**Development of models for power consumption medium-term forecasting in isolated power systems based on ensemble methods of machine learning.**

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The paper considers the problem of constructing a model for medium-term forecasting of power consumption load graphs in an isolated power plant. The model is based on ensemble methods of machine learning using the approach of identifying the most significant features. The studies of such models as linear regression, regression based on the SVR, regression decision tree, Random Forest, XGBoost, AbaBoost over decision trees, AbaBoost over linear regression were performed. The selection of features from the time series allows you to apply models simpler and more resistant to retraining. Calculations and analysis of the total prediction error were performed. The results of the study are intended to increase the reliability of forecasting in the planning, control and operation of isolated power systems.

*Key words: medium-term forecasting, electric power system, ensemble methods, isolated power system.*