



# 2021 PERFORMANCE RESULTS

## OPERATIONAL RESULTS

### Network exploitation

#### Core production assets in 2019–2021

Asset	2019	2020	2021*
Substations, pcs	33,731	34,382	<b>39,274</b>
Substation capacity, MVA thousand	31.4	31.6	<b>34.4</b>
Power lines (circuits), km	141,103	142,434	<b>156,675</b>

\* Incl. leased and no man's networks.

Increase in core production assets during 2021 was due to leased grid facilities, implementation of investment program, compensation-free transfer of grid facilities and acceptance of no-man's grid facilities for operation. The Company concluded contracts on the lease of networks of Ozersk Municipal District, AO Svyatogor and AO Uralelektromed.

#### Repairs in 2019–2021

The Company's repair and maintenance target for 2021 totaled RUB 4,263 million, real expenses in 2021 totaled RUB 4,339 million or 102%.

#### Repair program in 2021 in branches, RUB million

Branch	Target value	Actual value	% of completion
Permenergo	1,536	1,570	102%
Sverdlovenergo	1,504	1,514	101%
Chelyabenergo	1,215	1,247	103%
<b>IDGC of Urals (incl. HQ)</b>	<b>4,263</b>	<b>4,339</b>	<b>102%</b>

The overrun was mainly due to recovery and unscheduled works. Total costs of the branches spent on outsourcing repair works totaled RUB 666 million or 15%; with RUB 3,673 million or 85% spent on in-house repair works.

#### Company's repair program in 2019–2021

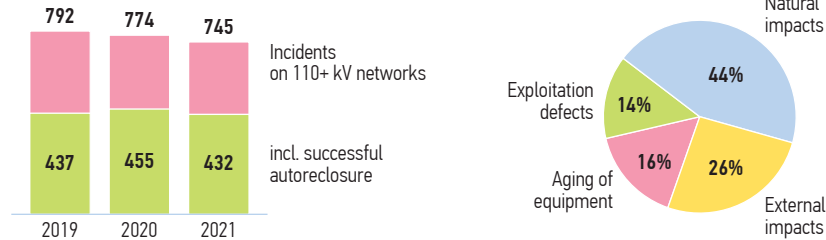
Works	2019 real values	2020 real values	2021 target values	2021 real values	% of completion
Power line corridor clearing, ha	8,998	9,426	9,749	10,258	105%
Groundwire replacement, km	270	291	199	209	105%
Insulator replacement, pcs	120,777	126,840	111,272	121,167	109%
Transformer overhaul, pcs	48	35	27	28	104%
Switch overhaul, pcs	1,848	1,726	1,643	1,712	104%
Overhaul of isolating switches, short circuitors, disconnecting switches, pcs	1,524	1,394	1,643	1,660	101%
Total repair costs, RUB mln	3,872	4,179	4,263	4,339	102%

Changes in repair volumes are attributable to natural fluctuations coming from repair periodicity. The repair program for 2022 totals RUB 4,631 million or +6.7% YoY, with RUB 3,896 million or 84% to be spent on in-house works and RUB 735 million or 16% to be spent on outsourcing works.

### Description of incidents on network facilities in 2019–2021, incl. primary incident factors

A decline in the number of incidents on 110kV+ networks of the Company's branches totaled 3.7% on 2020 and 5.9% on 2019.

#### Amount of incidents and disturbances on 110+ kV networks



Primary factors of incidents on 110kV+ networks in 2021 are natural impacts, external impacts, aging of equipment, exploitation defects. In 2021, all branches of the Company achieved long-term reliability targets, set by the regional regulators, with significant outperformance.

#### Reliability indicators

Branch	Isaidi, hour		Isaifi, pcs	
	Approved by the REC	2021 actual value	Approved by the REC	2021 actual value
Permenergo	3.0696	0.8403	1.5123	0.8111
Chelyabenergo	2.9879	1.2502	1.9023	0.9841
Iadiept, hour				
Sverdlovenergo	0.0167	0.0088		

In 2021, to enforce reliable grid performance, the Company has approved a set of special-purpose programs on technical development<sup>16</sup>; programs on reduction of incident rate and enhancement of equipment reliability, maintenance and repairs, service checks, upgrade (retrofitting) of grid facilities, reduction of injury risks, enhancement of fire safety, environmental safety, compliance with industrial safety requirements, equipment of high voltage units with arc fault protection, implementation of state-of-the-art security tools and special-purpose vehicles and lifting facilities. The primary expected effect from the special-purpose, repair and investment programs lies in the control of the level of incident rates and creation of conditions for achieving the reliability targets set by the regulators.

#### Consolidation of grid assets

OAO IDGC of Urals (jointly with AO EESK) consolidates grid assets to shape a unified network area on the territory of the Company's operations helping create a single point of responsibility for reliable and high-quality electricity supply and providing additional possibility to connect new consumers to the consolidated networks.

Primary means of consolidation were:

- rental. As of 01.01.2022, the volume of rented facilities and facilities with temporary right of ownership and use totaled 71,148 c.u.;
- uncompensated retrieval of grid facilities. We created hassle-free conditions for the transfer of grid facilities for any applicant. Applications on the transfer of grid facilities can be submitted through the corporate web site.

**↓ -3,7%**

DECLINE IN THE NUMBER OF INCIDENTS COMPARED TO 2020

#### Development of the grid complex

The electricity sector of the areas of the Company's presence evolves in line with the relevant regional schemes for development of the energy complex, generated in compliance with the Government Decree<sup>17</sup>, with due consideration of the development plans of all subjects of the energy system and capacity demand forecasts.

In 2021, the authorities of the Perm, Sverdlovsk and Chelyabinsk regions have prepared and approved the schemes and blueprints for development of the energy sector for 2022–2026<sup>18-20</sup>.

In an effort to optimize plans on development of the grid sector, in 2021 OAO IDGC of Urals contracted AO Federal Testing Center to prepare the Integrated 35+ kV Network Development Program for 2022–2026. The Program's materials, incl. baseline data on existing capacity utilization and proposals on its increase, as well as proposals on Company's nominees to be included into the working groups, dealing with crafting of the schemes and blueprints for development of the energy sector for the next period, have been filed with the regional authorities to be used in the production of the schemes and programs for development of the energy complex for the next period, serving as a basis for the Company's investment programs.