

± 800 kV直流输电系统双12脉动阀组平衡稳定运行及投退策略的仿真研究

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收稿日期 修回日期 网络版发布日期 接受日期

摘要

我国将在±800 kV向家坝—上海特高压直流系统中采用双12脉动阀组串联接线方式, 针对该方案的特点, 提出特高压直流控制系统的稳态运行控制策略和功能分配策略, 实现特高压直流系统的稳态运行和双12脉动阀组中单一阀组的投退顺序控制。介绍该控制策略方案的分层结构和核心控制模块的实现方案, 并通过EMTDC仿真验证了单一阀组投退顺序控制的动态过程, 结果表明该控制策略方案完全满足特高压直流系统设计的要求。

关键词 [直流特高压; 控制策略; 12脉动阀组; 投退顺序](#)

分类号 [TM72](#)

Simulation Study on Control Strategy for Balanced Steady Operation and Block/Deblock of Dual 12-Pulse Converter Groups in ±800 kV DC Transmission Project

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Abstract

The series connection of dual 12-pulse converter groups will be adopted in the ±800kV DC power transmission project from Xiangjiaba to Shanghai. According to the features of this project, the steady state operation control strategy of HVDC control system and the functional allocation are proposed to realize the steady state operation of this project and the sequence control of single converter group in the dual 12-pulse converter groups. The implementation scheme of the core control module and the hierarchical structure of the control strategy are presented. Using the simulation by EMTDC the dynamic process of sequence control for block/deblock of single converter group is validated. Simulation results show that the proposed control strategy can completely satisfy the requirement of the design for HVDC power transmission system.

Key words [UHVDC; control strategy; 12-pulse converter group; sequence of block/deblock](#)

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