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**REPORT**

**ANALYSIS OF THE ELECTRICITY AND COAL MARKET OF KAZAKHSTAN**

**JANUARY-FEBRUARY 2021**

**DEPARTMENT "MARKET DEVELOPMENT"**

**March, 2021**

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# **SECTION I**

# **Electricity generation in the UES of Kazakhstan**

According to the System Operator, power plants of the Republic of Kazakhstan in January-February 2021 generated 20,393.8 million kWh of electricity, which is 2.6% more than the same period in 2020. The decrease in generation was observed only in the Western zone of the UES of Kazakhstan.

*million kWh*

|  |  |  |  |
| --- | --- | --- | --- |
| **Zone** | **Generation type** | **January February** | **Δ, %** |
| **2020** | **2021** |
| **Kazakhstan** | **Total** | **19868.4** | **20393.8** | **2.6%** |
| *TPP* | *16503.0* | *16856.5* | *2.1%* |
| *GTES* | *1726.4* | *1842.0* | *6.7%* |
| *hydroelectric power station* | *1395.5* | *1269.6* | *-9.0%* |
| *WES* | *156.8* | *274.2* | *74.9%* |
| *SES* | *86.4* | *150.8* | *74.5%* |
| *BSU* | *0.3* | *0.7* | *133.3%* |
| **Northern** | **Total** | **15155.6** | **15646.2** | **3.2%** |
| *TPP* | *13514.3* | *13970.8* | *3.4%* |
| *GTES* | *591.8* | *573.4* | *-3.1%* |
| *hydroelectric power station* | *946.2* | *904.4* | *-4.4%* |
| *WES* | *75.6* | *144.2* | *90.7%* |
| *SES* | *27.4* | *52.7* | *92.3%* |
| *BSU* | *0.3* | *0.7* | *133.3%* |
| **South** | **Total** | **2241.2** | **2305.6** | **2.9%** |
| *TPP* | *1661.8* | *1713.8* | *3.1%* |
| *GTES* | *35.3* | *53.9* | *52.7%* |
| *hydroelectric power station* | *449.3* | *365.2* | *-18.7%* |
| *WES* | *36.1* | *74.9* | *107.5%* |
| *SES* | *58.7* | *97.8* | *66.6%* |
| **Western** | **Total** | **2471.6** | **2442.0** | **-1.2%** |
| *TPP* | *1326.9* | *1171.9* | *-11.7%* |
| *GTES* | *1099.3* | *1214.7* | *10.5%* |
| *WES* | *45.1* | *55.1* | *22.2%* |
| *SES* | *0.3* | *0.3* | *0.0%* |

# *Electricity generation by regions of the Republic of Kazakhstan*

In January-February 2021, compared to the same period in 2020, electricity generation increased significantly (an increase of 15% or more) in the Zhambyl and Kyzylorda regions. At the same time, a decrease in electricity generation was observed in Aktobe, Almaty, Karaganda, Mangistau, North Kazakhstan and East Kazakhstan regions.

*million kWh*

|  |  |  |  |
| --- | --- | --- | --- |
| **No. p / p** | **Region** | **January February** | **Δ, %** |
| **2020** | **2021** |
| 1 | Akmola | 915.2 | 928.9 | 1.5% |
| 2 | Aktobe | 737.2 | 711.8 | -3.4% |
| 3 | Almaty | 1360.4 | 1301.0 | -4.4% |
| 4 | Atyrau | 1,096.2 | 1152.2 | 5.1% |
| 5 | East Kazakhstan | 1508.6 | 1438.3 | -4.7% |
| 6 | Zhambyl | 473.3 | 546.9 | 15.6% |
| 7 | West Kazakhstan | 419.6 | 425.1 | 1.3% |
| 8 | Karaganda | 2,890.6 | 2,785.4 | -3.6% |
| 9 | Kostanay | 219.1 | 221.4 | 1.0% |
| 10 | Kyzylorda | 101.7 | 120.5 | 18.5% |
| 11 | Mangistau | 955.8 | 864.7 | -9.5% |
| 12 | Pavlodar | 8231.2 | 8936.6 | 8.6% |
| 13 | North Kazakhstan | 653.7 | 623.8 | -4.6% |
| 14 | Turkestan | 305.8 | 337.2 | 10.3% |
|   | **Total for Kazakhstan** | **19,868.4** | **20,393.8** | **2.6%** |

The volume of electricity production by energy producing organizations of Samruk-Energy JSC for January-February 2021 amounted to 6,799.2million kWh or an increase of 12.7% compared to the same period in 2020.

*million kWh*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Name** | **2020** | **2021** | **Δ 2021/2020** |
| **January February** | **share in Kazakhstan, %** | **January February** | **share in Kazakhstan, %** | **million kWh** | **%** |
|  | **JSC " Samruk-Energy "** | **6,030.6** | **30.4%** | **6,799.2** | **33.3%** | **768.6** | **12.7%** |
| *1* | *JSC AlES* | *1155.3* | *5.8%* | 1125.2 | *5.5%* | *-30.1* | *-2.6%* |
| *2* | *LLP "Ekibastuz GRES-1"* | *3,975.6* | *20.0%* | 4197.2 | *20.6%* | *221.6* | *5.6%* |
| *3* | *JSC "Ekibastuz GRES-2"* | *637.6* | *3.2%* | 1245.2 | *6.1%* | *607.6* | *95.3%* |
| *4* | *JSC "Shardara HPP"* | *109.3* | *0.6%* | 125.6 | *0.6%* | *16.3* | *14.9%* |
| *5* | *JSC "Moinak HPP"* | *118.2* | *0.6%* | 72.3 | *0.4%* | *-45.9* | *-38.8%* |
| *6* | *Samruk-Green Energy LLP* | *0.4* | *0.002%* | 2.6 | *0.013%* | *2.19* | *539.6%* |
| *7* | *LLP "First wind power plant"* | *34.1* | *0.2%* | 31.1 | *0.2%* | *-3.0* | *-8.8%* |

# **Electricity consumption in the UES of Kazakhstan**

# *Consumption of electrical energy by zones and regions*

According to the System Operator, in January-February 2021, there was an increase in the dynamics of electricity consumption in the republic compared to January-February 2020. Thus, the increase in the northern zone was 3%, in the southern zone - 2%, and in the western zone of the republic, consumption decreased by 2%.

