

Optimization of power flows through 110 kV grids of an industrial enterprise by installing phase-shifting transformers.

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The article discusses options for reducing the flow of active power in a 110 kV network using a phase-shifting transformer (PST) and a current-limiting reactor (CLR). Reducing the flow of active power in a 110 kV network can reduce the costs of manufactures for the transmission of electric energy. A comparison of the proposed measures showed that the PST is more efficient than the CLR. The PST has a higher net present value and a shorter payback period.

Key words: phase-shifting transformer, current-limiting reactor, active power flow management, net present value, payback period.