

## 数据挖掘技术在电价预测中的应用

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### 摘要

简要叙述了数据挖掘技术的特点, 分析了影响电价的因素, 提出了一种基于数据挖掘技术的电价预测方法。该方法将电价用市场供求关系、上网竞价发电功率、用户负荷需求、燃料价格、物价指数和消费水平等元素来表征, 并考虑了不同电价影响因子的影响程度。利用数据挖掘中的相似性搜索技术, 引进权重系数对所搜索到的匹配电价序列进行加权平均, 进而得到所预测的电价值。最后举例说明了该方法的具体应用过程。

关键词 [电力市场](#); [电价预测](#); [数据挖掘](#); [相似性搜索](#)

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## Application of Data Mining in Electricity Price Forecasting

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### Abstract

The authors relate the features of data mining in brief; analyze the influencing factors of electricity price in detail; and propose a method based on data mining to forecast electricity price. In the proposed method the electricity price is characterized by five characteristic elements, i.e., the relation of market supply and demand, bidding based transaction of generated power, load demand of customers, price of fuel, price index and level of consumption; based on the forecasting tool for these characteristic elements and considering the influence extents of different factors influencing electricity price, the similarity search technique in data mining is adopted; then bringing in weight coefficient the weighted average for searched matching price suite is performed; at last the forecasted electricity price is obtained. The concrete application of the proposed method is demonstrated by case study.

Key words [power market](#); [electricity price forecasting](#); [data mining](#); [similarity search](#)

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