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RusHydro Group announces its operating results for the 1Q 2020

April 21, 2020. Moscow, Russia. PJSC RusHydro (ticker symbol: MICEX-RTS, LSE: HYDR; OTCQX: RSHYY) announces operating results for the 1st quarter of 2020, of the parent company and subsidiaries of RusHydro Group reflected in consolidated financial statements.

Key highlights:

- **39,008 GWh** - total electricity generation by RusHydro Group including Boguchanskaya hydropower plant in 1Q 2020 (+19.2%)^[1];
- **24,823 GWh** - electricity output from hydro and pumped storage plants in 1Q 2020 excl. Boguchanskaya HPP(+29.6%);
- **9,431 GWh** – electricity output from thermal power plants (-3.0%).
- **117 GWh** – electricity output from alternative renewable energy facilities (+9.4%).
- **14,629 GWh** – total electricity output from power plants in the Far Eastern Federal District (+5.1%).
- **12,446 thousand Gcal/h** – heat output from thermal power plants in the Far Eastern Federal District (+0.6%).
- **5,371 GWh** – sales by Group's electricity retail companies in 1Q 2020 (-4.0% y-o-y).

Electricity generation by the plants of RusHydro Group, GWh

	1Q'20	1Q'19	chg, %
Center of Russia	12,373	8,183	51.2%
South of Russia and North Caucasus	1,293	1,169	10.6%
Siberia	6,047	5,642	7.2%
Total for the price zones	19,713	14,994	31.5%
Far East	4,368	3,178	37.5%
RAO ES East	10,260	10,757	-4.6%
Armenia ^[2]	30	48	-36.0%
TOTAL	34,371	28,976	18.6%
incl. by HPPs, PSPPs ^[3]	24,823	19,147	29.6%
incl. by TPPs and other	9,431	9,722	-3.0%
Incl. by alt. renewables (geothermal, solar, wind)	117	107	9.4%
Boguchanskaya HPP1	4,636	3,741	23.9%

The underlying factors of the production change in January-March 2020 were:

- water inflows to the reservoirs of the Volga-Kama cascade well above (1.5-6.4x) the normal level;
- total water inflow to the reservoirs in Siberia and the Far East 30-85% above the long-run average;
- water inflows to the reservoir of Chirkeyskaaya HPP at the normal level;
- increase of electricity consumption in the Far East by 5.4%
- increase of heat output in the Far East driven by weather conditions.

Center of Russia

Early flooding season is currently taking place in the center of Russia. Despite low snow reserves, the reservoirs of the Volga-Kama cascade are filled up to the maximum level following autumn-winter flooding. Thaw period came in a month earlier followed by heavy rainfall in the Upper Volga in the beginning of March. Flooding control commissions are currently in place at the hydropower facilities monitoring hydro meteorological conditions and water level at the head and tailraces of the hydroelectric complex.

In the first quarter of 2020 water inflow to Ribynskaya, Zhigulevskaya and Kamskaya HPPs was **at the all-time high historic level**. Inflows to other reservoirs of the Volg-Kama cascade was 1.5-6.4x the normal level. Total water inflow to the reservoirs of the Volga-Kama cascade reached 58.8 km³ (normal level - 23.5 km³).

In April water inflows to the reservoirs on the Volga River are expected below the normal level by 15-85% while inflows to the reservoir of Kamskaya HPP are expected above the normal level by 50%. Water inflows to other reservoirs on the Kama River will be at the normal level. Total water inflow to the reservoirs of the Volga-Kama cascade in April is expected at 33-53 km³ (normal level - 65.9 km³).

Total electricity production by the hydropower plants of the Volga-Kama cascade and Zagorsksaya pumped storage in the first quarter of 2020 increased by 51.2% to 12,373 GWh.

South of Russia and North Caucasus

In March and in the first quarter of 2020 total water inflow to Chirkeyskaaya HPP on the Sulak River was close to the normal level. In April 2020 according to Hydrometeorology Center of Russia total water inflow is expected at 110-138 m³ as compared to the normal level of 148 m³.

In 1Q 2020, total electricity production by the hydropower plants in the South of Russia and North Caucasus increased by 10.6% to 1,293 GWh as compared to the corresponding period last year.

Siberia

Early flooding season began in the reservoir of Novosibirskaya HPP. Water inflows to the reservoirs of Siberia in the first quarter of 2020 were above the normal level by 30-35%. Water reserves at the snow deposits of the Novosibirskoye reservoir as of 31.03.2020 were 93 mm or 10% above the normal level and 30 mm higher than in the same period last year. In Sayano-Shushenskoye reservoir, snow deposits as of 31.03.2020 were 166 mm or 43% above the normal level and 68 mm above the corresponding period last year. In April 2020 water inflows to Sayano-Shushenskoye and Novosibirskoye reservoirs are expected 30-35% above the normal level.

Overall electricity production by the hydropower plants in Siberia increased by 7.2% in 1Q 2020 to 6,047 GWh. Boguchanskaya HPP produced 4,636 GWh an increase of 23.9% over the corresponding period last year.

Far East

In 1Q 2020 water inflows to Zeyskoye and Kolymskoye reservoirs were 65-85% above the normal level. Water reserves at the snow deposits of Zeyskoye reservoir were 70-149% the normal level as of the middle of March. In April water inflows to Kolymskoye reservoir are expected in the range of 4-6 m³/sec as compared to the normal level of 3.22 m³/sec, to Zeyskoye reservoir – in the range of 100-200 m³/sec as compared to the normal level of 136 m³/sec.

Total electricity generated by hydropower plants in the Far East (not included in the RAO ES East subgroup) increased by 35.7% to 4,368 GWh in the first quarter of 2020 against the same period last year.

