

RELIABLE AND EFFICIENT OPERATION OF THE ENERGY SYSTEM



Reliability and security of electricity supply to consumers remain the key criteria of the Company's operations. Rosseti Kuban, PJSC takes exhaustive measures to comply with mandatory requirements of regulatory legal acts on labour protection, environmental, industrial and fire safety. In the reporting year, the Company fulfilled all production programmes aimed at ensuring reliable power supply to consumers in the Krasnodar Territory and the Republic of Adygeya, improving the quality of operation, reliability and efficiency of the Company's power grid facilities, and successfully passing the special climatic and natural periods of 2023 (floods, thunderstorm and fire hazard seasons, high temperature period, heating season).

VLADIMIR MIKHAILOV
Deputy General Director for Technical Issues — Chief Engineer

In 2023, Rosseti Kuban generally succeeded in achieving the primary goal of its production activity, i.e., keeping the reliability of the power equipment at an appropriate level. Within the specified period of time and to the fullest extent possible, Rosseti Kuban completed the repair programme and took a series of steps to increase the reliability of the power supply to consumers. In addition, the Company obtained a certificate of readiness to work during the 2023/2024 heating season.

The number of process disturbances in 110 kV and above power grids in the reporting period increased by 18.1% year-on-year, but there was a 3.2% decrease in the number of accidents in the 0.4 kV and above grid.

Accidents in the 110 kV and above grid grew mainly due to third-party exposure (23.6% growth).

The Company's reliability indicators (I_{SAIDI} , I_{SAIFI}) in the reporting year did not exceed the target values set by the Regional Energy Commission — Price and Tariff Department of the Krasnodar Territory (RPC-PTD KT).

Reliability indicators of Rosseti Kuban, PJSC in 2023

Indicator	Values set for Rosseti Kuban PJSC by the Regional Energy Commission — Department of Prices and Tariffs of the Krasnodar Territory for 2023		Assessment of achievement (achieved / not achieved)
	Plan approved by the REC for 2023	Actual for 2023	
System average interruption duration index, per point of delivery (I_{SAIDI}), hour	2.8310	3.3403	achieved with allowable deviation
System average interruption frequency index, per point of delivery (I_{SAIFI}), interruptions	1.0974	1.3099	achieved with allowable deviation

Key activities to ensure reliable and uninterrupted power supply to consumers performed in 2023 were directed at:

- Maintaining the rated parameters of production assets — power transmission lines, substation equipment, and relay protection and automation (RPA) devices
- Identifying and eliminating defects in a timely manner based on the power equipment monitoring results
- Ensuring readiness for prevention of and response to disturbances:

- Agreements with contracting and related power grid organisations, as well as with the Russian Ministry of Emergency Situations and the Federal Service for Hydrometeorology and Environmental Monitoring (Rosgidromet) were updated
- 403 teams, 1,884 employees, 778 units of equipment were prepared, including 22 mobile teams (124 employees) equipped with appropriate technical means (49 units), tools, rigging gear, sets of spare parts, communication aids, emergency sets of special clothing, food rations and financial means
- Company's emergency supplies were stocked
- Operational readiness of 121 emergency power supply sources (EPSS) with a total capacity of 14,274.5 kW was checked, of which 110 mobile EPSSs with a total capacity of 13,810.5 kW
- Four combined exercise was conducted on cooperation during response operations with the threat of power supply interruption, involving representatives of the Ministry of Emergency Situations of Russia in the Krasnodar Territory and the Republic of Adygeya, executive bodies of the Krasnodar Territory and the Republic of Adygeya and local self-government authorities

Every year, the Company confirms its readiness for operation during the heating season and obtains a respective readiness certificate. By Order No. 1005 of the Ministry of Energy of the Russian Federation dated 3 November 2023, the electric power entities were approved as ready to operate in the 2023/2024 heating season.

