

First Year of Georgian Energy Exchange Market 2024

The opening of the Energy Exchange Market on July 1, 2024, marked the next step in the reform of the Electricity Sector. The transitional model of the market introduced a new segment in practice, where the market price is determined according to the rules established by the Georgian National Energy and Water Supply Regulatory Commission. The implementation of the transitional market model was the first significant step towards the new electricity market model.

The work process of GENEX was transitioned from the testing phase to real operations. During the six months of trading, there were no disruptions to the trading process. Participants had the opportunity to take part in trading according to the rules of the day-ahead and intraday markets.

The transitional model of the market

On July 1, 2024, a transitional electricity market model was launched. The transitional model involves the introduction of the exchange market within the existing market framework.

Although the balancing period remains a month under the transitional model, hourly products are traded on the electricity exchange for physical delivery in specific hours.

In the transitional market model, only a limited number of participants are allowed to trade on the electricity exchange. These participants include:

- Participants, allowed to purchase electricity on the Exchange Market:
 - Direct consumers for ensuring their own electricity supply;
 - System operators for purchasing electricity to cover network losses;
 - Universal supplier, public supplier, and last-resort suppliers for purchasing electricity required for their supply obligations.
- Participants, allowed to sell electricity on the Exchange Market:
 - Producers with a "Guaranteed Power Purchase Agreement" during periods when they are not obligated to supply electricity under the agreement and within the limits of their generated electricity.
 - Enterprises benefiting from a government support scheme in accordance with Georgian government regulations, during periods when they are not under the support scheme.
 - Other electricity producers for electricity generated beyond the scope of public service obligations.

Market Participants

The first auction on the day-ahead electricity market was held on July 1, 2024. At the time of the first auction, four participants were registered on the exchange. As of the end of 2024, the number of registered participants on the exchange has grown to 21. The list of registered participants is published on the official website of JSC "Georgian Energy Exchange" (GENEX)

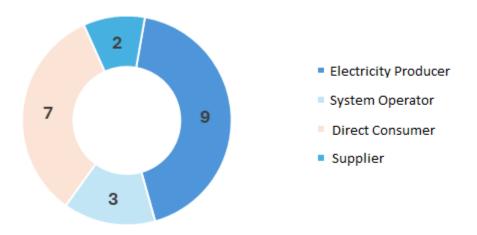


Figure 1. Registered Participants on the Exchange as of the End of 2024

Trading on the Electricity Exchange Market

Following the first auction, trading took place for 20 delivery days in the second half of 2024. The first transaction on the exchange market occurred on July 24. Public information on trading results is available on the Georgian Energy Exchange (GENEX) website.

In 2024, the total traded electricity volume on the exchange amounted to 17,490 MWh, with an average weighted price of 134.55 GEL/MWh (13.455 Tetri/kWh). The highest trading volume was recorded in July, reaching 11,624.6 MWh.

The monthly price of balancing electricity was always higher than the highest price recorded on the exchange during the respective month. As a result, electricity buyers collectively saved approximately 440,000 GEL by purchasing 17,490 MWh of electricity on the exchange.

