

自动化

在线稳定节能综合监控与预警系统的设计与应用

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摘要:

基于调度自动化系统平台, 介绍了电网在线稳定节能综合监控与预警系统体系框架、功能模块以及主要特点。该系统在实时采集数据的基础上, 可直观展示电网的稳定模式域、稳定裕度指标、稳定和网损的相对关系、无功补偿水平等电网运行状态信息, 有利于调度员清晰直观了解电网运行态势。该系统可快速定位电网安全隐患, 自动控制控制和语音预警。该系统的工程化实施, 可大幅提高电网实时稳定节能综合监控和预警能力, 实现电网的智能化调度。

关键词:

Design and Implementation of On-line Stability and Energy-saving Comprehensive Monitoring and Early Warning System

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Abstract:

This paper, based on the platform of dispatching automation system, introduced the frame work, function modules and main characteristics of on-line stability and energy-saving comprehensive monitoring and early-warning system. Based on real-time collected data, stability and energy-saving comprehensive monitoring and early-warning system (SEMW) can display core power system state information, such as stability mode, stability index, the relative relations between stability and active-power loss as well as reactive-power compensation levels, and so on. Through this, the dispatcher can clearly understand power system running situation. SEMW is specialized in quick location of hidden power security dangers, automatic intelligent control and voice warning. With engineering implementation, SEMW can significantly improve the on-line stability and energy-saving comprehensive monitoring and early-warning capability, as well as realize the smart grid dispatching.

Keywords:

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