*million kWh*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Name** | **Jan.-Feb 2020**  | **Jan.-Feb 2021**  | **Δ, million kWh** | **Δ, %** |
| **I** | **Kazakhstan** | **19 554.2** | **20,041.1** | **486.9** | **2%** |
| 1 | Northern zone | 12 806.2 | 13,231.4 | 425.2 | 3% |
| 2 | Western zone | 2 484.2 | 2443.6 | -40.6 | -2% |
| 3 | Southern zone | 4 263.7 | 4366.1 | 102.4 | 2% |
|  | ***incl . \_ by regions*** |  |  |  |  |
| 1 | East Kazakhstan | 1 720.5 | 1,698.7 | -21.8 | -1% |
| 2 | Karaganda | 3 327.8 | 3430.1 | 102.3 | 3% |
| 3 | Akmola  | 1 836.1 | 1971.5 | 135.4 | 7% |
| 4 | North Kazakhstan | 317.9 | 346 | 28.1 | 9% |
| 5 | Kostanay  | 874.2 | 864.4 | -9.8 | -1% |
| 6 | Pavlodar | 3 582.9 | 3,717.1 | 134.2 | 4% |
| 7 | Atyrau  | 1 163.1 | 1,104.1 | -59.0 | -5% |
| 8 | Mangistau  | 925.3 | 898.9 | -26.4 | -3% |
| 9 | Aktobe | 1 146.9 | 1203.5 | 56.6 | 5% |
| 10 | West Kazakhstan  | 395.9 | 440.6 | 44.7 | 11% |
| 11 | Almaty  | 2 210 | 2260.9 | 50.9 | 2% |
| 12 | Turkestan | 912.2 | 931.8 | 19.6 | 2% |
| 13 | Zhambyl  | 796.6 | 812.8 | 16.2 | 2% |
| 14 | Kyzylorda  | 345 | 360.5 | 15.5 | 4% |

# **The results of the industry in January-February 2021**

*(express information of the Bureau of National Statistics ASPR RK)*

January-February 2021 compared to January-February 2020, the industrial production index amounted to 98.1%. An increase in production volumes was recorded in 11 regions of the republic, a decrease was observed in Atyrau, West Kazakhstan, Karaganda, Kyzylorda , Mangystau and Turkestan regions.

**Changes in industrial output by region**

*in % to the corresponding period of the previous year*

In the city of Nur -Sultan, the IPP amounted to 119.3%, mainly due to an increase in the production of ready-mixed concrete, refined gold, and the production of railway locomotives.

In Almaty, due to an increase in the production of building prefabricated metal structures and buses, the IPP amounted to 117.4%.

In the Almaty region, the IPP amounted to 114.3% due to an increase in the production of tobacco products, the production of electric batteries.

In the city of Shymkent, due to the increase in the production of refined products, the IPP amounted to 112.1%.

In the North Kazakhstan region, due to an increase in the growth in the production of food products, as well as pipes, fittings made of plastic, IPP amounted to 109.7%.

In the Akmola region, due to an increase in the production of pesticides, the production of combines and tractors, the IPP amounted to 109.7%.

In the East Kazakhstan region, the IPP amounted to 109% due to an increase in the extraction of gold ores and concentrates, the production of refined gold.

In the Kostanay region, the IPP amounted to 107.2% due to an increase in the production of iron ore and copper concentrates, the production of gold in Doré alloy, and cars.

In the Aktobe region, the IPP amounted to 105.9% due to the growth in the production of ferrochromium and the provision of services in the mining industry.

In the Zhambyl region, due to the growth in the production of phosphate raw materials, the production of sugar, ferrosilicomanganese, the IPP amounted to 105.6%.

In Pavlodar region, the IPP amounted to 101.6% due to the growth in the production of gasoline, diesel fuel, heating oil, propylene polymers and processing of secondary metal raw materials.

In the Karaganda region, the decrease in the IPP was due to a decrease in the extraction of coal, copper and zinc concentrates, and the production of blister copper (98.9%).

In the Turkestan region, due to a decrease in the extraction of uranium and thorium ores, the IPP amounted to 97%.

In West Kazakhstan IPP amounted to 94.7% due to a decrease in gas condensate production, production of pipes, steel profiles.

In Atyrau (83.1%), Kyzylorda (98.3%), Mangistau (93%) regions, the IPP decreased mainly due to a reduction in crude oil production.

*(Source:* [*www.stat.gov.kz*](http://www.stat.gov.kz) *)*

# *Electricity consumption by large consumers in Kazakhstan*

In January-February 2021, compared to the same period in 2020, electricity consumption by large consumers decreased by 1.3%.

