



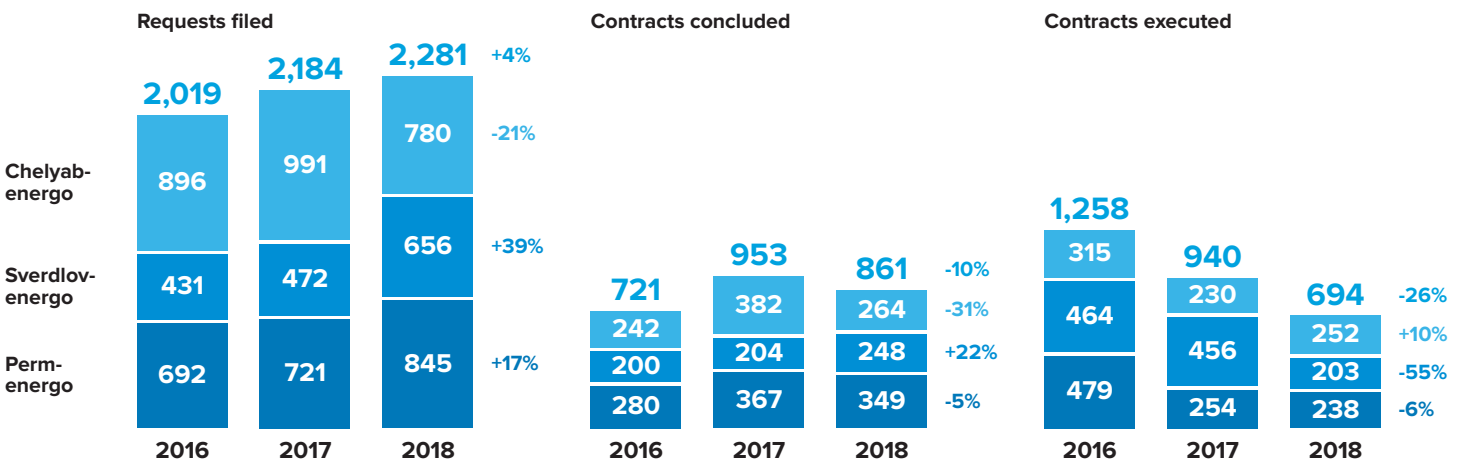
## TECHNOLOGICAL CONNECTION

In 2018, the demand for connection to the networks kept growing. Total requests for technological connection, filed with the Company, totaled 39,527 (+13% YoY). In 2018, the Company concluded 31,672 contracts (+13% YoY). The amount of the executed contracts in 2018 is -9% YoY due to unreadiness of filers' equipment. During 2018, we connected 26,312 consumers (29,032 consumers in 2017). The capacity of the concluded contracts lost 10%YoY. Connected capacitance in 2018 totaled 694 MW (-26% YoY) due to changes in the structure of concluded contracts on connection (2018 contract on generating facilities of OAO INTER RAO – Electrogeneration with capacity of 245 MW). With liabilities to connect generating facilities reducing, demand for technological connection to networks in residential development continues to persist.

### Demand for connection, pcs\*



### Demand for connection, MW\*



\* Net of temporary connection.

During 2018, Permenergo cancelled 1,934 contracts (+118% YoY) with total capacity of 94 MW and worth RUB 232 million (net of VAT). Most of the contracts (90%) were cancelled by 0-15 kW filers, 88% of cancellations done by individuals. Sverdlovennergo cancelled 1,071 contracts (-7% YoY) with total capacity of 30 MW and worth RUB 38 million. Most of the contracts (982 contracts) were cancelled by 0-15 kW filers, 911 contracts cancelled by individuals. Chelyabenergo cancelled 929 contracts (-19% YoY) with total capacity of 56 MW and worth RUB 416 million. Most of the contracts (86%) were cancelled by 0-15 kW filers, 89% of those cancellations done by individuals.

