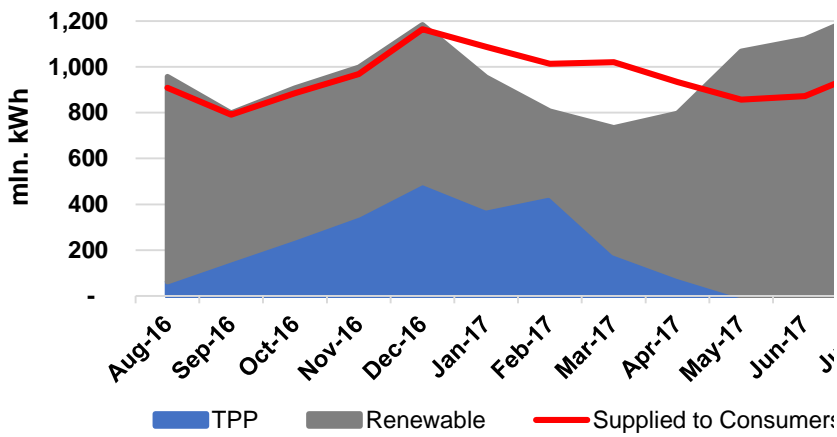




1. Electricity Generation – Consumption – Trade

Figure 1. Electricity Consumption and Generation (mln. kWh)



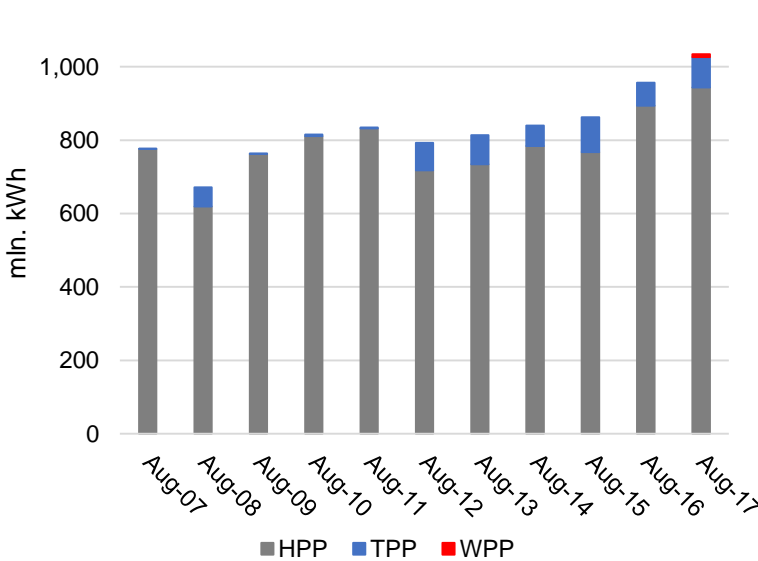
Source: Electricity System Commercial Operator (ESCO)

In August 2017, Georgian power plants generated 1,035 mln. kWh of electricity. This corresponds to an 8% increase in total generation in comparison with the previous year (in 2016, total generation in August was 957 mln. kWh). Generation decreased by 17% with respect to July 2017 (in July 2017 total generation was 1,247 mln. kWh).

Following the traditional seasonal pattern, renewable sources of electricity produced 92% of total generation (952 mln. kWh), while thermal power generation accounted for only 8% of total generation (83 mln. kWh). Consumption of electricity on the local market was 1,038 mln. kWh, marginally bigger than the amount generated. Looking at the seasonal trends, generation from TPP is highest between December and February, and lowest between May and July, when renewable generation peaks.

