

# 6. TARIFFS

## NANGA PARBAT

Nanga Parbat (8 125 m) is the ninth highest mountain in the world. It is located in the Gilgit-Baltistan region of Pakistan, to the south from Western Karakoram range. The summit is to the south of the Indus river, therefore, geographers refer it to the Himalayas rather than Karakoram. Nanga Parbat is the highest summit of the Western Himalayas. It is one of the roughest mountains on the planet and occupied the 1st position in the 8000-er fatality rating for a long time.

Nanga Parbat is a huge massif bounded by a range of 7000-ers, especially from the north. Here one can see North Peak I (7 816 m), North Peak II (7 785 m), North Peak III (7 537 m), summits over Silver Saddle – Southeast Peak (7 530 m) and East Peak (7 597 m). The north-eastern spur has Rakhiot Peak (7 070 m). The south-western spur has two peaks – Rupal Peak (7 260 m) and Mazeno Peak (6 940 m).



The main lines of Company's activities are energy transmission and connection to networks that are regulated by the state. Our branches operate under RAB methodology with approved long-term parameters till 2017 (Permenergo – since 2009, Chelyabenergo and Sverdlovenargo – since 2011). Boiler tariffs are made up by expenses incurred by all grid companies of a region and are annually prescribed for a year ahead during the long-term regulation.

Revenues from energy transmission contribute most to the overall revenues of the Company. As of 2013 these

revenues totaled RUR 55 258 mln. or 96% of overall revenues (+11% on 2012).

In absolute terms the uplift totaled RUR 5 566 mln. and was due to:

- the growth of boiler tariffs for energy transmission;
- transition of providers of last resort to transmission fees since 01.01.2013 basing on a tariff type (flat rate/ two-part tariff) chosen by a consumer under contract due to increased transmission tariffs since 01.07.2013.

#	Branch	MU	Permenergo	Sverdlovenargo	Chelyabenergo	IDGC of Urals
	Boiler GRR	RUR mln.	15 724	30 124	14 204	60 052
	Other consumers	RUR mln.	14 651	29 828	13 828	58 308
	Residents	RUR mln.	1 073	296	376	1 745

Decree of the Sverdlovsk regulator (Regional Energy Commission of the Sverdlovsk region) #171-PK dd. 23.12.2010 (as revised by the Sverdlovsk REC Decree #245-PK dd. 24.12.2012) has approved long-term parameters of regulation for IDGC of Urals operating under RAB methodology for 2012–2017. Flat (boiler) tariffs for energy transmission via Sverdlovsk regional grids for 2013, differentiated by half-year period, are approved by Decree of the Sverdlovsk REC #212-PK dd. 18.12.2012. Flat (boiler) tariffs for 1H 2013 were retained at rate prescribed for 2H 2012, being increased by 10% for 2H 2013 in comparison to the rate prescribed for 1H 2013. In 2013

the uplift of average tariff for energy transmission via the Sverdlovsk regional grids and GRR totaled 10% and 5.5% on 2012 correspondingly. When flat (boiler) tariffs were approved for energy and capacity balance sheets of the 2013 Sverdlovsk network boiler, the following last-mile consumers (UAZ-SUAL, Rusenergoresurs, Rusenergosbyt and Atomenergosbyt) were excluded from the overall transmission and capacity volumes. Boiler productive supply in 2013 showed a 4% drop on 2012.

Decree of the Perm regulator (Regional Energy Commission of the Perm region) #49-e dd. 26.06.2012 stipulated the revision since 01.07.2012



of long-term tariffs and regulation parameters for Permenergo operating under RAB methodology. Decree of the Perm REC #49-e dd. 26.06.2012 (as revised by the version dd. 28.12.2012) affirmed RAB parameters for Permenergo, long-term gross revenue requirement calculated under RAB methodology for 2012-2017 (excluding loss compensation). The key approved parameters are as follows: net supply growth on 2012 totaled 0.08%, uplift of boiler gross revenue requirement excluding loss compensation and payments to regional grids equaled 13.43%. According to Russian Government Decree #1178 dd. 29.12.2011 Decree of the Perm REC #128-e dd. 28.12.2012 has affirmed flat tariffs for energy transmission in the Perm region for 01.01.2013-30.06.2013 and 01.07.2013-31.12.2013. Flat (boiler) tariffs for 1H 2013 were retained at rate prescribed for 2H 2012, being increased by up to 10% for 2H 2013 in comparison to the rate prescribed for 1H 2013. In 2013 the uplift of average tariff for energy transmission in the Perm region totaled 10% on 2012. According to item 2 of the changes, introduced to acts issued by the Russian Government regulating operations of regional grid companies, approved by Russian Government Decree #403 dd. 08.05.2013, Permenergo prepared a proposal regarding changes into a consolidated forecast production balance sheet for 2013 to reduce its 2013 shortfall expenses. Using the proposal Federal Tariff Service approved changes into Decree #160-e/1 dd. 28.06.2012 stipulating that 1H2013 figures should adhere to 2H 2012 rate. As a result, Decree

of the Perm REC #12-e dd. 29.08.2013 affirmed flat (boiler) tariffs with 1.56% growth on 2H 2013 since 01.09.2013.