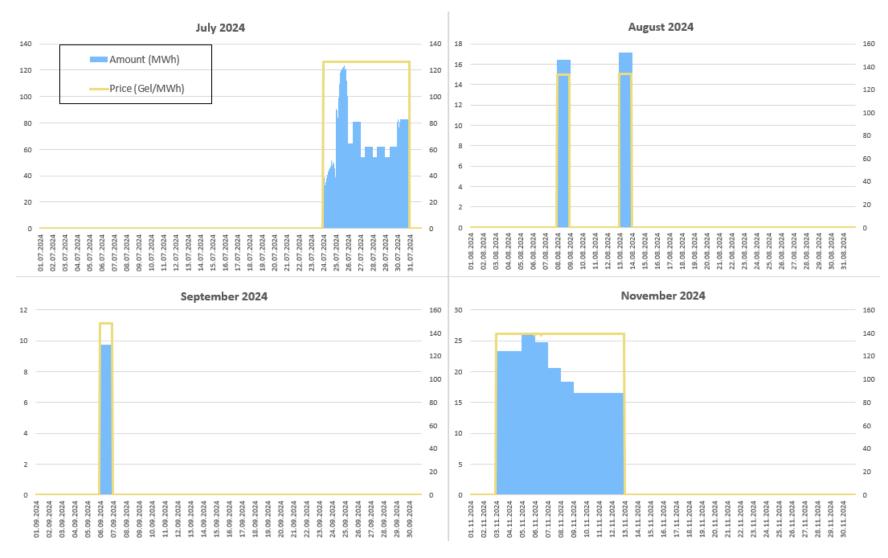


Figure 2. Trade Price Dynamics

The current electricity market model provides that electricity imported by JSC "Electricity System Commercial Operator" (ESCO) and electricity produced under Guaranteed Power Purchase Agreements (PPA) is sold exclusively as balancing electricity. As a result, this electricity, which accounted for approximately 16% of total demand in 2024, is not available for sale in other market segments, such as bilateral contracts or the exchange. Given this restriction, the market remains structurally deficit-driven on a monthly and yearly basis, meaning demand consistently exceeds supply. Consequently, Electricity sellers can easily find buyers and Electricity buyers face challenges in securing the required amount of electricity. This situation, along with other factors, is reflected in the supply and demand dynamics on the exchange.

Between July and December 2024, demand on the exchange significantly exceeded supply. During this period the total demand registered on the exchange amounted to 1,545,806.24 MWh and the total supply offered by sellers was only 67,723.2 MWh. The respective supply and demand figures are presented in Figure 3.

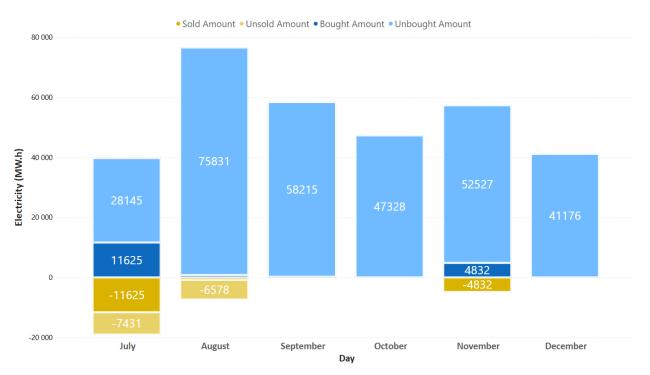


Figure 3. Supply and Demand on the Energy Exchange Market

The minimum selling bid price recorded on the exchange was 126 GEL/MWh, while the maximum buying bid price reached 150 GEL/MWh. Detailed information is provided in Table №1. As seen in the figure, the willingness of participants to pay for electricity was 1-19% lower than the price of balancing electricity. This allowed buyers to purchase electricity at a lower cost compared to the alternative. Although the balancing electricity price is not known at the time of

exchange trading, participants can make informed predictions, enabling them to take advantage of market opportunities. From Figure 3, it is evident that at least some of the offered but unsold electricity could have been traded if buyers had placed higher bid prices. Even in this case, purchases would still have been cheaper than the alternative. A higher risk tolerance among electricity buyers, driven by expectations of benefits, could create incentives for sellers to offer more electricity on the exchange. However, this alone cannot be considered the sole reason for low liquidity on Energy Exchange Market.

table 1

	Maximum Buying Bid (GEL/MWh)	Maximum Selling Bid (Gel/MWh)	Price of Balancing Electricity (GEL/MWh)
July	126	126	156.16
August	134	133	154.74
September	149	143	149.98
October	145	-	144.34
November	146	138	154.97
December	150	-	164.05

The highest aggregated demand was recorded on August 15, reaching 3,041.1 MWh, which accounted for 7.17% of the total demand for that delivery day.

Between July and December 2024, buyers' price acceptance behavior remained unchanged. A match between buyers' and sellers' prices occurred on only 20 delivery days.

The electricity market remains deficit-driven. Electricity generated by PPA power plants and imported electricity are sold through bilateral contracts, meaning that sufficient electricity is not available on the exchange for buyers, as it is already sold outside the exchange.

One possible reason for the static nature of bid prices could be the unchanged expectations regarding balancing electricity prices.

Market Data

Trading results are published daily on the Georgian Energy Exchange (GENEX) website, in accordance with the "Day-Ahead and Intraday Market Rules". Interested parties have access to public information that the exchange operator is obligated to disclose.

In addition to mandatory disclosures, GENEX provides stakeholders with tools on its website that enable easy processing and analysis of various market data.