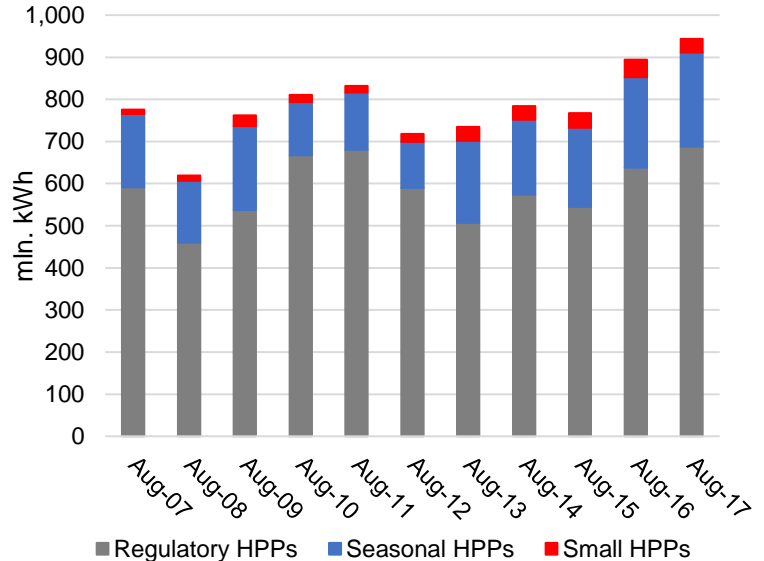
Among different sources of electricity, hydropower remained dominant. Specifically, in August 2017, hydropower (HPP) generation amounted to 944 mln. kWh, wind power (WPP) was 8 mln. kWh, and thermal power (TPP) was 83 mln. kWh (**Figure 2**). In hydropower generation, large (regulatory) HPPs produced 73% (688 mln. kWh) of electricity, while seasonal and small HPPs produced, respectively, 24% (224 mln. kWh) and 3% (32 mln. kWh) (**Figure 3**).

Figure 2. Electricity Generation by Sources (mln. kWh)



Source: ESCO

Figure 3. HPP generation by type (mln. kWh)

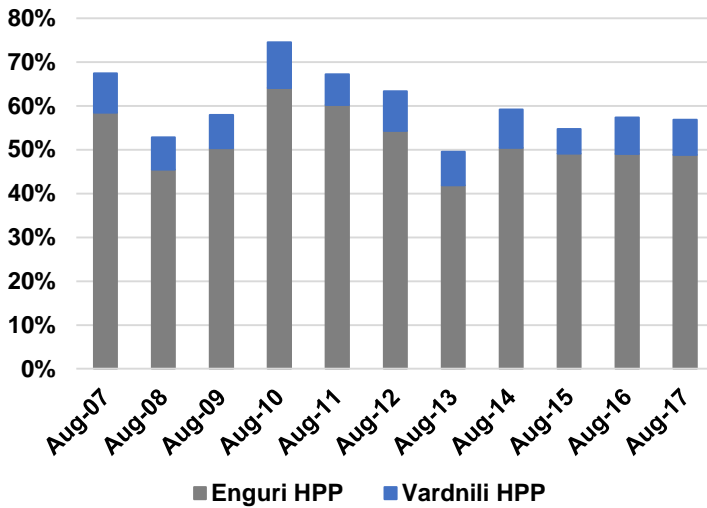


Source: ESCO

Among large HPPs, Enguri and Vardnili generated the largest amounts of power, producing 505 mln. kWh and 83 mln. kWh, respectively, representing 57% of total generation (**Figure 4**). These HPPs also represent around 86% of generation for regulatory HPPs. Overall power generation has increased by 8% (**Figure 5**) from August 2016, mainly due to a 31% increase in TPP, and an 8% increase in regulatory HPP generation.

