehicle to grid (V2G); shiftable load; adjustable load; wind and photovoltaic resource; range anxiety

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/673037>

