电力市场

容量市场环境下高报行为的分析与防范

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摘要：

容量市场与电量市场联合运行的环境下，发电商在容量市场有动机高报容量，而在电量市场和辅助服务市场侧将高报电价，以避免发电。分析了高报发电容量机组的风险和收益，提出了计算机组惩罚水平的方法，进一步指出亏损的基、腰荷机组和盈利调峰机组是两类潜在的投机者。研究结果表明，有效的惩罚水平与发电商特有的随机性的利润收入及其风险偏好高度相关。该方法及结果对电量市场与容量市场的有效运行和管制有借鉴意义。

关键词：

Analysis and Precaution of Capacity Market Over-Offer Behavior

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Abstract:

In a capacity-energy combined market environment, suppliers have incentives to deliberately over-offer their capacities in the capacity market while they bid very high price in the energy and ancillary markets to avoid generation. This paper analyzes the risks and profits of this capacity-over-offering behavior, and develops a method for computing non-operable penalty level to prevent such a behavior. It is further pointed out that two kinds of suppliers are potential adventurers. Results of this research show that effective penalty level strongly correlates with the stochasticity of suppliers' profit and suppliers' risk preference. The methodology and the results provide new knowledge to the operation in a capacity-energy market environment.

Keywords:

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