*million kWh*

|  |  |  |
| --- | --- | --- |
| **No. p / p** | **Consumer** | **January - February** |
| **2020** | **2021** | **Δ, %** |
| 1 | JSC Arcelor Mittal Temirtau" | 652.7 | 633.6 | -3% |
| 2 | JSC AZF ( Aksuysky ) "TNK Kazchrome " | 968.3 | 906.2 | -6% |
| 3 | Kazakhmys LLP Smelting » | 197.4 | 209.2 | 6% |
| 4 | Kazzinc LLP \_ | 477.1 | 481.1 | 1% |
| 5 | JSC " Sokolovsko-Sarbayskoye GPO" | 321.7 | 284.0 | -12% |
| 6 | Kazakhmys Corporation LLP | 224.0 | 219.1 | -2% |
| 7 | AZF JSC (Aktobe) "TNK Kazchrome " | 516.9 | 539.2 | 4% |
| 8 | RSE “Channel them. Satpaev » | 19.7 | 31.2 | 59% |
| 9 | Kazphosphate LLP \_ | 327.6 | 272.6 | -17% |
| 10 | NDFZ JSC (part of Kazphosphate LLP ) | 277.4 | 219.2 | -21% |
| 11 | LLP " Taraz Metallurgical Plant" | 31.3 | 69.1 | 121% |
| 12 | JSC " Ust-Kamenogorsk titanium -magnesium plant" | 155.9 | 71.1 | -54% |
| 13 | Tengizchevroil LLP \_ | 321.1 | 310.0 | -3% |
| 14 | PAZ JSC (Pavlodar Aluminum Smelter) | 160.5 | 155.8 | -3% |
| 15 | JSC "KEZ" (Kazakhstan electrolysis plant) | 626.5 | 624.4 | 0% |
| 16 | TemirzholEnergo LLP \_ | 243.2 | 273.8 | 13% |
| 17 | JSC "KEGOC" | 940.4 | 1,022.6 | 9% |
| **Total** | **6,184.4** | **6 102.9** | **-1.3%** |

*million kWh*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | **Name** | **January- February** | **Deviation, million kWh** | **Δ , %** |
| **2020** | **2021** |
| **I** | **JSC " Samruk-Energy "** | **1399.98** | **1468.3** | **68.4** | **4.9%** |
| *1.* | *LLP "Bogatyr-Komir"* | 33.36 | 55.8 | *22.4* | 67.3% |
| *2.* | *JSC Alatau Zharyk Companies »* | 198.51 | 199.4 | *0.9* | 0.5% |
| *3.* | *AlmatyEnergoSbyt LLP* | 1168.11 | 1213.1 | *45.0* | 3.9% |

# **Coal**

# *Thermal coal mining in Kazakhstan*

According to the Bureau of National Statistics, Kazakhstan produced 18,761.2 thousand tons of hard coal in January-February 2021, which is 1% more than in the same period in 2020 (18,649.7 thousand tons).

*thousand tons*

|  |  |  |  |
| --- | --- | --- | --- |
| **No.**  | **Region** | **January-February** | **Δ, %** |
| **2020** | **2021** |
| 1 | Pavlodar | 12006.7 | 11879.2 | 99% |
| 2 | Karaganda | 5407.9 | 5309.2 | 98% |
| 3 | East Kazakhstan | 1214.8 | 1528.1 | 126% |
|  | **Total for the Republic of Kazakhstan** | **18649.7** | **18761.2** | **101%** |

# *Coal mining by Samruk-Energy JSC*

In January-February 2021, Bogatyr Komir LLP produced 7,768 thousand tons, which is 3.3% less than in the corresponding period of 2020 (8,032 thousand tons).

# *Sale of coal by Samruk-Energy JSC*

In January-February 2021, 7,618 thousand tons were sold, including :

- to the domestic market of the Republic of Kazakhstan 7,360 thousand tons, which is 15.4% more than in the corresponding period of 2020 (6,377 thousand tons);

- for export (Russian Federation) - 259 thousand tons, which is 83.8% less than for the corresponding period of 2020 (1,599 thousand tons).

*thousand tons*

|  |  |  |  |
| --- | --- | --- | --- |
| **No.**  | **Region** | **Sales volume, thousand tons** | **Δ, %** **2021/2020** |
| **January-February 2020** | **January-February 2021** |
| **Total to the domestic market of the Republic of Kazakhstan** | **6 377** | **7 360** | **115.4%** |
| **Total for export to Russia** | **1 599** | **259** | **16.2%** |

According to the indicators for January-February 2021, compared to the same period in 2020, the Company observed a decrease in coal sales by 4.5%.

# **Renewable energy sources**

According to the system operator, the volume of electricity production by renewable energy facilities (SPP, WPP, BGS, small HPPs) of the Republic of Kazakhstan in January-February 2021 amounted to 492.7 million kWh . Compared to January-February 2020 (368.1 million kWh ), the increase was 133.8%.

million kWh

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Name** | **2021** | **2020** | **Deviation 2021/2020** |
| **January February** | **share in Kazakhstan, %** | **January February** | **share in Kazakhstan, %** | **million kWh** | **%** |
|   | **Total output in Kazakhstan** | **20393.8** | **100%** | **19868.3** | **100.0%** | **525.5** | **102.6%** |
| **I** | **Total RES in the Republic of Kazakhstan, incl . by zones** | **492.7** | **2.4%** | **368.1** | **1.9%** | **124.6** | **133.8%** |
| 1. | *Northern zone* | *210.3* | *42.7%* | *119.3* | *32.4%* | *91.0* | *176.3%* |
| 2. | *Southern zone* | *227.0* | *46.1%* | *149.7* | *40.7%* | *77.3* | *151.6%* |
| 3. | *Western zone* | *55.4* | *0.0%* | *99.1* | *26.9%* | *-43.7* | *55.9%* |
| **II** | **Total RES in the Republic of Kazakhstan, incl. by type** | **492.7** | **2.4%** | **368.1** | **1.9%** | **124.6** | **133.8%** |
| 1. | *SES* | *150.8* | *30.6%* | *140.0* | *38.0%* | *10.8* | *107.7%* |
| 2. | *WES* | *274.2* | *55.7%* | *156.8* | *42.6%* | *117.4* | *174.9%* |
| 3. | *Small HPPs* | *67.0* | *13.6%* | *71.0* | *19.3%* | *-4.0* | *94.4%* |
| 4. | *BiogasInstallations* | *0.7* | *0.1%* | *0.3* | *0.1%* | *0.4* | *233.3%* |