The Company's preparation for the flood period was led by the Company's Central Flood Commission (approved by Order No. 35-od dated 23 January 2023 "On Preparations and Tasks for Successful Survival of the 2023 Spring High Water and Flood Period") acting as part of the Kuban Headquarters and similar commissions of the Company's branches. During the preparation and in the course, 78 activities were implemented, including:

- Power grid facilities in potential flood zones were monitored, and the list of such families was updated. According to the monitoring results, up to 335 facilities (2.1% of the total number of power facilities) fall into the potential flooding zone, including 95 main grid facilities (16 35–220 kV substations, 79 sections of 35–110 kV overhead lines) and 240 distribution grid facilities (179 sections with 10–0.4 kV OTL poles and 61 10/0.4 kV transformer substations)
- Training exercises were held (from 25 April to 26 April 2023) with the involvement of management bodies, forces and means of territorial units of functional subsystems of the Russian Unified Emergency Rescue Service of the Krasnodar Territory and the Republic of Adygeya to practice the actions of the Company's management bodies, forces and means in case of emergencies of natural and man-made nature caused by the impact of dangerous meteorological phenomena during the flood period
- A total of 54 anti-accident exercises were conducted in the Company's power grid branches to mitigate potential consequences of flooding of power facilities
- Flood commissions held 11 meetings to review issues on preventing and responding to potential disturbances and/or emergencies at the Company's power facilities during the spring-summer flood period
- Heads of the Executive Office of the Company and Adygeyan Power Grids branch attended two meetings of the Emergency Situations and Fire Safety Committee of the Krasnodar Territory administration and two meetings of the Emergency Situations Committee and Fire Safety of the Republic of Adygeya on the readiness of power grid equipment in the area of the Company's operational responsibility for the 2023 flood period. There were no claims and concerns from the executive authorities and the Emergency Situations and Fire Safety Committees of the administrations of the above-mentioned constituent entities of the Russian Federation
- In accordance with the approved schedule of inspections of power grid facilities located in high-risk areas, overhead power lines across rivers, 1,865 poles, and 77 site power grid facilities were inspected. No damage was found during the inspections
- Availability and good technical condition of special equipment, vehicles and mechanisms were ensured
- Checks were carried out to ensure that emergency stockpiles were available, as well as places where they were stored. The inspection confirmed compliance with the completeness of equipment, materials and spare parts of the emergency stockpile. Storage conditions for equipment, materials, spare parts, and access routes are capable of ensuring prompt loading of materials and equipment for delivery to the places of possible emergency damage for mitigation
- Checks were carried out to ensure that the teams have all the equipment, gear and protective means, as well as the accessories, special vehicles, machinery and mechanisms are ready for the work, that communication equipment and notification flow charts are in place and in good working order. The checks did not reveal any violations of the storage rules for protective means, tools and appliances



In the reporting period, preparations for the heating season were successfully completed.

The readiness of watercraft and water pumping equipment was checked. Available watercraft (four small vessels) and 27 motor pumps are ready to be used in case of a flood situation

The Company's Grid Control Centre every day communicated with the regional centres for hydrometeorology and environmental monitoring of the Krasnodar Territory and the Republic of Adygeya and the Sochi Hydrometeorological Centre, as well as crisis management centres of the Chief Directorates of the Ministry of Emergency Situations of Russia in the Krasnodar Territory and the Republic of Adygeya to obtain operative information on weather conditions and flood situation at the water bodies of the Krasnodar Territory and the Republic of Adygeya.

During the flood period from 1 May 2023 to 30 September 2023, 153 daily hydrometeorological bulletins and 20 storm warnings on adverse meteorological phenomena or a set of adverse meteorological phenomena were received, including information on threats of water level rise in the rivers of the Krasnodar Territory and the Republic of Adygeya, which is 62.5% less than in 2022.

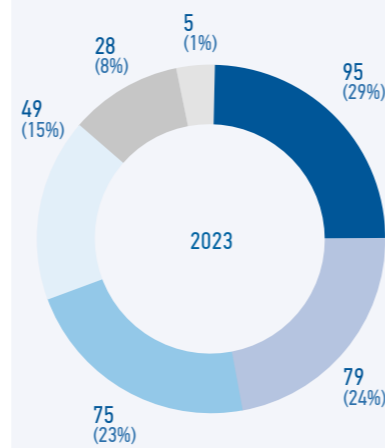


All activities dictated by the Federal Service for Ecological, Technological, and Nuclear Supervision with a deadline in 2023 were fulfilled and decontrolled.