2013 tariffs for energy transmission were approved by the regulator of the Chelyabinsk region according to Russian Government Decree #1178 dd. 29.12.2011. The approved flat (boiler) tariffs for energy transmission are as follows: 1H 2013 rate was equal to 2H 2012 rate, 2H 2013 rate should not exceed 10% (excluding investment program) on 1H 2013 rate. In 2013 the uplift of Chelyabenergo average tariff totaled 6.8% on 2012. In 2013 gross revenue requirement was reduced by 11.1%, smoothing effect (RUR 795 mln.) being applied in calculations. 2013 revenues fell due to changes in net supply volume in comparison to 2012. Several last-mile consumers (ChEMK and Magnesit) were excluded from Chelyabenergo production balance sheet in 2013. The tariff uplift for other consumers since 01.07.2013 totaled 16%. Losses from exclusion of ChEMK and Magnesit were partially compensated. In September 2013 the branch boiler included additional regional grid companies, their number increased from 22 to 44. Gross revenue requirement for regional grid companies in comparison to 2012 changed from RUR 1 157 thous. (26% of overall expenses of regional grid companies) to RUR 1 593 thous. (36% of overall expenses of regional grid companies). AES Invest became a second large holder of the boiler in the region. Therefore, since September 2013 payments for energy transmission in the Chelyabinsk region are made according to the legislation.





Approved long-term regulation parameters for the Company's branches and gross revenue requirement (excluding loss compensations) for 2017 are disclosed in the table below.

	Year	Sverdlovenargo	Permenergo	Chelyabenergo	IDGC of Urals
		RUR thous.			
Gross revenue requirement excluding loss compensations	2012	15 940 625	8 010 416	12 146 367	36 097 408
	2013	16 632 417	9 086 522	10 043 312	35 762 251
	2014	15 089 763	9 342 329	11 493 830	35 925 922
	2015	16 745 703	10 715 523	13 017 815	40 479 041
	2016	18 495 189	12 277 696	14 771 656	45 544 541
	2017	19 680 044	13 974 251	16 674 606	50 328 901

Changes of average tariff for energy transmission in branches, kopecks./kW/h.

	MU	2009	2010	2011	2012	2013
Sverdlovenargo	kopecks/kW/h	54.5	72.3	82.9	88.6	97.4
Permenergo	kopecks/kW/h	58.5	76.1	81.2	84.2	92.9
Chelyabenergo (branch boiler)	kopecks/kW/h	45.9	74.0	74.3	67.3	71.9
IDGC of Urals	kopecks/kW/h	52.9	73.8	80.1	80.7	88.8
Growth	%	18.7%	39.6%	8.5%	0.7%	10.1%

Unstable flows of the Company's average tariff were influenced by changing number of regional grid companies in Chelyabenergo boiler for 2011–2013.

Gross revenue requirement dynamics in branches, RUR mln.

Branch	MU	2009		2010		2011		2012		2013	
		total GRR	own GRR	total GRR	own GRR	total GRR	own GRR	total GRR	own GRR	total GRR	own GRR
Sverdlovenargo	RUR mln.	20953	5323	22341	6038	27915	6600	28561	7882	30124	8309
Permenergo	RUR mln.	11274	4894	14667	6670	13781	4636	14237	4884	15724	5533
Chelyabenergo	RUR mln.	11234	4560	14171	4750	13885	4767	15986	6516	14204	4632
IDGC of Urals	RUR mln.	43461	14777	51179	17278	55581	16003	58784	19282	60052	18473
Growth	%			18	17	9	-7	6	20	2	-4

The drop of own GRR of IDGC of Urals in 2013 was due to the drop of own GRR in Chelyabenergo. A significant growth of own GRR in Chelyabenergo in 2012 was caused by the presence of a large last-mile consumer (ChEMK) in energy consumption

balance sheet when marginal transmission tariff growth was applied. In 2013 ChEMK and Magnesit were excluded from the transmission pricing and this resulted in a 17% decrease of transmission volumes and own GRR.