January-February 2021 there is an increase in the production of electricity from WPPs and SPPs compared to the same period in 2020.

million kWh

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Name** | **2021** | **2020** | **Deviation 2021/2020** |
| **January February** | **share in Kazakhstan, %** | **January February** | **share in Kazakhstan, %** | **million kWh** | **%** |
|  | ***Electricity production in UES RK*** | **20393.8** | **100.0%** | **19868.3** | **100%** | **525.5** | **102.6%** |
| 1. | Production of "clean" electricity (RES + Large HPPs) | *1695.0* | *8.3%* | *1263.8* | *6.4%* | *431.2* | *134.1%* |
| 2. | Production of "clean" electricity (RES excluding Large HPPs) | *492.7* | *2.4%* | *368.1* | *1.9%* | *124.6* | *133.8%* |

Samruk-Energo JSC (SPP, WPP, small hydropower plants) for January-February 2021 amounted to 51.2 million kWh or 10.4% of the total volume of electricity generated by renewable energy facilities, which is compared to the same period 2020 is lower by 0.9 % (in January-February 2020, the generation of RES of the Company amounted to 56.2 million kWh , and the share of RES of the Company was 15.3%).

million kWh

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Name** | **2021** | **2020** | **Deviation 2021/2020,** |
| **Jan.-Feb.** | **share in Kazakhstan, %** | **Jan.-Feb.** | **share in Kazakhstan, %** | **million kWh** | **%** |
| 1 | Production of JSC " Samruk-Energo " "clean" electricity (RES excluding Large HPPs), including : | 51.2 | 10.4% | 56.2 | 15.3% | -5.0 | 0.9% |
| 2 | *JSC AlES Cascade of small HPPs* | *18.5* | *3.8%* | *21.7* | *5.9%* | -3.2 | 0.9% |
|  | *Samruk-Green Energy LLP ( SES 2 MW )* | *1.6* | *0.3%* | *0.4* | *0.1%* | 1.2 | 4% |
|   | *Samruk-Green Energy LLP ( WPP 5 MW )* | *1.2* | *0.0%* | *0.0* | *0.0%* | 1.2 | % |
|   | *First Wind Power Plant LLP WPP 45 MW* | *31.1* | *6.3%* | *34.1* | *9.3%* | -3.0 | 0.9% |

# **Centralized electricity trading JSC "KOREM"**

*(information of KOREM JSC)*

*General trading results*

Based on the results of the centralized electricity trading in February 2021, 124 transactions were concluded in the amount of 73,176 thousand kWh for a total amount of 589,632.2 thousand tenge on spot trading in the “day ahead” mode, the minimum price was 6, 7 tenge /kWh (without VAT), the maximum price is 8.2 tenge /kWh (without VAT). There were no transactions on spot trading “during the trading day” and trades for the medium and long term periods.

For the same period in 2020, the total volume of centralized trading amounted to 50,071 thousand kWh. The table below shows the price dynamics of transactions concluded at centralized trading in February 2020-2021.

Dynamics of prices established as a result of centralized trading

in February 2020-2021

|  |  |  |  |
| --- | --- | --- | --- |
| **February** | **spot trading in the "day ahead" mode** | **trades for medium- and long-term periods** | **during business days** |
| MIN price | MAX price | MIN price | MAX price | MIN price | MAX price |
| **tg /kWh ( excluding VAT)** |
| **2020** | **4.501** | **6.7** | **5.76** | **5.76** | **-** | **-** |
| **2021** | **6.7** | **8.2** | **-** | **-** | **-** | **-** |

#

# ***Results of spot trading in the "day ahead" mode***

Based on the results of spot trading in February 2021, 124 transactions were concluded in the amount of 73,176 thousand kWh, the minimum clearing price for spot trading in the “one day ahead” mode was 6.7 tenge / kWh ( without VAT), and the maximum is 8.2 tenge / kWh (without VAT).

The table below shows the final day-ahead spot trading results for February 2021.



# The table shows that the total demand amounted to 111,480 thousand kWh, while the total supply amounted to 73,176 thousand kWh. Unsatisfied demand in February 2021 amounted to 39,168 thousand kWh, and supply volume 0 thousand kWh . In the process of spot trading, 409 orders were accepted into the trading system, of which 332 were from buyers and 77 were from sellers.

# ***Results of spot trading "during the trading day"***

# According to the results of the auctions held in February 2021, no deals were concluded. According to the results of the auctions held in February 2020, no deals were also concluded.

# ***Trading results for the medium and long term***

# In February 2021 and for the same period in 2020, based on the results of trading for the medium- and long-term periods, no transactions were concluded.

# For the same period in 2019, for trading in electricity for the medium and long term, 1 transaction was concluded with a volume of 336 thousand kWh for a total amount of 1935.36 thousand tenge. The minimum and maximum price for this type of centralized trading amounted to 5.76 tenge / kWh (excluding VAT).

# **Export-import of electrical energy**

In order to balance the production and consumption of electricity in January-February 2021, exports to the Russian Federation amounted to 230.49 million kWh , imports from the Russian Federation - 249.92 million kWh .

