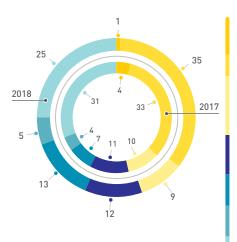
KLIBANENERGO PISC ANNUAL REPORT 2018

Dynamics of specific accidents raye at power grid facilities (number of technological failures (crashes) per 1,000 c.u. of equipment) of the Company in 2016-2018



The main causes of technological violations (crashes) at the Company's power grid facilities for 2017-2018



Failure to comply with the maintenance and repair volumes Depreciation of equipment The impact of unauthorized persons and organizations Not involved in the process Repeated wind load when project conditions are exceeded Atmospheric Surge (thunderstorm) Defects (shortcomings) of installation

All activities of the requirements of the Federal Service for Environmental, Technological and Nuclear Supervision with a deadline of 2018 were fulfilled and removed from control.

To ensure reliable operation of the power grid complex under conditions of power supply interruption to consumers and other abnormal situations related to power supply interruption, the Company's headquarters operates on an ongoing basis, representatives of which regularly participate in ensuring power supply security in the Krasnodar Territory and the Republic of Adygea.

REPAIR AND MAINTENANCE ACTIVITIES

The Company annually forms and executes the maintenance and repair program (MRO), taking into account:

- standard periodicity of capital; medium and current repairs of power equipment;
- technical condition of objects; the results of preventive tests;
- the need to comply with the Regulations of the supervisory authorities; elimination of technological violations;
- profitability and overall performance of electrical networks.

THE PROGRAM OF MAINTENANCE AND REPAIR OF THE REPORTING YEAR WAS SUCCESSFULLY IMPLEMENTED IN ALL DIRECTIONS. MEASURES WERE IMPLEMENTED FOR RUB 1,766.7 MILLION, WHICH IS 104% OF THE PLAN (INCLUDING THE WAGE FUND, INSURANCE PREMIUMS, FUEL AND LUBRICANTS AND TRAVEL EXPENSES FOR REPAIR ACTIVITIES).

Leading indicators of the implementation of the repair program in 2016-2018, the plan for 2019

Other reasons

DESCRIPTION OF THE ACTIVITIES	2016	2017	2018	2019 (PLANNED)
Clearing of high-voltage lines, ha	826.7	968.5	1,620.19	1,828.98
Replacement of ground wire, km	72.7	130.4	77.08	77.25
Replacement of insulators, pcs.	43,612	52,056	43,062	86,711
Repair of power transformers, pcs.	26	41	21	21
Repair of switches, pcs.	1,110	1,120	899	925
Repair of separators, short-circuit breakers, disconnectors, pcs.	1,087	1,290	1,698	1,749
Repair of transformer substations, pcs.	401	483	604	2,911
Repair of power lines, km	2,764.3	2,888.0	3,124.3	12,467.9

To improve the reliability of the power grid complex by a comprehensive program to enhance the reliability of substation equipment, enhance the safety of 0.4-10 kV distribution networks, and also to prepare the power system for the Russian Investment Forum, the World Cup in Sochi and essential events in 2018

- reactive power sources recovered 540 defective capacitors replaced;
- · mechanical and electromagnetic interlocks were restored at 30 substations 35-110 kV:
- there were replaced 57 physically worn 35–110 kV bushings, oil circuit breakers and power transformers;
- thermovision inspection was performed: 508 OTL with the plan for 234 pcs.,
 - 616 substations 35-110 kV, with the plan 288 pcs.;
- 763 power towers replaced by 10 kV overhead lines;
- there were replaced 2,011 towers with 0.4 kV overhead lines;

- 680.32 km of wire replaced with overhead transmission lines 0.4-10 kV;
- 527.4 km of 0.4-10 kV bare wire replaced by steel insulated wire:
- were replaced 14,640 branches to inputs to households made with bare wire:
 - 11 overhead lines with uninsulated wires were removed from the territories of preschool institutions, schools, other educational institutions, camps, etc. (if the removal was impossible, the bare wire was replaced with insulated).

For 2019, the MRO expenditure limits were provided in the amount of 3,566.7 million rubles, which is 110% more than the 2018 plan, which let to form a set of measures in the MRO program, sufficient for the reliable electricity supply to Kubanenergo consumers.