The Headquarters of the Company operate continuously, and its representatives regularly take part in works to ensure the security of power supply in the Krasnodar Territory and the Republic of Adygeya. This is done to provide the reliable operation of the power grid complex under conditions of power supply interruptions and other abnormal situations involving power supply interruptions.

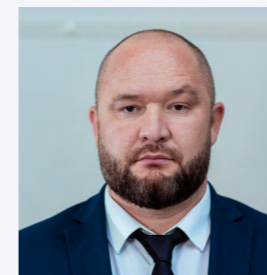
In the reporting year, there was one fire at the Company's substation, resulting in damage to the main equipment. Based on the results of the investigation into the causes of this accident, emergency response measures were developed and implemented. In 2020–2022, no fires and spontaneous combustion at the Company's facilities and emergency shutdowns of power grid equipment caused by fire were recorded.

Main causes of accidents in power grids of Rosseti Kuban, PJSC in the 110 kV and above grid in 2023 (accidents/%)



- Exposure to unauthorised persons and organisations not involved in the technological process
- Impact of recurrent natural phenomena
- Unsatisfactory technical condition (ageing of insulation, loss of mechanical strength of wire, change of material properties, etc.)
- Impact of animals and birds
- Defects in design, construction, workmanship
- Impact of organisations involved in the technological process

SALE OF ADDITIONAL (NON-TARIFF) SERVICES



Business diversification and development of additional (non-tariff) services is a strategically important area of Rosseti Kuban's focus.

The main goals of Rosseti Kuban in this field are to increase the share of non-tariff revenue in the Company's total revenue and to increase the profitability of non-tariff activities. Rosseti Kuban, PJSC provides a wide range of additional services, including maintenance of consumers' power grid facilities, arrangement of outdoor lighting, placement of telecommunications equipment, and many others.

ANATOLY ABUSALIMOV
Head of the Department for Development of Non-Tariff Services

In an effort to diversify its business, Rosseti Kuban offers a variety of extra (non-tariff) services in addition to tariff-regulated power transmission and grid connection services.

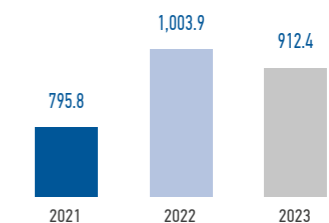
- Equipment leasing and placement services
- Repair and maintenance
- Construction and installation
- Consulting, organisational and technical services
- Other services

In 2023, Rosseti Kuban's revenue from the sale of additional services totalled RUB 912.4 million, which is 8% more than the target value.

912.4 RUB mln

revenue from the sale of additional services in 2023 (+8% vs. the plan)

Dynamic profile of revenue from additional services in 2020–2022 (RUB mln)



Structure of revenue from additional services in 2021–2023

Indicator	2021	2022	2023	Change 2023/2022 (%)
Revenue from sales of additional (non-tariff) services related to other activities — total, RUB mln	795.8	1,003.9	912.4	-9.1
including:				
Equipment leasing and placement services, RUB mln	162.6	148.9	199.5	+34.0
Repair and maintenance services, RUB mln	103.9	344.2	200.1	-41.9
Construction and installation, RUB mln	357.4	399.0	375.5	-5.9
Consultancy and organisational & technical services, RUB mln	169.2	108.3	116.0	+7.1
Agency services, RUB mln	0	0	0	0
Communication and information technology services, RUB mln	0.003	0.001	0	-100
Other activity services, RUB mln	2.7	3.5	21.3	6x growth
Other miscellaneous services, RUB mln	0.035	0	0.098	-
Volume (share) of non-tariff revenue in total revenue of Rosseti Kuban, %	3.1	3.4	2.6	-0.8 p.p.