Export of JSC " KEGOC " - 223.11 million kWh , import of electricity from the Russian Federation for the reporting period in the amount of 20618 million kWh .

million kWh

| **Name** | **20 20 January -February** | **202 1 January -February** | **Δ 2021/2020** |
| --- | --- | --- | --- |
| **2260.8** | **-52.8%** |
| **Export of Kazakhstan** | **-516.05** | **-602.63** | -86.57 | 17% |
| **in Russia** | -169.74 | -230.49 | -60.75 | 36% |
| **in the IPS of Central Asia** | -346.31 | -372.14 | -25.83 | 7% |
| **Import of Kazakhstan** | **201.82** | **249.92** | 48.11 | 24% |
| **From Russia** | 199.17 | 249.92 | 50.75 | 25% |
| **from IPS Central Asia** | 2.65 | 0.00 | -2.65 | -100% |
| **Balance- flow "+" deficit, "-" excess** | **-314.23** | **-352.70** | -38.47 | 12% |

# **SECTION II**

# **Status of formation of the Common Electricity Market of the Eurasian Economic Union**

The common electricity market of the Eurasian Economic Union is planned to be formed by integrating the national electricity markets of **Armenia, Belarus, Kazakhstan, Kyrgyzstan and Russia.** The EAEU Member States are gradually forming a common electric power market of the Union on the basis of parallel operating electric power systems, taking into account the priority provision of electric energy to domestic consumers of the Member States.

At the same time, the balance of economic interests of producers and consumers of electric energy, as well as other subjects of the EAEU OER, will be observed.

May 29, 2019 as part of the celebration of the fifth anniversary of the signing of the Treaty on the Eurasian Economic Union The Supreme Council signed an international agreement on the formation of a common electric power market of the Union in the form of a Protocol on amendments to the Treaty on the Eurasian Economic Union dated May 29, 2014 (in terms of the formation of a common electric power market of the Eurasian Economic Union).

On December 20, 2019, the Supreme Council adopted Decision No. 31 “On the plan of measures aimed at the formation of a common electricity market of the Eurasian Economic Union”, which establishes, among other things, the deadlines for the approval and entry into force of the rules for the functioning of the Union’s common electricity market, as well as other acts provided for by the specified protocol.

At present, the EAEU Member States are working on the development and harmonization of the rules for the functioning of the EAEU CER.

In 2021, one meeting of the Advisory Committee on the Electricity Industry under the EEC Board (hereinafter referred to as the Advisory Committee) was held
(14th meeting, January 21, 2021) and one meeting of the Subcommittee on the formation of the EAEU ERA of the Advisory Committee on the Electricity Industry under the EEC Board (hereinafter referred to as the Subcommittee) (56th meeting on January 14 , 57th meeting on February 5, 58th meeting on February 25-26).

Work on the formation of a common electricity market of the Eurasian Economic Union continues.

# **Status of formation of the Electricity market of the CIS**

Since 1992, 55 meetings of the Electric Power Council of the Commonwealth of Independent States (hereinafter - CIS EEC) have been held.

By decision of the EEC of the CIS (Minutes No. 50 dated October 21, 2016), the Consolidated Schedule for the Formation of a Common Electricity Market of the CIS Member States was approved.

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Events** | **Period of execution** | **Current status** |
| 1 | Implementation of activities in accordance with Section II. Action Plan for Cooperation between the EEC and the EEC of the CIS, approved on June 10, 2016. | 2016-2020 | Permanent participation of the EEC representatives at the meetings of the EEC of the CIS, representatives of the EC of the EEC of the CIS - at the meetings on the formation of the EER of the EAEU is ensured. |
| 2 | Preparation of a draft procedure for the settlement of deviations from the agreed values of interstate power flows . | 2016-2017 | The decision to develop a procedure for settling deviations from the agreed values of interstate power flows was taken at the 45th meeting of the EEC of the CIS. The draft Procedure was considered at the 29th meeting of the Working Group "Formation of a common electric power market of the CIS countries" on September 15, 2016 in Moscow (RF). In accordance with the Decision of the 47th meeting of the EEC of the CIS, the Action Plan of the EEC of the CIS for 2016 includes the development and approval of draft documents on determining the magnitude of deviations from the agreed values of interstate electricity flows and the settlement of deviations from the agreed values of interstate electricity flows . Work continues. |
| 3 | Preparation of a draft procedure for the distribution of throughput capacity of interstate sections / export-import sections between participants in export-import activities. | 2018-2020 | By the decision of the 50th meeting of the EEC of the CIS, Methodological recommendations for the metrological support of measuring complexes for metering electric energy at interstatepower lines.By the decision of the 50th meeting of the EEC of the CIS, the Schedule for monitoring the application of regulatory technical documents in the field of metrology of electrical measurements and electricity metering in the production activities of the energy systems of the CIS member states was approved. |
| 4 | Preparation of a draft procedure for compensation of costs associated with the implementation of the transit / transmission / movement of electricity through the energy systems of the CIS member states. | 2018-2020 | The unified format of the data exchange layout for accounting of interstate electricity flows , developed by the Working Group on metrological support of the electric power industry of the Commonwealth of Independent States, was approved by the decision of the 33rd meeting of the CIS EEC and recommended to the electric power industry management bodies of the CIS member states for use in organizing the accounting of interstate electricity flows and data exchange on interstate flows . |
| 5 | Harmonization of national legislation in the field of electric power industry, development and adoption of national regulatory legal documents necessary for the formation and functioning of the CIS EER. | 2020-2025 | The decision of the 51st meeting of the EEC of the CIS approved the Conceptual approaches to technical regulation and standardization in the field of electric power industry. The Regulations on the Working Group “Updating and Harmonizing the Regulatory and Technical Base for Regulating the Electricity Industry” were also approved. By the decision of the 51st meeting of the CIS EEC, the Work Plan of this Working Group was approved. |

# **Overview of the media in the CIS countries**

*(according to information from the website of the CIS EES Executive Committee)*

**Republic of Armenia**

**« Moody's investors Service "confirmed the Ba2 rating of the company "Electric Networks of Armenia"**

One of the reputable international rating agencies Moody's investors Service has confirmed the Ba2 rating of Electric Networks of Armenia, with the status of "stable", this time for a long-term. The rating of the company is unprecedented both in Armenia and in the region.

