RESEARCH AND DEVELOPMENT

The Company's innovative development programme focuses on research and development (R&D) meant to promote cutting-edge technologies to create fundamentally novel methods, as well as applied research meant to improve the existing technologies. Four R&D themes were finalised in 2022–2024. In 2024, phases of two R&D projects were accepted.

R&D results in 2024

R&D description	Technical result
Transition to smart grids with a distributed intellectual automation and control system	
Research into the possibility of using the FCC frequency range for PLC in low-voltage power grids for data transmission from smart electricity meters	Implementation timeframe: 2024–2025 Results obtained: • State standards and regulatory documentation of Rosseti PJSC on signal transmission via low-voltage power grids were reviewed • A patent search was conducted in domestic and foreign databases in the field of the scientific work under study • Technologies ensuring signal transmission in authorised frequency bands with authorized signal levels were analysed • Particular technical requirements for hardware and software were developed for prototypes of smart electricity meters (SEMs) with PLC (FCC + CA) and the capability to switch the PLC frequency range via a backup RF channel • Design documentation was developed for SEM prototypes with PLC (FCC + CA) • 140 SEM prototypes were developed, manufactured and configured with PLC (FCC + CA) and the capability to switch the PLC frequency range via a backup RF channel • Individual SEM prototypes with PLC (FCC + CA) were tested in laboratory conditions to check for proper functioning and switching of PLC frequency ranges
Application of advanced technology solutions and materials in power engineering	
Research into the prospects for using high-temperature wires, taking into account the shift of peak loads to periods of extremely high temperatures and the influence of temperature on the transmission capacity of OTLs	Implementation timeframe: 2024–2026 Results obtained: • Patent searches and patent studies were carried out, and patent-protected technical solutions related to R&D and the relevant regulatory framework were analysed • The climatic conditions, temperature and load regimes of existing overhead lines and bus arrangements were analysed, and typical OTLs for the power system were selected as reference models for R&D • Research on optimising the design and material of OTL wires for use in extreme weather conditions was analysed • Test programmes and procedures were devised, and test equipment was selected • Test benches were debugged and the procedure was tested using AC wire as a reference one

As a result of R&D work carried out in 2022–2024, four protection documents were obtained: three certificates of state registration of computer software and one certificate of state registration of a database. During the above period, six licence agreements for R&D results were concluded, and one R&D result was integrated into the production activities of the Company.

FINANCIAL RESULTS

TARIFF POLICY AND TARIFFS FOR THE COMPANY'S SERVICES

Company's tariff policy

Prices (tariffs) for the Company's power transmission services and the grid connection fees are regulated by the state and set according to the KKSTRD orders. In the Krasnodar Krai, the Republic of Adygeya and the Sirius federal territory, where the Company operates, there are unified prices (tariffs) for each group of electricity consumers.

The main legal acts that regulate relations in setting the regulated tariffs and the practice of their application are as follows:

- Federal Law 'On electric power industry' No. 35-FZ dated 26 March 2003 (as amended)
- Decree of the Government of the Russian Federation 'On pricing in the field of regulated prices (tariffs) in the electric power industry' No. 1178 dated 29 December 2011 (as amended)
- Orders of the Federal Tariff Service (FTS of Russia):
  - On approval of the guidelines for the calculation of tariffs for electricity transmission services established using the required gross revenue long-term indexation technique No. 98-e dated 17 February 2012
  - On approval of the guidelines for the calculation of regulated tariffs and prices for electric (thermal) energy in the retail (consumer) market No. 20-e/2 dated 6 August 2004
- Order of the FAS of Russia No. 490/22 dated 30 June 2022 'On approval of the methodological guidelines for determining the grid connection fee' (effective from 2 September 2022)

Tariffs for electricity transmission services

Starting from 2023, Rosseti Kuban PJSC moved to another long-term (5-years) period for tariff regulation of electricity transmission services. Rosseti Kuban's electricity transmission tariffs and long-term regulatory parameters for 2023–2027 were set by the KKSTRD using the long-term indexation of required gross revenue.

Tariffs for electricity transmission services in the Krasnodar Krai, the Republic of Adygeya, and the Sirius federal territory for 2024 were established by Order of the KKSTRD No. 32/2023-e dated 29 November 2023 (as amended by Order No. 35/2023-e dated 20 December 2023), with an increase of 9.1% from 1 July 2024 to the approved tariffs for the second half of 2023.

Information on tariffs for electricity transmission services in 2024 is available on the Company's official website in the To Consumers/Electricity Transmission/Tariffs for Electricity Transmission Services section.

Tariffs for the Company's electricity transmission services for 2022–2024

Indicator	2022	2023	2024	Δ 2024/2023 (%)
Region's required gross revenue (RGR) for electricity transmission approved under tariff and balance decisions (RUB million)	57,733	68,529	75,574	+10.3
Including:				
• Own RGR	24,849	28,952	31,944	+10.3
• Expenses for electricity transmission services via the Unified National (All-Russian) Power Grid (UNPG)	8,495	9,974	11,803	+18.3
• Expenses for purchase of electricity to compensate losses	9,244	11,469	12,350	+7.7
• Expenditures on TGO services (according to the effective contractual scheme)	15,145	18,134	19,477	+7.4
Including:				
– to pay for electricity losses	5,349	6,627	7,331	+10.6
– for upkeep of power grids of related TGOs	9,797	11,508	12,146	+5.5
• common-pot net electricity delivery (million kWh)	19,955	21,694	22,696	+4.6
• average tariff for electricity transmission services (RUB/kWh)	2.89321	3.15887	3.32980	+5.4