

联营电力市场中需求侧的直接参与

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摘要

在现有的允许需求侧竞标的日前联营市场中, 每当某个时段的市场清算电价高于投标报价时, 需求侧的兆瓦级购电竞标就被拒绝。由于用户不参与通过削减供电量来牟利的商业运作, 因此未得到满足的用户需求只能从平衡市场中在更接近于预期用电的时段中获得。这就使用户遭受更大的不能以所希望的价格来满足其对电能的需要风险。文章介绍了一种新的市场概念, 它能在日前市场对需求侧的竞标者关闭后, 以合并拍卖规则中需求移动机制的方法来降低其需求不平衡的风险。

关键词 [市场清算工具](#); [最大社会福利](#); [允许需求侧参与](#); [需求移动](#); [基于联营的电力市场](#); [完全竞争](#); [混合整数线性规划](#)

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Direct Participation of Demand-Side in a Pool-Based Electricity Market

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Abstract

In existing day-ahead pool markets that allow demand-side bidding, bids for MW purchase are rejected whenever the market clearing prices at the periods concerned are greater than the bid prices. As the consumer is not in the business to make profits through curtailing energy, the unsatisfied demand has to be acquired through balancing market, at periods closer to intended consumption. This exposes the consumer to greater risk of not meeting its energy requirement at a desirable cost. A novel market concept is introduced by allowing demand-side bidders to reduce the risk of going unbalanced after the gate closure of day-ahead market. This is done by incorporating a demand shifting mechanism within auction rules.

Key words [market clearing tool](#); [maximum social welfare](#); [demand side participation](#); [demand shifting](#); [pool-based electricity market](#); [perfect competition](#); [mixed-integer LP](#)

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