After becoming part of the Tashir companies , the Company began and continues to implement a 10-year investment program worth $726 million without interruption. Since 2015, the Company has been actively cooperating with the Asian Development Bank, the European Bank for Reconstruction and Development, the Eurasian Development Bank and the International Finance Corporation, whose loans are used to implement the Company's investment programs. At the end of the year, an agreement was signed with the International Finance Corporation (IFC), which is a member of the World Bank Group, to provide credit funds in the amount of $60 million for the implementation of investment programs. The credit funds stipulated by the agreement will be allocated to the Company in February of the current year.”

**Republic of Belarus**

# **Organizations of the Ministry of Energy system achieved key indicators in 2020**

On February 26, 2021, with the participation of the Deputy Prime Minister of the Republic of Belarus Yu. Nazarov, a meeting of the board of the Ministry of Energy was held, at which the results of the work of organizations included in the system of the Ministry of Energy in 2020 and tasks for 2021 were considered.

The key project for the industry is the construction of the Belarusian nuclear power plant. At the end of 2020, their installed capacity was 916 MW. These facilities were already actively used in January-February 2021 as part of the ongoing pilot operation of the first power unit of the station.

Particular attention was paid to the modernization of the energy infrastructure. In 2020, 1.9 thousand km of power transmission lines and 183 km of heating networks were built and reconstructed, 1.4 thousand km of gas pipelines of various categories were put into operation, 32 thousand apartments were gasified with natural gas.

Putting the plant into operation opens up additional opportunities for increasing electricity consumption in the country. The Ministry of Energy approved the Program for Increasing Electricity Consumption for Heating, Hot Water Supply and Food Cooking for 2021-2025. The document includes three main areas. The first is the construction of new electrified housing, where electricity will be used for heating and hot water supply. The second direction is the transfer of multi-apartment housing stock from the use of solid fuel to electricity. During the five-year period, it is planned to commission 85 such houses. The third direction is the transfer of the existing individual housing stock to the use of electricity for heating and hot water supply. This work is considered primarily as an alternative to gasification. First of all, it will be organized in rural settlements. All conditions for its effective implementation have been created. At the level of the Head of State, incentive tariffs for the population were approved, Decree No. 127 of April 14, 2020 determined the mechanism for reimbursement of expenses for the electricity supply of the operated housing stock.

As a result, the volume of electricity consumption by the population for heating and hot water supply in Belarus in 2020 increased by 7 times compared to 2019 - from 12.9 million kWh to 89.4 million kWh .

**Power unit No. 1 of BelNPP generated the first billion kilowatt-hours of electricity**

kWh of electricity since its inclusion in the country's unified energy system .

With the commissioning of two BelNPP power units into commercial operation, electricity generation will amount to about 18 billion kWh per year. According to the press service, the station will provide about 40% of domestic electricity needs and will allow replacing about 4.5 billion cubic meters of natural gas annually.

The Belarusian nuclear power plant with two VVER-1200 reactors with a total capacity of 2400 MW is being built according to the Russian AES-2006 project near Ostrovets, Grodno region. The first power unit should be put into operation in 2021, the second - in the first half of 2022.

# **The EDB provided Minskenergo with 101.2 million euros for the construction of a peak-reserve energy source**

The Eurasian Development Bank (EDB) and RUE Minskenergo signed an agreement to open a long-term credit line in the amount of 101.2 million euros.

### *To finance the project, the EDB attracted a targeted loan from a consortium of leading German banks, KFW IPEX Bank and Landesbank Hessen Thuringen Girozentrale . The loan is secured by insurance from the Swedish Export Credit Agency (EKN).*

The funds will be used to finance the supply of the main power equipment under a contract with Siemens Energy AB, which is necessary for the construction of a 300 MW peak-backup energy source at CHPP-5.

**The Republic of Kazakhstan**

**In 2021, 23 renewable energy facilities will be commissioned in Kazakhstan for $370 million.**

In Kazakhstan, 23 renewable energy facilities with a capacity of 391 MW will be put into operation this year, Minister of Energy N. Nogaev said .

The volume of investments in these projects amounted to $370 million.

This year, Kazakhstan will continue holding auctions for the implementation of renewable energy projects, including flexible hydroelectric power plants, the head of the department added.

In 2021, the share of RES in the total electricity generation in the country should increase from 3% to 3.3%.

“In general, in 2025 it is expected that the share of renewable energy sources in total electricity generation will reach 6%,” concluded Nogaev .

As reported, in 2020, the volume of electricity generated by renewable energy sources [amounted to](https://kursiv.kz/news/otraslevye-temy/2020-12/v-kazakhstane-v-22-raza-vyrosli-investicii-v-zelenuyu-energetiku) 3.15 billion kWh , or 3% of the total generation in Kazakhstan. Last year, 25 renewable energy projects with a capacity of 583 MW were launched in the country: these are 10 WPPs - 203.45 MW, 12 SPPs - 369.65 MW, one HPP - 4.5 MW and two BioPPs - 5.4 MW.