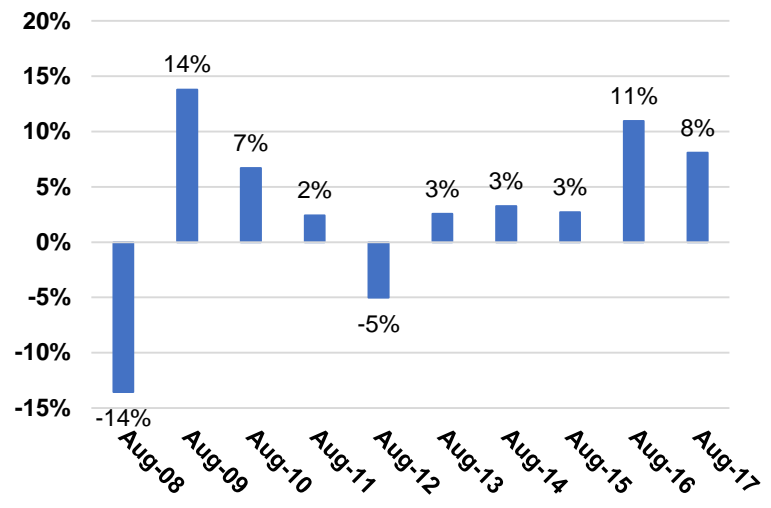


Figure 4. Share of Enguri and Vardnili in total generation (mln. kWh)



Source: ESCO

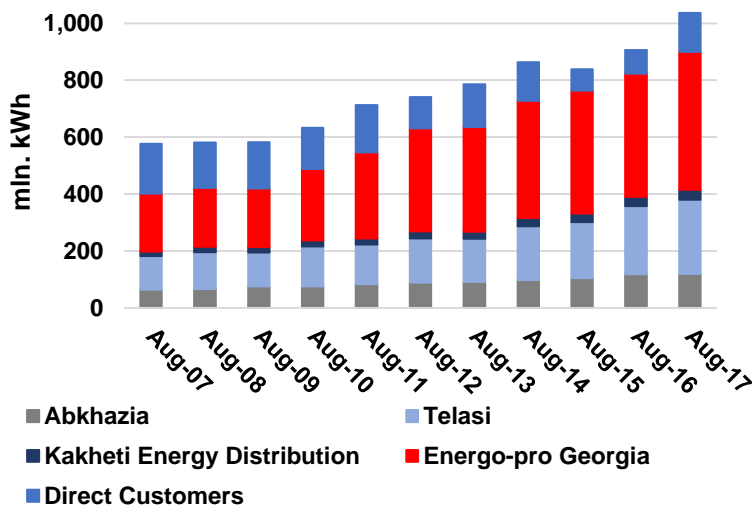
Figure 5. Annual growth of generation (%)



Source: ESCO

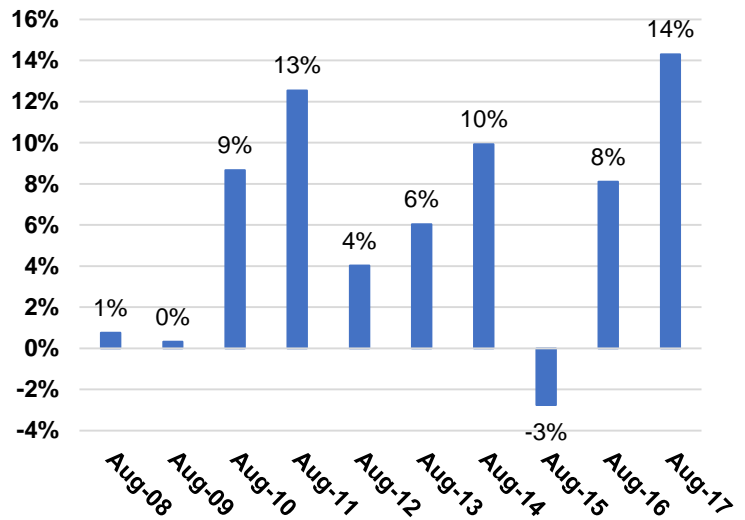
In August 2017, total electricity consumption of Georgia came from Telasi – 25% (261 mln. kWh), Energo-Pro Georgia – 47% (484 mln. kWh), Kakheti Energy Distribution – 3% (35 mln. kWh), Abkhazia – 11% (119 mln. kWh) and direct customers – 13% (138 mln. kWh) (**Figure 6**). Compared to August 2016, demand from Telasi increased by 9%, from Energo-Pro Georgia by 12%, from Kakheti Energy Distribution by 9%, from Abkhazia by 2%, and from direct customers by 66% (a large increase caused primarily by consumption of “Georgian Manganese”). Overall, the annual increase in electricity consumption reached 14% in August 2017 (**Figure 7**).

