## **GRID CONNECTION SERVICES**

IN THE NEAR FUTURE, ROSSETI KUBAN'S ACTIVITIES ARE AIMED AT PROVIDING QUALITY AND RELIABLE ELECTRICITY SUPPLIES TO EXISTING CONSUMERS, AS WELL AS INCREASING THE AVAILABILITY OF POWER INFRASTRUCTURE AND ELIMINATING POWER GRID CONSTRAINTS FOR THE GRID CONNECTIONS OF NEW CONSUMERS.

IN 2021, THE NUMBER OF VALID GRID CONNECTION AGREEMENTS INCREASED BY 17% TO 18,465. THE DEMAND FOR GRID CONNECTION IS NOT ONLY CONSISTENTLY HIGH, BUT IS ALSO SHOWING PRONOUNCED GROWTH. MINIMUM 30–35 THS APPLICATIONS ON AVERAGE ARE FILED EVERY YEAR.



Alexander Chepusov
Deputy General Director for
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Connection, Rosseti Kuban, PJSC

In 2021, there was a 21% (138 MW) increase in connected capacity for consumers, primarily due to the deferred demand factor activated by the easing of COVID-19 restrictive measures. For the second year in a row, the percentage of agreements not performed on time does not exceed 6% of the total number of ongoing agreements (1,016 agreements at the end of 2021). The main reason for violating deadlines is the applicant's unreadiness to complete the grid connection procedure. In order to solve this problem, the Company is working out the possibility of implementing the measures, which are in the scope of applicant's responsibility, as an additional service.

Pursuant to Resolutions of the Government of the Russian Federation No. 262 dated 10 March 2020 and No. 639 dated 26 April 2021, the Company carried out a number of organisational and technical measures to re-engineer the grid connection process; those measures ensured prompt and complete meeting the increased demand for such service. In the future, this will reduce the volume of overdue agreements.

In 2021, the average term for grid connection activities was 94 days, and under agreements concluded with small and medium-sized businesses, it did not exceed 66 days, which is significantly lower than the normative terms established for grid organisations by the current legislation. The average term to consider an application and submit an offer did not exceed nine days".

The key documents, which regulate the Company's activities related to grid connection of consumer terminals (power installations) of legal entities and individuals to Rosseti Kuban power grids:

- Federal Law No. 35-FZ dated 26 March 2003 On the Electric Power Industry
- Rules for the Grid Connection of Consumer Terminals of Electricity Consumers, Generating Facilities and Grid Facilities Owned by Grid Operators and Other Entities to Power Grids approved by Decree No. 861 of the Government of the Russian Federation dated 27 December 2004
- 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

 Order of the Federal Antimonopoly Service (FAS of Russia) On Approval of the Guidelines for Determining the Fees for Grid Connection No. 1135/17 dated 29 August 2017

A complete list of regulatory legal documents, detailed information on the implementation of the grid connection procedure in Rosseti Kuban is publicly available on the Company's <u>website www.</u> rosseti-kuban.ru in the To Consumers / Grid Connection section.

For more details on the grid connection, please visit the Company's website.



## **EXECUTION OF GRID CONNECTION AGREEMENTS**

In the reporting year, the Company executed 33,795 agreements for the grid connection to PJSC Rosseti Kuban power grids. The total power supplied under the implemented grid connection agreements amounted to 788 MW, which is 135% more than the planned value. Compared to 2020, the amount of connected capacity increased by 21% (138 MW).

33,795 GRID CONNECTION AGREEMENTS FULFILLED IN 2021

788 MW — THE TOTAL CAPACITY UNDER THE AGREEMENTS FULFILLED (+21% YEAR-ON-YEAR)

#### **LOAD CAPACITY CONNECTED IN 2021 BY CONSUMER CATEGORY (MW)**

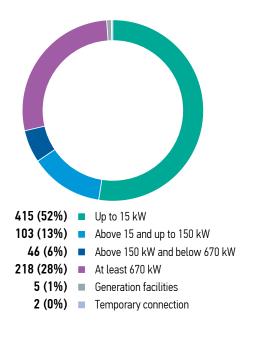
#### **Connection categories**

Number of grid connection agreements implemented

3 1		
Agreements	For total power (MW)	
31,832	415	
27,504	361	
1,591	103	
189	46	
128	218	
3	5	
33,743	787	
52	2	
33,795	788	
	31,832 27,504 1,591 189 128 3 33,743 52	

#### THE STRUCTURE OF THE ROSSETI KUBAN AGREEMENTS **IMPLEMENTED BY CAPACITY CONNECTED** (MW AND %)

### APPLICANTS WHICH HAD THEIR LARGEST AND MOST SIGNIFICANT ENERGY FACILITIES CONNECTED TO THE **COMPANY'S POWER GRIDS IN 2021**



