COMPANY'S MAIN INNOVATIVE PROJECTS IMPLEMENTED IN 2024

The main innovative projects of osseti Kuban implemented in 2024

Project	Project description
Creation of a smart metering system in the Company's branches	Implementation timeframe: 2020–2030 In the reporting year, innovative smart electricity meters (SEMs) were installed in all branches of Rosseti Kuban. Smart meters are introduced as part of Rosseti Kuban's investment programme aimed to create a metering system as required by Federal Law No. 522-FZ dated 27 December 2018 'On amendments to certain legislative acts of the russian federation in connection with the development of electricity (capacity) metering systems in the Russian Federation'. In the reporting year, smart meters also were installed during the grid connection of new consumers with a capacity of up to 15 kW. The project aims to create a smart metering system and integrate it into the innovative systems being established: supervisory control and data acquisition system (SCADA), distribution management systems (DMS), and outage management systems (OMS). The expected effect: • Reduced operating costs by remotely taking readings and parameters of electricity supply to consumers • Options for remote restriction and restoration of power supply to electricity consumers
Development of a customer relationship management (CRM) system	Implementation timeframe: 2024–2026 The digital transformation programme implemented by the Company during the reporting year included the project on the development of a customer relationship management (CRM) system, which involved the design, creation and implementation of automated information systems powered by domestic software platforms: an automated information system (AIS) for processing customer requests and an automated information system for grid connection (Tekhpris AIS). Stages completed for the AIS for processing customer requests: • development of a detailed plan • design and commercial operation • state registration of a computer software, with certificate No. 2024666989 dated 18 July 2024 • inclusion with the Russian software registry Stages completed for the Tekhpris AIS: • completion of one stage of design and survey work • development of a business process review report, project charter, and business process optimisation proposals
Development of an information security system for critical information infrastructure facilities	Implementation timeframe: 2025–2029 The project on the development of an information security system for critical information infrastructure facilities involved the purchase and delivery of 17 units of ViPNet Coordinator hardware and software in 2024, as well as the installation software and hardware package to ensure the information security of critical information infrastructure during the renovation of the IKEA 110 kV substation.
Development of the Company's production asset management system (PAMS)	Implementation timeframe: 2022–2025 In 2024, a feature was added to automatically manage the schedule for taking equipment down for repairs, which integrates the repair schedule with the AERCS (Request SW, Repairs SW). This allowed us to: • Increase the productivity of employees involved in drawing up annual and monthly shutdown schedules and coordinating shutdown requests through: – automated generation of annual equipment repair (shutdown) schedules based on repair orders in the PAMS – automated generation of monthly repair (shutdown) schedules based on the annual repair (shutdown) schedule approved by the system operator, with the option of making adjustments to the schedule in the PAMS (adding, deleting, or changing requests) • Improve the quality of control and consistency of information between different information systems and functionalities • Enhance the efficiency of the Company's information systems in terms of process management and power grid facility's management

Project	Project description
Development of advanced metering infrastructure (AMI)	Implementation timeframe: 2024–2029 A new feature was added to the automated system for selling electricity metering services as part of the development of advanced metering infrastructure (AMI) project. This feature automatically downloads contract numbers and connection certificates. The Consolidation subsystem was expanded to automatically fill in the other characteristics and property of unconsolidated entities. In addition, the functions for generating household reports were updated, and a number of improvements were made to increase the efficiency of business processes. A special tool was added to the smart electricity metering system (SEMS) subsystem to optimise the work of electricity metering users during information exchange between the Pyramida-Seti software and the electricity metering system. Based on data from the Pyramida-Seti software obtained from the electricity metering system, this tool creates billing events for individuals and legal entities, as well as technical metering points, and then sends these events to the metering points of individuals and legal entities as part of information exchange with the guaranteed supplier (electricity retailer). To meet the requirements for providing access to the minimum set of SEMS functions,[1] the electricity metering system was added a feature for filling in meter identifiers along with a number of upgrades to improve business process performance.
Automation of business processes of the Company	The first stage of design and survey work for a domestic automated information system for financial and economic activities (FEA AIS) was completed, involving business process review with report generation; project charter; proposals for business process optimisation.
Use of innovative non-insulated wire and self-supporting insulated wire (SIW) during repairs of 0.4–10 kV OTLs	Implementation timeframe: 2021–2025 While working on the medium-term plan for the Innovative Development Programme for 2024–2028, we delivered and installed innovative non-insulated wire and SIPs made by Metsbytservis LLC (Tverenergokabel LLC), which features increased strength, higher throughput capacity and reduced power losses. The work was done as part of the 2024 maintenance and repair programme. New maintenance and repair plans for wire replacement involve using innovative wire on 0.4–10 kV OTLs, including: • on at least two 0.4 kV OTLs, each with a minimum length of 0.25 km • at least two 6–10 kV PTLs, each with a minimum length of 1 km
Implementation of an innovative system for locating damage on 110 kV PTLs synced via FOCL (result of R&D by Rosseti Kuban PJSC)	Implementation timeframe 2024–2029 Under the project on the implementation of an innovative system for locating damage on 110 kV PTLs synced vis FOLC, based on the R&D results, PJSC Rosseti Kuban implemented a software and hardware package for locating damage on 35–750 kV PTLs synced via FOLC during the construction of the Moldovka 110 kV substation. Two OTLs were equipped with wave damage location equipment Bresler-0117.090.B1.B1.

Costs in the main areas of innovative development in 2022–2024 (RUB million excluding VAT)

			2024	
Innovative development focus area	2022	2023	target	actual
Transition to smart grids with a distributed intellectual automation and control system	392.5	765.1	668.10	880.71
Transition to integrated business process efficiency and automation of control systems	3.8	36.2	166.55	192.0
Application of advanced technology solutions and materials in power engineering	0.0	16.3	41.71	41.71
Promotion of an innovative development management system and establishment of an innovative infrastructure	0.5	0.3	8.23	8.23

[1] Approved by Decree of the Government of the Russian Federation No. 890 dated 19 June 2020.