

Technical Losses Optimization

The 2012 Program to reduce energy loss in the UNEG was developed within the framework of Federal Grid Company's Energy Saving and Power Efficiency Program for the 2010-2014 period and included three key areas:

Optimizing the schematic and operating mode parameters under conditions of both operation and continuous control of electric grids

- Maintaining optimal operational modes concerning reactive power and voltage;
- Shutting down electric grid equipment operated under low loads;

- Reducing the duration of the maintenance and repair for primary grid equipment.

Decreasing energy consumption spent on in-house substation needs

- Optimizing the duration and number of operated transformer and automatic transformer cooling fans;
- Optimizing the operation of heating and lighting systems in the SS control rooms;
- Providing for the automatic operation of heating systems used to heat the

- tanks and electric drives of oil-filled circuit breakers;
- Installing energy-saving lamps and lights in outdoor switchgears;
- Upgrading the energy efficiency of buildings.

Constructing, re-constructing and developing electric grids.

- Installing reactive power compensators;
- Replacing overloaded transformers and commissioning additional power transformers at existing substations.

- Optimizing electric grid loads by constructing new overhead lines and substations.

2012 Technological effect, thousand KWh

58,953.96
123,642.38
31,422.77

Annual volumes of electric energy loss, mln of KWh

In 2012, the total economic effect of implementing measures aimed at reducing UNEG losses reached 214,019.1 thousand kWh. The electric energy loss reduced by 3% and stood at 21,945.8 million kWh.