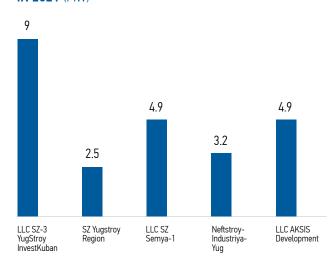
Applicant		Load capacity connected (MW)
<b>НЭСК</b> электросети	JSC NESK Elektroseti	75
<u>⊿NLE≜</u> ,	JSC Novoroslesexport	14
	Federal State Budgetary Institution All-Russian Children's Centre Orlyonok	6
славянск эко	LLC Slavyansk ECO	5

In 2021, significant capacities were allocated to meet the electricity demand of housing construction projects; the high rates of those have persisted in the region in recent years. More than 1,900 agreements for a total capacity of 133 MW were fulfilled.

# **1.9** ths

AGREEMENTS WITH TOTAL CAPACITY OF 133 MW — CONNECTION OF APARTMENT BUILDINGS IN 2021

## LARGEST APARTMENT BUILDINGS CONNECTED IN 2021 (MW)



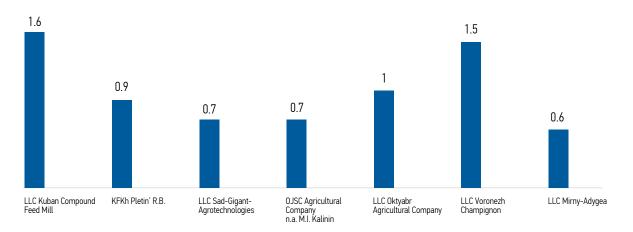
Also, the agricultural sector and the food industry, which require no less power capacity than other sectors, always play a strategic role in the economic structure of southern Russia.

In 2021, the Company fulfilled more than 900 agreements for grid connection of agricultural facilities, with a total capacity of over 42 MW.

900+

CONNECTIONS IN THE AGRICULTURAL SECTOR WITH A TOTAL CAPACITY OF >42 MW

#### LARGEST AGRICULTURAL FACILITIES CONNECTED IN 2021 (MW)<sup>1</sup>



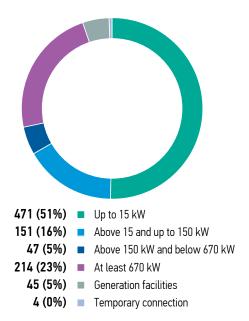
<sup>1.</sup> LLC Mirny-Adygea is implementing a project to build a 3,000-strong dairy plant for producing goat milk.

# **CONSUMER DEMAND FOR GRID CONNECTION IN** 2021

In 2021, the Company concluded 38,157 agreements for grid connection to Rosseti Kuban power grids for the total capacity of 931 MW with the total value of RUB 4.3 bn, excl. VAT. Since 2019, the demand for grid connection has remained at a persistently high level. On average, about 30–35 ths applications are received per year and at least 30 ths agreements are signed.

Connection categories	Number of grid connection agreements implemented		
	agreements	for total power (MW)	
Up to 15 kW inclusive, total	35,526	471	
Including individuals	30,511	406	
15 to 150 kW inclusive	2,178	151	
150 to 670 kW	208	47	
Not less than 670 kW	153	214	
Electricity generation facilities	15	45	
TOTAL, EXCLUDING TEMPORARY GRID CONNECTION	38,080	927	
Temporary connection	77	4	
TOTAL, INCLUDING TEMPORARY GRID CONNECTION	38,157	931	

# STRUCTURE OF PJSC ROSSETI KUBAN'S AGREEMENTS CONCLUDED IN 2021 BY CAPACITY CONNECTED (MW AND %)



## REVENUES AND MONETARY FUNDS COLLECTED

Revenue from grid connection services in the reporting year amounted to RUB 2,348 mn (excl. VAT), which is 101% of the target and 3.2 times higher than in 2020 (RUB 731 mn). In the reporting year, agreements with major customers were fulfilled, including JSC KTK-R (the first stage of activities under the agreement, RUB 729 mn), JSC Novoroslesexport (RUB 361 mn), State Healthcare Institution Research Institute — KKB No. 1 named after Professor Ochapovsky (RUB 238 mn), Orlyonok All-Russian Children's Centre (RUB 189 mn), LLC Studio Project Design (RUB 103 mn), LLC Kurortny Residential Complex (RUB 47 mn), JSC NESK-Electroseti (RUB 66 mn), LLC SpetsPharm Production (RUB 19 mn).

In 2021, monetary funds for grid connection services were received in the amount of RUB 2,354 mn (incl. VAT), which is 207% more than the planned value and 22% higher than in 2020 (RUB 1,922 mn, incl. VAT).

