

عنوان مقاله:

Investigation of transient state due to switching of series capacitors in compensated transmission lines

محل انتشار:

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خلاصه مقاله:

Power switches are designed to cut off normal currents and short circuit. They act like large switches that can be opened or closed by local switches or telecommunication signals by the remote protection system. Therefore, the protection of equipment and devices of the power system against defects and connections is done by the power switch. In this regard, the transient states caused by the opening and closing of the power switches in the compensated lines with series capacitors It is great in designing and coordinating insulation and protection systems. Therefore, in this paper, first the types of power switches are introduced and examined, and then the function of power switches when switching on compensated transmission lines with series capacitor with and without the presence of protection system is simulated. Also, transient overvoltage due to switching on such lines are investigated. The simulation results indicate the need for a protection system for series capacitors at the time of switching.

کلمات کلیدی:

power surge, transmission lines, series capacitor, transient states, کلیدزنی قدرت, خطوط انتقال, خازن سری, حالات گذرا.

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