

论文

智能电网的风险评估

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摘要:

提出了智能电网风险评估的基本思路和总体框架,针对智能电网带来的新的不确定性,从工程风险和金融风险两方面提出了评估的内容和方法。总结了工程风险评估的研究现状,讨论了其在智能电网各领域的应用前景。分析了市场条件下分布式电源、大型可再生能源电源等新型电源和供电公司面临的金融风险,研究了电力市场不同发展阶段和典型模式对风险的影响。

关键词: 智能电网 风险评估 工程风险 金融风险 电力市场 分布式发电(DG) 可再生能源发电

Risk Assessment of Smart Grid

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Abstract:

In this paper, basic concept and overall framework of smart grid risk assessment are presented. To solve new uncertainty brought by smart grid, the contents and methods of risk assessment for engineering risk and financial risk are proposed. Present research situation of engineering risk assessment is summarized and its application prospect in various fields of smart grid is analyzed. The financial risk that the new types of power generation, such as distributed generation (DG), large-scale renewable generation as so on, and power supply companies may face with in market environment as well as the impacts of different development stages of electricity market and typical modes on the risk are researched.

Keywords: smart grid risk assessment engineering risk financial risk electricity market distributed generation (DG) renewable generation

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