

电力市场

电力市场中需求响应市场与需求响应项目研究

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摘要:

需求响应市场与需求响应项目是实施需求响应的有效运作方式, 需求响应收益是实施需求响应的动因。提出了需求响应市场的设计原则与需求响应项目的构成要素, 划分了需求响应市场与需求响应项目的类型, 探讨了需求响应市场与项目的时间跨度关系, 阐述了需求响应的本质, 分析了需求响应在增强电网可靠性、降低电网成本、提高市场效率、增强风险管理能力、改善环境质量、提升服务水平与缓解市场力等方面的作用, 详细论述了PJM实施需求响应的情况。对我国需求响应市场与需求响应项目的建设提出了建议与设想。

关键词:

Study on Demand Response Markets and Programs in Electricity Markets

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Abstract:

The effective way to implement demand response is the demand response markets and demand response programs, and the drive is demand response benefits. Design principles of demand response markets and main components of demand response programs are put forward. Types of demand response markets and demand response programs are divided, and timescales of them are explored, the essence of demand response is expounded and the actions of demand response in improving grid reliability, lowering grid cost, increasing market efficiency, enhancing the ability of risk management, improving environmental quality, elevating service level and relieving market power are analyzed. The conditions of implementing demand response in PJM market are described in detail. Some suggestions and assumptions for the construction of demand response markets and demand response programs in China are proposed.

Keywords:

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