Figure 6. Electricity Consumption by Type of Customer (mln. kWh)



Source: ESCO

Figure 7. Annual electricity consumption growth (%)

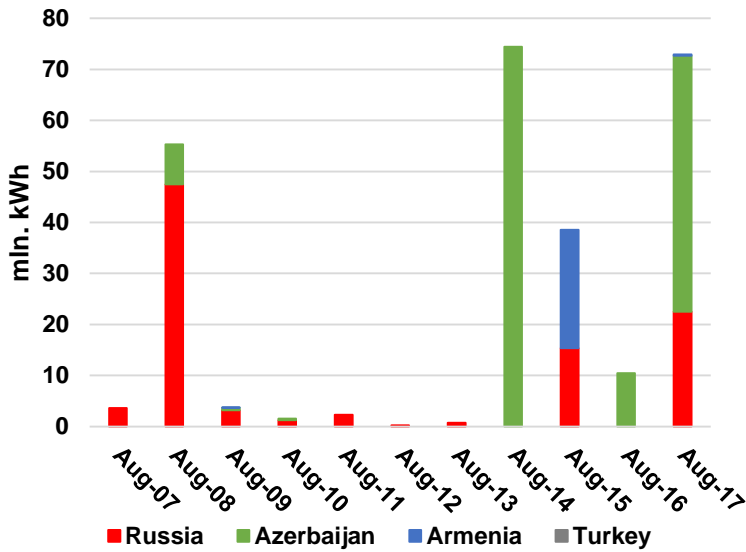


Source: ESCO

In August 2017, Georgia imported 73 mln. kWh of electricity. 69% of this electricity was imported from Azerbaijan, and 31% from Armenia (**Figure 8**). Unlike last month, August 2017 has not shown a large increase in exports, primarily due to the month-long drought in the country. Export from Georgia reached 32 mln. kWh (a 16% increase compared to August 2016). 36% of exports went to Turkey, and 64% went to Armenia (**Figure 9**).

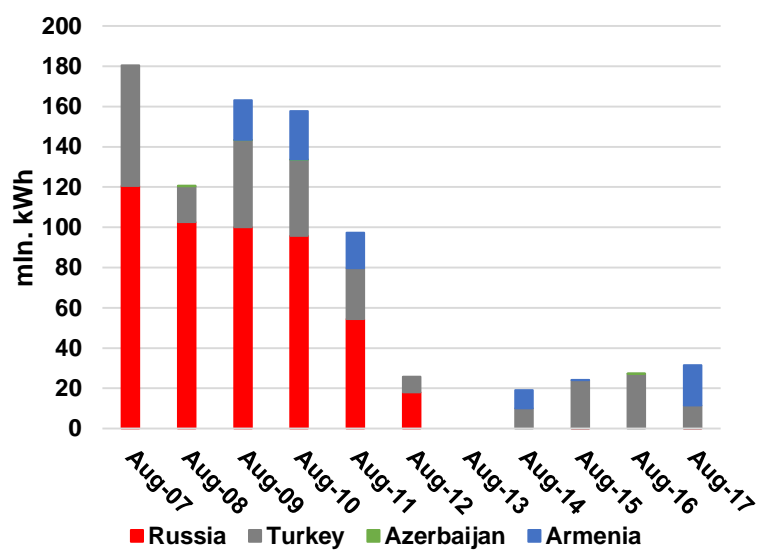


Figure 8. Import (mln. kWh)