#### Connection contracts cancelled during the reported period\*

Branch	contracts	MW	Contract value, RUB million, net of VAT
Permenergo	682	276	156.4
Sverdlovennergo	1,190	47	95.21
Chelyabenergo	1,212	158	861.95
<b>2016 TOTAL</b>	<b>3,084</b>	<b>480.62</b>	<b>1,113.55</b>
Permenergo	886 (+30% YoY)	34 (-88%)	184.63 (+18%)
Sverdlovennergo	1,146 (-4%)	80 (+70%)	92.49 (-3%)
Chelyabenergo	1,149 (-5%)	146 (-8%)	420.58 (-51%)
<b>2017 TOTAL</b>	<b>3,181 (+3%)</b>	<b>259.88 (-46%)</b>	<b>697.71 (-37%)</b>
Permenergo	1,934 (+118% YoY)	94 (+176%)	232 (+26%)
Sverdlovennergo	1,071 (-7%)	30 (-63%)	38 (-59%)
Chelyabenergo	929 (-19%)	56 (-62%)	416 (-1%)
<b>2018 TOTAL</b>	<b>3,934 (+24%)</b>	<b>181 (-30%)</b>	<b>686 (-2%)</b>

\* Net of temporary connection.

Connection requests are waived in the light of changes in filer's intentions (changes in terms for construction of filer's equipment), filer's refusal to execute a contract due to lack of funds or intentions to construct any facilities (specifications are received just to increase the market value of a land plot) as well as expiration of specifications.

In 2018, the Company tried to improve access to the grid infrastructure, taking active steps in several directions, such as: development of interactive channels for customers, updates of the automated control system supervising connection process (launched in 2017) and regulation of internal processes of interaction between units during connection.

As a part of online customer relations evolution, in 2018 we integrated customer accounts and our automated control system supervising connection process to shorten the time for document preparation and to standardize document formats and guides in use. For prompt interaction with customers we also added an online chat functionality on the official web-site. To enforce efficient interaction between units we added a package for submittals adoption and reissue of documents into the automated control system. Implementation of electronic signature to sign documents and its automatic verification also help shorten the duration of some processes. We have also standardized connection business processes on all company levels (branch – production department – power distribution zone) and optimized internal cross-functional links. Reduction of connection terms is the focus of these measures. In 2018, with a view to discharge liabilities related to connection, the Company has also approved the roadmap<sup>23</sup> that affirmed key connection metrics for 2018 and related action plan. Several production departments of the Company implement our “turn-key technological connection” pilot project, when for a fee we provide a filer with the service of executing filer's liabilities under the concluded connection contract by our technicians. The service ensures synchronization and reduction of terms for activities by the parties (gridco and filer), and improves overall quality of works.

Pursuant to the Russian Government Decree<sup>24</sup>, local authorities have adopted regional roadmaps<sup>25-27</sup> on implementation of the target models improving investment climate, also covering connection to electric networks. OAO IDGC of Urals has taken an active part in development and implementation of the regional target models. By the end of the year, all activities from the target model stages, the Company is liable for, were accomplished on time.

#### The most important connections in 2018 are:

- Contract with AO NPO Microgen (RUB 3.7 million, 0.2 MW): development of the health sector in the Perm region.
- Contract with OOO Lukoil-Perm (RUB 5.4 million, 24 MW): development of the oil industry in the Perm region.
- Contract with AO South Urals Plant Kristal (RUB 0.06 million, 3.5 MW): assistance in import substitution in electronic component base and electronic equipment.
- Contract with OOO Agrokomples Churilovo (RUB 0.167 million, 8.6 MW): development of the largest greenhouse enterprise in the Urals.
- Contract with Krasnouralsk Administration (RUB 8.9 million, 0.5 MW): connection of the Molodost ice arena.
- Contract with MKU OKS of Krasnoturinsk (RUB 13.6 million, 0.6 MW): improvement of the quality of water supply to residents.

