

## عنوان مقاله:

The importance and trends toward flexible loads of residential consumers in Smart Grids

## محل انتشار:

نوزدهمین کنفرانس اپتیک و فوتونیک ایران و پنجمین کنفرانس مهندسی فوتونیک ایران (سال: ۱۳۹۱)

تعداد صفحات اصل مقاله: ۶

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## خلاصه مقاله:

In a household appliances can be categorized into flexible and inflexible groups. Appliances that are controllable and have a flexible energy consumption in terms of time and amount are placed in the first group and, are called flexible loads. This paper tries to investigate the importance of these kind of loads in policy making processes such as energy pricing. To do that, the two sides of energy pricing process i.e. energy provider and residential consumer is defined using two different optimization problem and the impact of flexible load on their economic benefits is investigated. Results show that it's better for energy provider to consider both flexible and inflexible loads in his energy pricing process. In the other hand, the residential consumer's cost is decreased with increasing in the amount of flexible part of his total load. In this paper, the data used for inflexible part of load and the pricing scheme are based on the data reported by Iran Grid Management Company.

## کلمات کلیدی:

distribution system, , flexible load, residential consumer, Smart Grid

## لینک ثابت مقاله در پایگاه سیویلیکا:

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