Source: ESCO

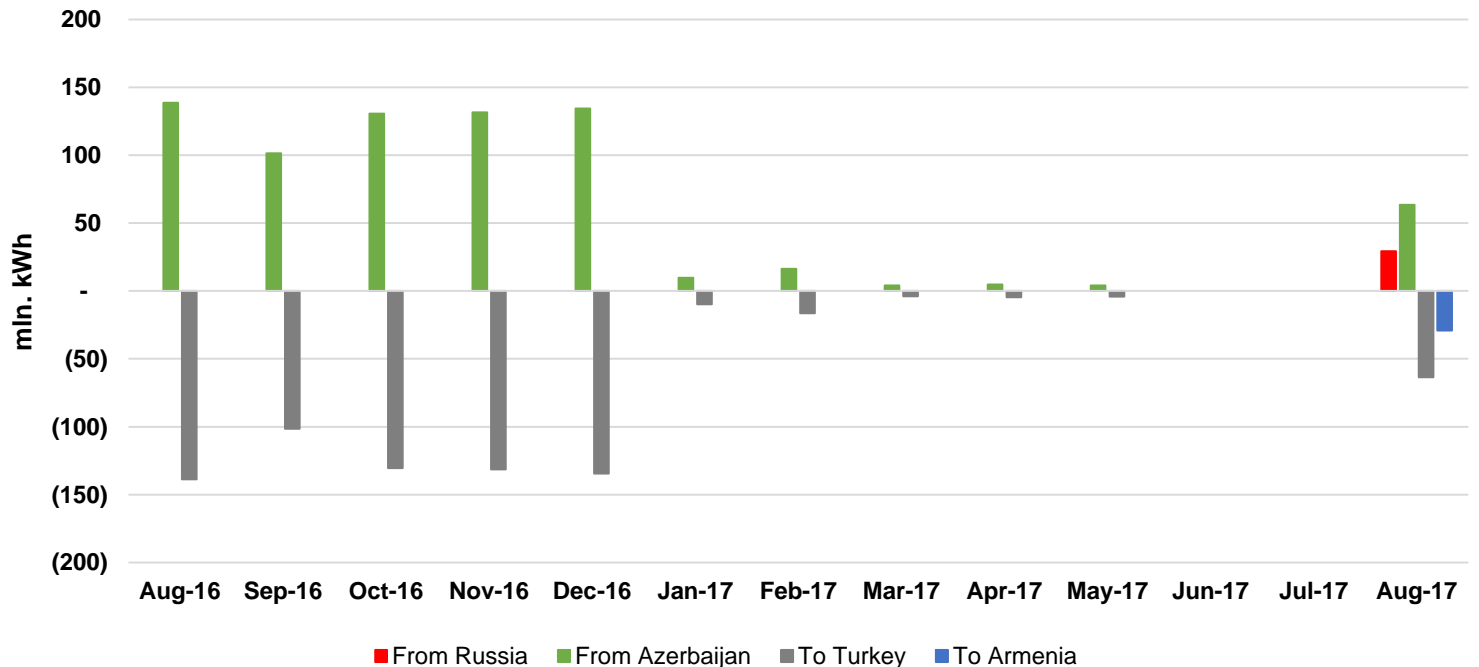
Figure 9. Export (mln. kWh)



Source: ESCO

Transit in August 2017 amounted to 93 mln. kWh. Around 69% of this electricity was transited from Azerbaijan to Turkey, and 31% was transited from Russia to Armenia (**Figure 10**). Georgia seems to be on its way to becoming a trading hub between neighbouring electricity markets.

Figure 10. Electricity transit through Georgia (mln. kWh)

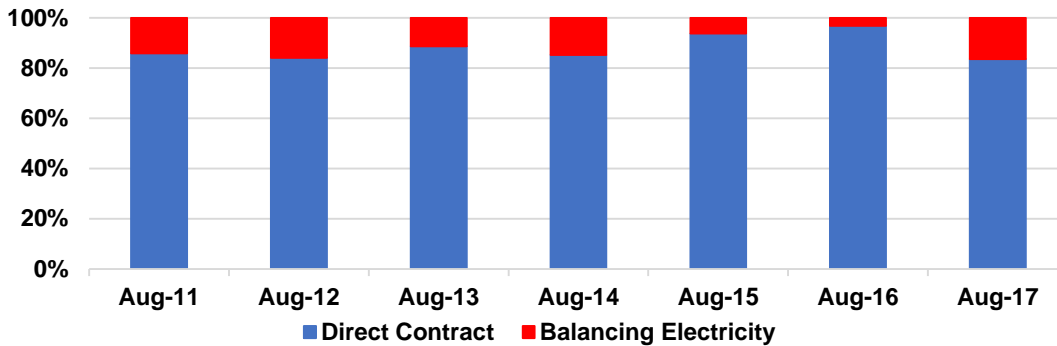


Source: ESCO



2. Market Operations

Figure 11. Electricity purchased / sold shares of direct contracts and balancing electricity

