

电力市场环境下电压质量的综合评价指标

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摘要

目前的电压质量标准是针对单个电压质量问题建立的。为客观比较和评价不同公共连接点(point of common coupling, PCC)的电压质量, 通过pqr 坐标变换提取出了与用户经济损失有直接联系的功率偏差, 定义了反映PCC电压质量的绝对偏差因子和反映负荷特性的相对偏差因子, 建立了电力市场环境下电压质量的综合评价指标体系。运用Matlab计算了反映PCC电压质量的绝对偏差因子和相对偏差因子, 验证了文中分析的正确性和可行性, 为评价电压质量问题对用户造成的经济损失提供了依据。

关键词 [电压质量; 坐标转换; 综合评估; 评价指标](#)

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Synthesis Evaluating Index of Voltage Quality in Electricity Market Environment

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Abstract

Current voltage quality standard is drafted according to single voltage quality problem. In order to compare and evaluate voltage quality at different point of common coupling (PCC) objectively, by means of pqr coordinate transformation the power deviation that directly relates customer's economic losses is extracted, absolute distortion factor reflecting the voltage quality of PCC and relative distortion factor reflecting load characteristics are defined, and a comprehensive evaluation index system for voltage quality under electricity market environment is built. In order to provide foundation for evaluating customer's economy losses caused by voltage distortion, by means of Matlab the simulation is conducted; absolute and relative distortion factors of voltage quality at PCC are calculated. Simulation results verify the correctness and feasibility of the analysis given in this paper.

Key words [voltage quality; coordinate transformation; synthesis evaluation; evaluating index](#)

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