**Work to strengthen the power grids of the western region will begin in 2021.**

The construction of power transmission lines with a capacity of 220 kV in the direction of Tengiz - Kulsary - Atyrau - Inder - Uralsk will begin this year, Minister of Energy N. Nogaev said .

The length of the line will be 900 km, according to the minister's presentation.

Also, in order to unite the western zone with the unified electric power system (UES) of the republic, it is necessary to build power transmission lines with a voltage of 500 kV. As follows from the presentation, these are three segments: Atyrau - Aktobe (500 km, AC), Atyrau - Zhezkazgan (1400 km, DC) and Beineu - Shymkent (1500 km, DC).

kV lines in the direction of the South-Kazakhstanskaya GRES - Shymkent (600 km, alternating current).

Thus, for the uninterrupted operation of the UES of Kazakhstan, the construction of power transmission lines with a length of about 2000 km is required.

Samruk-Kazyna Foundation to begin work on strengthening the southern zone of the republic's electric power system, as well as to develop a scheme for strengthening transit links between the western regions of the country. In the future, they should be combined with the unified electric power system of Kazakhstan.

He also ordered to develop the energy balance of the republic until 2035, taking into account the projected shortage of electric power by 2027.

**Kazakhstan to build 1,500 MW maneuvering capacities by 2025**

By 2025, Kazakhstan plans to build gas and hydroelectric power plants with a total capacity of 1477 MW, Minister of Energy N. Nogaev said .

Taking into account the shortage of flexible capacities, the Ministry has worked out four potential projects for the construction of generating plants with a flexible mode in the southern region of the country.

As follows from the presentation of the minister, this year it is planned to hold auctions for the construction of four combined cycle units (CCGT) with commissioning in 2025. These are CCGTs in the Kyzylorda region for 220 MW, Turkestan region for 250 MW, Almaty region for 400 MW and Almaty for 450 MW.

Thus, by 2025, it is planned to put into operation 1320 MW of gas generation in the south of Kazakhstan, the head of the department specified.

In addition, by the end of 2025, 13 hydroelectric power plants (HPPs) with a total installed capacity of about 177.67 MW will be put into operation.

In total, from 2020 to 2030, according to the hydropower industry of the Republic of Kazakhstan, the capacity of all HPPs in the country will increase from 2684 MW to 6038 MW, according to the materials of the Ministry of Energy for the government meeting.

**Electricity shortage will come in the next couple of years**

Despite the existing electricity surplus, Kazakhstan may face a shortage of electricity in the next two or three years, S. Zhumangarin, chairman of the Agency for the Protection and Development of Competition, said .

“Today, the electricity situation is still in surplus - we produce 106 billion kWh, consume 105 billion. But experts say, and it is no secret to anyone, that in the next two or three years we are entering a deficit zone. This means that we will not have enough production of our own electricity, ”said Zhumangarin , speaking at the Open Space for the development of competition in the electricity market on Friday.

He noted that in addition to the construction of new capacities, the Eurasian Economic Union will be an important support to cover the deficit. Zhumangarin recalled that the EAEU common energy market will start operating in 2025.

“48% of generation in the country is produced by state-owned companies, the problem of state participation in the energy sector is the main one because today we cannot say that the electricity market in the country is fully competitive,” the speaker noted.

**Republic of Kyrgyzstan**

**The Ministry of Energy and Industry will appear again in Kyrgyzstan**

The Ministry of Energy will be created again in Kyrgyzstan. About this today during a meeting of the coalition of the majority of the Zhogorku Kenesh said the candidate for the post of head of government U. Maripov .

He noted that now there are nine energy companies operating in the republic, each of which has large expenses. Maripov is sure that these companies have a reserve of up to 2 billion soms, which will be freed up with effective management.

U. Maripov added that the issue of the future work of the National Energy Holding , which unites energy companies with state participation, will be considered separately.

**The Ministry of Energy replaced the chairman of the " Natsenergoholding "**

The National Energy Holding has changed its chairman. Bakyt became the new head Sydykov . Minister of Energy and Industry Kubanychbek Turdubaev the day before, February 9, introduced him to the team.

# **Electric Stations appoints new CEO**

**General Director of OJSC "Electric Stations" by decision of the board of directors the day before, February 18, became Talaibek Bektenov .**

**Today there are no reserves for generating an additional volume of energy, - U. Maripov**

“Currently, there are no reserves to generate new volumes of energy,” U. Maripov, a candidate for prime minister, said on February 3 at a plenary session of parliament.

This is an obstacle to the growth of production. Poor management, growth in the number of consumers, and corruption in this sector lead to big problems, he said.

“It is difficult to say that previous investments were effective, so comprehensive reforms are needed. You yourself know that in this industry, the external debt today is 137 billion soms, due to the fact that the US dollar rose, 20 billion soms were automatically added to the total debt,” he said.

The reforms include the full use of the potential of the projects of the Naryn cascade of HPPs, the Kokomeren cascade of HPPs, the Sarydzhaz cascade of HPPs, small hydropower plants, alternative energy, tariffs, he said.

He also said that the issues of agriculture and regional development play an important role, therefore, within the framework of economic zoning, programs will be developed for each region.

**Russian Federation**

**Ukraine resumed import of electricity from Russia**

Ukraine has resumed the import of electricity from Russia, the supply capacity is currently about 200 MWh .

In January, Ukrainian companies resumed commercial imports of electricity from Belarus, as of Monday, the supply capacity is 310-480 MWh .

**"Green" energy in Russia risks losing billions of investments**

The renewable energy sector in the Russian Federation may lose 150-180 billion rubles of investments due to a reduction in the volume of the green generation support program after 2025.

