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电力系统

综合负荷模型参数的深化研究及适应性分析

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摘要:

首先详细介绍对实际电网进行综合负荷模型(synthesis load model, SLM)建模的流程。然后根据对实际电网负荷构成的统计和调查数据,分析我国电网各类负荷的分布情况,并指出建立适合于实际电网SLM参数的必要性。最后分析SLM参数对电网稳定特性的影响,说明选择合适的负荷模型参数对准确分析电网稳定特性至关重要。

关键词:

In-Depth Study and Adaptability Analysis on Synthesis Load Models and Parameters

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Abstract:

Detailed procedures for the modelling of synthesis load of practical power network are presented; then based on the detailed investigation and statistics of load composition at 220 kV and 330 kV substations, the distribution of different kinds of load in domestic power grids are analyzed and the necessity of establishing the parameters of synthesis load model (SLM) suitable to actual power networks is pointed out; finally, the influence of SLM parameters on stability of interconnected power grids is researched. Research results show that it is crucially important for accurate analysis on power grid stability to choose appropriate load model and parameters.

Keywords:

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