

西北电网短路电流的限制措施

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摘要

介绍了电力系统短路电流产生的原因和危害以及国内外在电力系统短路电流限制技术方面的研究状况, 结合西北750 kV电网的建设和发展, 分析了西北电网在750 kV发展过程中短路电流增加的原因和趋势, 并对限制短路电流的多种措施进行了探讨: 包括实现电网分层分区运行; 加装中性点电抗; 实现母线分段运行; 采用高阻抗变压器等。针对不同的网架情况, 提出了相应的对策和建议。

关键词 [短路电流](#); [西北电网](#); [措施控制](#); [超高压](#); [电力系统](#)

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Application of Measures Limiting Short Circuit Currents in Northwest China Power Grid

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Abstract

The reasons procreating short circuit currents in power grid and the damage of short circuit currents are briefly described. The present situation of the research on the technology limiting short circuit currents home and abroad are presented. Taking the construction and development of 750kV power network in Northwest China as background, both reason and trend of enlargement of short circuit currents are analyzed; the measures which can limit short circuit currents are presented, they are: power grid operation under district and voltage level classification, installation of neutral reactors, implementation of bus partition running and adopting transformer with high impedance, etc. Besides, several related countermeasures and suggestions are proposed.

Key words [short-circuit current](#); [Northwest China power grid](#); [controlling measurement](#); [UHV](#); [power system](#)

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