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The phase-shifting transformers placement and settings choice method development.

The phase-shifting transformers placement and settings choice method development is considered. Dependencies of node voltage and active power losses on PST angle with use of bilinear theorem are obtained for 57-node test scheme, optimal PST angles are determined. The principles of phase-shifting transformers placement and settings choice for PSTs located in the same cluster are considered as well.

Key words: *Unified Energy System, phase-shifting transformer, bilinear theorem, optimal placement, optimal PST angle.*

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