In Russia, from 2014 to 2024, there is a program to support "green" energy (CSA RES), including the construction of power plants, which are selected through a competitive selection. They are guaranteed a 15-year return on investment with a base yield of 12% per annum, adjusted for OFZ yields. A decision was made to extend the program to support renewable energy sources (RES) until 2035, some adjustments are still being discussed, and the possibility of reducing the volume of the program after 2025 is being considered.

# **Russia discussed with Tajikistan the prospects of the Sangtuda hydroelectric power station**

The Minister of Energy of the Russian Federation N. Shulginov and the Minister of Energy and Water Resources of Tajikistan D. Juma at the meeting discussed the functioning of the Sangtuda HPP-1 and the possibility of exporting the electricity generated by the station.

Sangtudinskaya HPP-1 was built in 2009 with the assistance of JSC Inter RAO. The station makes a significant contribution to the energy supply of the Tajik economy, providing up to 12% of the generation of all electricity in Tajikistan.

The share of Russian companies in the authorized capital of OAO Sangtudinskaya HPP-1 is 75% minus 1 share, the share of the Republic of Tajikistan is 25% plus 1 share.

**The Ministry of Energy proposes to confirm the origin of electricity with a certificate**

To offset the results of the implementation of climate projects in the Russian energy sector, it is proposed to introduce certificates of origin of electrical energy, the Ministry of Energy sent the relevant bill to the Cabinet . This was announced by the deputy director of the department of the consolidated state policy of the department A. Kulagin.

The official explained that for the consumer of electricity, such a certificate would be evidence of a reduction in the carbon footprint in the production of final products. In the coming years, this will become an important competitive advantage in foreign markets. For owners of generating facilities operating on the basis of low-carbon energy sources, these certificates will become an additional way to acquire investments. In sum, this approach will ensure the protection of the interests of Russian companies in international markets.

**The Ministry of Energy presented a draft law on the introduction of a target model for managing demand for electricity**

The Ministry of Energy of Russia has developed and published for public discussion [a draft federal law aimed at introducing a target model of electricity demand management](https://regulation.gov.ru/projects#npa=112234) .

The project introduces a new type of service - services for managing changes in electricity consumption, and also defines and consolidates the legal status of electricity consumption management aggregators .

“The adoption of the developed federal law will make the electricity demand management mechanism an integral part of the wholesale electricity and capacity market, which will have a positive impact on price dynamics,” the Ministry of Energy explained .

The development of the project is a continuation of the initiative to introduce the practice of electricity demand management in the UES of Russia. As part of it, since January 2017, a price-dependent consumption mechanism was launched for consumers of the wholesale electricity market, and in 2019-2020, a pilot project was carried out to involve retail market consumers in demand management by creating specialized organizations - demand management aggregators . The pilot project showed the viability of the principles laid down and aroused great interest among both electric power companies and electricity consumers.

During the pilot project, 70 aggregator companies representing more than 300 control facilities, each of which, in turn, consists of power receiving devices of one or more consumers, took part in it.

In a year and a half, the capacity of retail consumer demand management resources has grown from 50 MW to 600 MW, and the number of regions where the project is present has exceeded 50.

In 2021, it is planned to extend the pilot project after the relevant decision is made by the Russian Government.

# **Rosseti has appointed a new CEO**

The board of directors of Rosseti at a meeting on February 12 elected Andrey Ryumin, who previously held the post of acting CEO, as the company's general director . head of " Rosseti ".

**The Republic of Tajikistan**

**Tajikistan signed agreements with Afghanistan and Uzbekistan on the supply of electricity for the current year**

The state energy holding "Barki Tojik " signed agreements with Afghanistan and Uzbekistan on the export of electricity for the current year.

M. Asozoda , the first deputy head of Barki Tojik , told reporters , under the agreement, 50 MW of electricity (about 1.2 million kWh ) is supplied to Afghanistan every day until April.

According to him, an agreement on the supply of Tajik electricity was also signed with Uzbekistan. In summer, Tajikistan undertakes to export 1.5 billion kWh of electricity to this country.

Electricity is exported to Afghanistan via two transmission lines - 110 kV and 220 kV. The cost of electricity supplied through a 110 kV power transmission line is 3 cents per kilowatt, and for 220 kV - 4.5 cents with an annual increase of 3%.

**The Ministry of Energy announced the deadlines for the commissioning of facilities under the CASA-1000 project in Tajikistan**

First Deputy Minister of Energy and Water Resources of Tajikistan D. Shoimzoda said at a press conference in Dushanbe that the construction of the Tajik section of CASA-1000 will be completed in 2021.

He also noted that, according to the feasibility study of the CASA-1000 project, $1.86 billion is needed for its implementation, of which $314 million will be allocated by Tajikistan.

At this stage, the necessary funds have been allocated by the World Bank, the Islamic Development Bank, the European Investment Bank and the European Bank for Reconstruction and Development.

Shoimzoda added that about $111 million has been spent in the Tajik part of CASA-1000 to date, and noted that after verification of the work performed, another $180 million will be funded.

In general, the CASA-1000 project provides for the construction of the following facilities:

* Power transmission line 500 kV " Datka-Sughd 500" with a length of 477 kilometers, of which 28 km of the line falls on the territory of Tajikistan and the expansion of the substation "Sughd-500";
* Power transmission line 500 kV "Regar- Sangtuda " with a length of 115 kilometers and expansion of the substation "Regar-500";
* converter station at Sangtuda to convert AC to DC and construction of a 1,300 MW Novshara substation in Pakistan;
* the Sangtuda-Novshara transmission line in Pakistan with a length of more than 750 kilometers, of which 117 kilometers are in the territory of Tajikistan.