

电力市场

基于网络追踪法的区域电网统计损耗分摊

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摘要:

从区域电网成本分析和制定损耗指标计划的角度出发, 提出了基于有功电量及网络追踪法的损耗分摊方案, 提出厂站损耗参与分摊以减少计量装置误差影响的思路, 对损耗分摊中共性问题进行了分析。以电网线路之间的连接关系为基础, 按线路有功电量分摊厂站损耗, 按线路之间连接关系追踪计算目标线路承担其他线路损耗的分摊系数和损耗电量。计算过程不涉及电网运行参数和阻抗参数, 计算速度较快; 算法直观、清晰, 容易理解掌握。算例分析结果表明, 该算法正确、合理, 符合电网运行客观实际。

关键词:

Network Loss Allocation of Regional Power Grid Based on Network Tracing

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Abstract:

From the viewpoint of cost analysis and drafting loss objective for regional power grid, a loss allocation scheme based on active electricity quantity and network tracing is proposed, and the thinking that the loss in power plants and substations are brought into the allocation to reduce the influences of metering device error is put forward. The common characters in loss allocation are analyzed. Based on the connected relations among transmission lines within regional power grid, the loss in power plants and substations are allocated by active electricity quantities in transmission lines, and according to the connected relations among transmission lines the allocation coefficients, by which the objective transmission line undertakes the loss in other transmission lines, are traced and the electricity loss to be allocated to the objective transmission line are calculated. The calculation does not concern operational parameters and impedance parameters of regional power grid, so the calculation is rapid; and the algorithm is intuitionistic, clear and easy to grasp. Results of calculation case shows that the proposed algorithm is correct and rational and conform to the practical situation of regional power grid.

Keywords:

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