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华中电网稳定计算用负荷模型参数仿真研究

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摘要
负荷模型是影响电力系统仿真计算的重要因素。为探讨目前华中电网调度部门实际使用的负荷模型及其参数的准确性，指导科学建模工作，利用电力系统分析综合程序PSASP计算了华中电网各配电网的等值阻抗，仿真结果表明目前应用的等值负荷模型参数与实际情况有一定差距，配电网络结构、运行电压、等值阻抗处理方法等因素对负荷模型等值的准确性均有影响，利用仿真得到的负荷模型等值参数可减少电压稳定问题突出的电网所需要的稳定措施量。

关键词 华中电网；负荷模型；配电网络；等值阻抗

分类号

Simulation Study on Load Model Parameters for Stability Analysis of Central China Power Grid

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Abstract
Load model is one of the important factors effecting power system stability simulation. To research the accuracy of the load model and its parameters being adopted in the dispatching department of central China power grid to guide the load modeling scientifically, the equivalent impedances of distribution networks of central China power grid are calculated by power system analysis software package (PSASP). Simulation results show that there is a certain difference between the equivalent load model parameters being adopted and their practical values, and the factors, such as the structure of distribution network, its operating voltage and the approach to process the equivalent impedance and so on, effect the equivalence accuracy of load model. Using the equivalent load model parameters obtained from simulation, the measures being adopted currently to enhance voltage stability of power network can be simplified.

Key words central China power grid；load model；distribution network；equivalent impedance

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