The over-performance is due to continuous interaction with applicants to fulfil contractual obligations as soon as possible, including through the provision of additional services to them in relation to the implementation of measures provided by the specification and assigned to scope of applicant's responsibility

2.3 RUB bn

REVENUE FROM THE GRID CONNECTION SERVICES IN 2021 (3.2 TIMES AS MUCH AS IN 2020)

— that contributes to a reduction in the time required to fulfil agreements. The over-performance for the indicator related to receipt of funds is associated with advance payments under the grid connection agreements.

In 2022, the Company expects to generate revenue from connection services of at least RUB 1.1 bn (excl. VAT). In 2022, a major grid connection facility in terms of revenues is projected to be JSC Caspian Pipeline Consortium – R, for the second phase of the project (with planned revenues of RUB 421 mn, excl. VAT).



## **GRID CONNECTION OF GENERATING FACILITIES**

Applicant	Generation facility connected	Required capacity for the grid connection of generating units to power the grid, voltage rating	The grid connection agreement date and price (excl. VAT)	Status of the grid connection of the facility as of the end of 2021
PJSC Rosneft	Tuapse Refinery	24 MW, 110 kV	1 April 2010, RUB 56.7 mn	On 21 December 2016, PJSC Rosseti Kuban notified the Applicant of the completion of work provided for by technical specifications and the readiness to the actual connection of the facility according to the legislation in force. The grid connection deadline is 30 May 2022
LLC ART-TECH	Electric facilities of a land plot for the arrangement of a logistics centre	6.2 MW, 10 kV	29 May 2020, RUB 4.14 mn	The agreement is being implemented. The grid connection deadline is <b>29 May 2022</b>
LLC LUKOIL — Kubanenergo	Electrical installations of a land plot for the operation of the base power station	2.25 MW, 35 kV	25 February 2021, RUB 1.52 mn	The agreement is being implemented. The grid connection deadline is 25 February 2023
OJSC Verkhnebakansky Cement Plant	Power station of OJSC Verkhnebakansky Cement Plant	56.41 MW, 6 kV	3 September 2015, RUB 0.09 mn	The agreement is being implemented. On 18 February 2019, PJSC Rosseti Kuban notified the Applicant of the readiness to the actual connection of the facility following the procedure compliant with the applicable legislation. Completion of activities by the applicant is expected
OJSC Novoroscement	GPU (gas piston unit) based energy centre with a capacity of 17,600 kW	17.60 MW, 110 kV	4 March 2019, RUB 11.40 mn	The agreement is being implemented. On 4 March 2019, PJSC Rosseti Kuban notified the Applicant of the readiness to the actual connection of the facility according to the legislation in force. The grid connection deadline is 4 March 2022 Completion of activities by the applicant is expected
LLC LUKOIL-Ecoenergo	Consumer terminals of a small HPP	1.5 MW, 6 kV	1 December 2020, RUB 13.18 mn	The agreement is being implemented. The grid connection deadline is 1 December 2022

Applicant	Generation facility connected	Required capacity for the grid connection of generating units to power the grid, voltage rating	The grid connection agreement date and price (excl. VAT)	Status of the grid connection of the facility as of the end of 2021
LLC ENERGO-VOLT	GPU-based energy centre with a capacity of 24.8 MW	24.8 MW, 110 kV	17 September 2018, RUB 16.9 mn	The agreement is being implemented. The grid connection deadline is 17 September 2022
LLC KNAUF GIPS KUBAN	GPU-based energy centre with a capacity of 4 MW	4 MW, 10 kV	10 December 2018, RUB 2.48 mn	The agreement is being implemented. The grid connection deadline is 10 December 2022
LLC EuroSib- Energo-Kuban	Consumer terminals of a land plot. The residential area land plots for IV hazard class facilities of various types (construction of mini-CHPPs)	4.44 MW, 10 kV	22 May 2018, RUB 2.75 mn	The agreement is being implemented. The grid connection deadline is <b>22 May 2022</b>
LLC Renewable Energy Sources	Solar power plants	13.5 MW, 10 kV	1 October 2021, RUB 314.25 mn	A total of three agreements have been concluded. The grid connection deadline is <b>1 October 2023</b>
LLC Renewable Energy Sources	Solar power plants	27 MW, 10 kV	11 November 2021, RUB 54 mn	A total of six agreements have been concluded. The grid connection deadline is 11 November 2023
LLC Renewable Energy Sources	Consumer terminals of a land plot for the arrangement of a production facility	4.6 MW, 10 kV	12 August 2020, RUB 7.12 mn	The grid connection deadline is  12 August 2022  The agreement was completed on 11 March 2021