Transmission GRR structure of the Company in dynamics is as follows:

	MU	2009	2010	2011	2012	2013
Boiler GRR	RUR mln.	43 461	51 179	55 824	58 784	60 052
Regional gridcos	RUR mln.	10 554	11 360	13 967	12 628	13 713
Losses	RUR mln.	8 487	9 967	9 833	10 059	10 661
FSK	RUR mln.	9 642	12 574	15 779	16 816	17 205
Own GRR	RUR mln.	14 777	17 278	16 245	19 282	18 473

### Connection tariffs

According to the methodic recommendations on the determination of a connection fee approved by Decree of Federal Tariff Service #209-e/1 dd. 11.09.2012, regulators of the Perm, Sverdlovsk and Chelyabinsk regions approved a standardized tariff and maximum capacity rates for all branches of the Company for 2013. The regulators applied various methods for rate differentiation. In Permenergo the capacity rates were differentiated by a voltage level only in terms of aerial and cable line construction. A C1 standardized tariff rate was not differentiated, but C2, C3 and C4 standardized tariff rates underwent a wide differentiation depending on a voltage level and

equipment type. In Sverdlovenergo the regulators approved capacity and standardized tariff rates. Differentiation of a C1 rate was planned on a voltage level and capacity range, maximum capacity rates for aerial and cable line construction were differentiated only by voltage levels. Besides, the Sverdlovsk region set standardized tariff rates for connection in the Sverdlovsk region and formulas for connection rates. In Chelyabenergo the regulators approved maximum capacity and standardized tariff rates. A wide differentiation of all rates by voltage levels and capacity range was planned. Besides, maximum capacity rates were divided by activities and measures.

	2011	2012	2013
Permenergo	12 531	12 531	5 416
Sverdlovenergo	3 615	4 123	6 709
Chelyabenergo	4 800	5 114	5 426
IDGC of Urals	5 189	5 313	5 477
uplift / drop, %		2.4%	3.1%

The table shows average maximum capacity rates approved by the regional tariff regulators. A high Permenergo tariff in 2011–2012 had no significant influence on the overall Company average tariff due to a low share of maximum capacity in Permenergo requests in overall volume of maximum capacity used in calculation of a connection fee. Prior to 2013 the maturity of connection rates in the Perm, Sverdlovsk and Chelyabinsk regions was not limited to the of-

ficial year. Thus, Permenergo rate, approved in December 2010, could be applied in 2011–2012 and a connection rate for many applicants remained unchanged since May 2009. Sverdlovenergo rates changed twice: since January 01, 2011 and May 24, 2012. Chelyabenergo connection rates in 2011–2012 were applied on an individual basis; therefore, we used summarized data for comparison.



Type of a standardized tariff rate	Permenergo	Sverdlovenego	Chelyabenergo
A rate to cover connection expenses according to measures stipulated in item 16 of the methodical recommendations (except b and c), RUR/kW - C1	533.00	445.17	85.20
including			
- preparation of technical conditions for an applicant by a grid company (hereinafter referred to as the TC), RUR/kW	160.00	-	35.58
- design verification by a grid company, RUR/kW	21.00	-	20.78
- participation of a federal official in an inspection, RUR/kW	94.00	-	0.00
- connection of applicant's facilities and putting a switching device into position "ON", RUR/kW	258.00	-	28.84
A rate to cover expenses incurred by a grid company for aerial line construction - C2, RUR/km	291 861.20	322 052.35	363 749.50
A rate to cover expenses incurred by a grid company for cable line construction - C3, RUR/km	1 227 616.71	419 945.87	505 780.87
A rate to cover expenses incurred by a grid company for substation construction - C4, RUR/kW	2 582.65	3 071.30	1 835.94

The table demonstrates average maximum capacity rates approved by the regional tariff regulators. Decree of the Sverdlovsk REC #230-PK did not suppose the differentiation of a C1 rate by measures and activities, the rate was differentiated by voltage levels and capacity ranges. Besides, the decree stipulated that maximum capacity rates for measures and activities related to the construction of reclosers, transformer substations and main substations were equal to standardized tariff rates to cover expenses incurred by grid companies to construct substations in the Sverdlovsk region (C4), approved

by Decree of the Sverdlovsk REC #229-PK dd. 24.12.2012. A low average C1 rate in Chelyabenergo can be explained by the domination of requests with large maximum capacity and insignificant organizational expenses in the overall structure of requests used for the determination of a fee. If we analyze connection contracts concluded according to 2013 tariffs, a rate per kW of maximum capacity was very common for the Company (average figures reaching 85%), in Sverdlovenego the distribution of the rate reached 92%. Individual calculations of a connection fee did not exceed 1.5% of overall cases.

#### Analysis of connection fee options in 2013 (branch breakdown)