Total electricity generated by RAO ES East subgroup in the first quarter of 2020 amounted to 10,260 GWh, a decrease of 4.6% as compared to the first quarter last year. JSC Far Eastern Generating Company's (DGK) share of electricity generated was 72% or 7,423 GWh, a decrease of 5.5% against the same period last year.

The main driver behind the decrease was increase in production by HPPs operating in United Power System of the East by 33.7% (to 3,617 GWh), growth of electricity consumption in the region by 5.4% to 14,842 GWh and decrease of electricity sales to UES of Siberia by 87.2% to 20.5 GWh.

Heat output by thermal plants of RAO ES East Subgroup in the first quarter of 2020 increased by 0.6% to 12,246 GCal as compared to the corresponding period of 2020 due to lower air temperatures in the regions of presence of JSC DGK, PJSC Yakutskenergo and JSC Chukotenergo.

Heat output by thermal plants of RAO ES of the East Subgroup, '000 GCal

	1Q'20	1Q'19	Chg.
JSC DGK incl.	8,344	8,246	1.2%
Primorye power system	1,800	1,722	4.6%
Khabarovsk power system	4,799	4,833	-0.7%
Amur power system	981	930	5.5%
South Yakutsk power district	763	761	0.3%
JSC RAO ES East (CHPP Vostochnaya)	353	333	6.1%
PJSC Yakutskenergo	1,068	1,056	1.2%
UES of East	9,766	9,635	1.4%
Yakutsk power system incl.	515	530	-2.9%
JSC Sakhaenergo	29	33	-13.0%
JSC Teploenergoservice	487	498	-2.2%
Kamchatka power system incl.	761	787	-3.2%
PJSC Kamchatskenergo	731	753	-3.0%
JSC KSEN	30	34	-9.7%
Magadan power system	474	476	-0.3%
Chukotka AO power system	160	151	5.9%

Sakhalin power system	571	593	-3.8%
Isolated power systems	2,481	2,537	-2.2%
TOTAL	12,246	12,172	0.6%

Armenia

Electricity generation by the Sevan-Hrazdan cascade of hydropower plants in Armenia in the January and February of 2020 decreased by 36.0% to 36 GWh. The power generation by the plants of the cascade is dependent on water inflows of the Hrazdan river and water discharge from Sevan Lake. On March 11, 2020 RusHydro has finalized divestment of its assets in Armenia to PJSC Hrazdan Power Company (HrazTES, Tashir Group).

Electricity retail

Total electricity output by RusHydro Group's energy retail companies in 1Q 2020 increased by 0.2% to 13,542 GWh as compared to 1Q 2019. Decrease came on the back of climate factor as the average temperature in the first quarter of 2020 was higher than in the first quarter of 2019.

In the first quarter of 2020, total electricity output by RusHydro's retail companies, operating in Chuvashia, Ryazan and Krasnoyarsk regions, decreased by 4% and amounted to 5,588 GWh.

Electricity output by PJSC DEK (energy retail company operating in the Primorskiy Krai, Khabarovskiy Krai, Amur region and Jewish Autonomous region, the main supplier of electricity to the population in the second non-price zone of the wholesale energy market) in the first quarter of 2020 increased by 2.4% and amounted to 6,579 GWh.

Total electricity output by RusHydro's companies located in the isolated energy systems in the Far East Federal District amounted to 1,592 GWh in 1Q 2020, an increase of 6.2% as compared to the same period last year.

Electricity output by RusHydro Group's retail companies, GWh

	1Q'19	1Q'18	chg, %
PJSC Krasnoyarskenergosbyt	3,342	3,533	-5.4%
JSC Chuvash retail company	911	936	-2.8%
PJSC Ryazan retail company	649	697	-6.9%
JSC ESC RusHydro	469	430	9.4%
Total	5,371	5,596	-4.0%
<i>PJSC DEK (for reference)</i>	<i>6,579</i>	<i>6,422</i>	<i>2.4%</i>
<i>Isolated energy systems (for reference)</i>	<i>1,592</i>	<i>1,495</i>	<i>6.5%</i>
Total by Group	13,542	13,513	0.2%

Water inflows forecast

According to the forecast of the Hydrometeorology Center of Russia, the following dynamics of water inflows to the major reservoirs is expected in the 2nd quarter of 2020:

- Total water inflows to reservoirs on Volga River are expected below the normal level by 25-70%, while water inflows to the reservoirs on the Kama River are expected to be at the long-run average. Total water inflows to the reservoirs of the Volga-Kama cascade are expected in the range of 110 - 130 km³ (as compared to the normal level of 159 km³);
- Inflows to Chirskeyskoye reservoir on the Sulak River are expected to be at the normal level;
- Inflows to reservoir of the rivers of Siberia for the most part are expected to be close to long-run average or slightly above it;
- In the Far East inflows to Zeyskoye and Kolymskoye reservoirs are expected to be at or slightly above the long-run average.

[1] The Boguchanskaya hydropower plant is part of the Boguchanskiy Energy and Metals Complex (BEMO), a 50/50 joint venture (JV) between RusHydro and UC RUSAL, and is not part of RusHydro Group. According to RusHydro's shareholding in the JV (50%), the results of the plant are reported in the official financial statements in "Share of results of associates and jointly controlled entities". Operations of the HPP have been put into the press-release for general reference.

[2] Data for Jan-Feb 2020. On 11.03.2020 RusHydro has finalized divestment of its assets in Armenia to PJSC Hrazdan Power Company (HrazTES, Tashir Group).

[3] Includes generation by HPPs of JSC RusHydro, Kolymskaya HPP and Viluiskie HPPs (RAO ES East Subgroup).