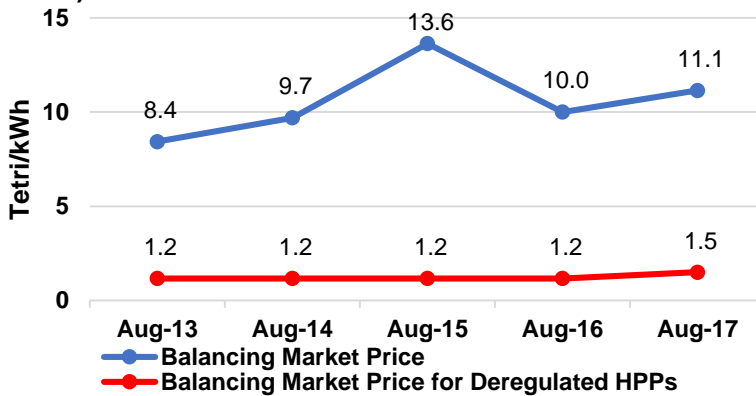


Source: ESCO

In August 2017, 84% (914 mln. kWh) of electricity sold on/from the local market was through direct contracts. The rest, 16% (180 mln. kWh), was sold as balancing electricity. The share of balancing electricity has increased compared to the past two years, because of increased consumption over the month, leading to a significant need for imports (Figure 11).

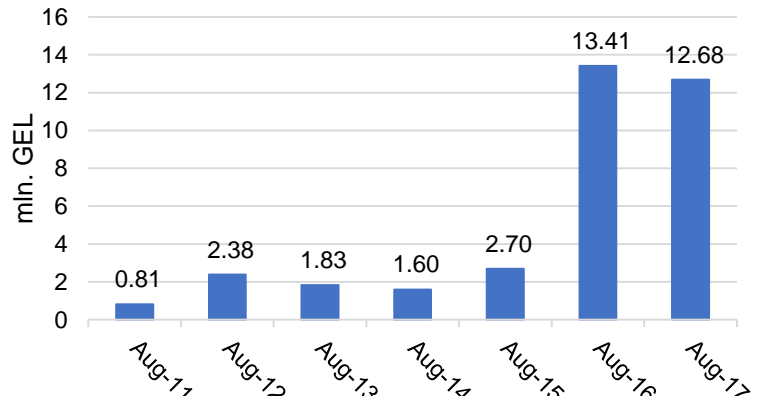
The weighted average price of the balancing electricity was 11.1 tetri/kWh in August 2017, which is an annual increase of 11%, with respect to August 2016. As for the weighted average price for deregulated (small) HPPs, it reached 1.5 tetri/kWh (Figure 11). The difference between the overall balancing electricity price, and that for deregulated HPPs, is coming from the regulatory structure of the balancing electricity market (see July 2017 report). Guaranteed capacity payments in August 2017 were roughly 12.68 mln. GEL, a decrease of 5% compared to August 2016 (Figure 12). This reduction is due to smaller guaranteed capacity fees (set by the national regulator) paid to several TPPs (see July 2017 Report). The higher cost of guaranteed capacity, compared to earlier years (2011-2015), is primarily caused by payments to the newly built Gardabani TPP, which became operational in November 2015.

Figure 11. Balancing electricity prices Weighted Average and Weighted Average price for deregulated HPPs (tetra / kWh)



Source: ESCO

Figure 12. Cost of Guaranteed Capacity (mln. GEL)



Source: ESCO

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