



# Georgia's Energy Sector Electricity Market Watch

Georgia | Energy  
Monthly Bulletin  
December 14, 2016

## Modified rules for expression of interest in power plants have been released.

The updated rules require all PP owners to sell their energy in Georgia for eight out of 12 months (September through April) every year for the first ten years (instead of 15 years prior to the update). Investors who want to apply for PPs from the list published by the Ministry of Energy are requested to sell electricity only to ESCO and provide a financial model in support of the requested tariff and expected IRR. After construction, the investor must provide an audit report evaluating the capital expenditures incurred. The report might result in the lowering of the tariff if capex is lower than set out in the model (giving the same IRR); a tariff increase is not considered.

**Kakha Kaladze is back to his post of Minister of Energy.** He had resigned from his post while campaigning with the Georgian Dream, as Georgian law requires all state ministers, except the Prime Minister, to step down from active duty if they are running for parliament in the elections. Mr. Ilia Eloshvili, former and current deputy Minister of Energy, held the position of Minister of Energy while Kakha Kaladze was campaigning with the Georgian Dream.

**A new map of potential HPPs has been published on the Ministry of Energy website.** The Ministry of Foreign Affairs of Norway issued a grant of 1.8mn Euro in 2013, aimed at digitalizing hydrological and meteorological data that has been accumulated over decades, correcting mistakes, and filling in informational gaps. Analysis of the data on river conditions and capex requirements revealed a list of high-priority HPPs. Using the GIS system, a digital map of potential HPPs was published on the Ministry of Energy website, providing general information like coordinates, installed capacity, generation, capex requirements, etc. for each HPP.

**Net metering, a new opportunity for consumers.** Based on changes in legislation, energy consumers are allowed to install micro power plants (<100kW of installed capacity) that use renewable energy sources (mainly solar panels), meet their own energy needs, and supply surplus energy to the DSOs (Telasi, Energo-Pro, or Kakheti Distribution). The DSO will be obligated to satisfy unmet demand. Consumed and supplied energy amounts will be netted on an annual basis for settlement with the DSO. Interested parties will need to apply to the DSO.

**A new special administrator, Mamuka Kobakhidze, has been appointed to LTD KazTransGas Tbilisi through end-2017.** LTD KazTransGas Tbilisi has been managed by a special administrator, appointed by GNERC, starting March 16, 2009. The administrator holds the authority of General Director and is in charge of continued implementation of licensed activities. The appointment of a special administrator was necessitated by outstanding debts of LTD KazTransGas Tbilisi (GEL 68.8mn). Prior to this role, Mamuka Kobakhidze held the positions of Director of Georgian Energy Development Fund and General Director of Georgian Gas Transportation Company.

**The list of electricity exporters in 2017 is largely defined.** Net Transfer Capacity (NTC) for the "Meskheti" transmission line connecting Georgia and Turkey was announced for the year 2017. Maximum capacity of the line is 700MW, but according to the Interconnection Operation Agreement, parties might limit transfer capacities on an annual basis. For the main export months of 2017, NTC was set at 250MW in May, 300MW in June, and 700MW in July. The line was allocated to the group of companies with long term transmission rights (TDA owners) and to Eastern Power Corporation Ltd. The latter secured its allocation via special auction (gcat.com.ge). The line is only partially utilized, leaving room for transit companies and other exporters willing to export to Turkey.

**Allowed export volumes for 2017 have been announced by Georgian State Electrosystem (GSE).** Export allocations for the summer months were set as follows: May - 35.6GWh, 48MW; June - 126.7GWh, 176MW; and July - 114.6GWh, 154MW. These amounts can be exported to any neighboring country, subject to auction allocation. The auction revealed that 10.3% of annual export volume will be directed to Armenia, while the export market and exporter identity for 38.7% of annual export capacity remains undetermined, to be allocated via auction.

## Electricity market highlights

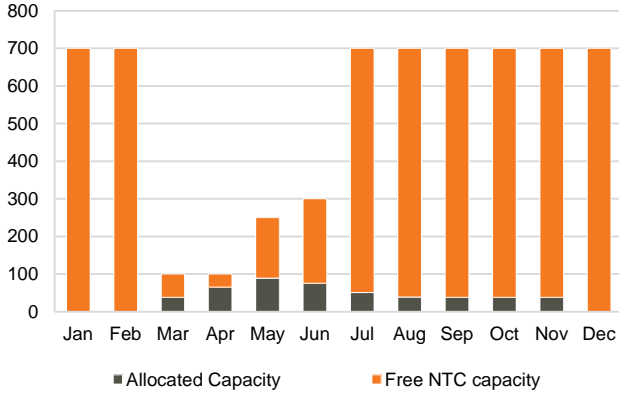
Balancing price of electricity in Georgia, October*	USc 4.7 / kWh
Market clearing price of electricity in Turkey, October *	USc 4.7 / kWh
Average export price for Georgian electricity, October **	USc 6.2 / kWh
Average import price for electricity, October	USc 5.2 / kWh
Y/Y change in domestic consumption in kWh, 10M16	4.7%
Y/Y change in exports in kWh, 10M16	-12.7%
Y/Y change in exports to Turkey in kWh, 10M16	-26.3%

\*Average exchange rates in October GEL/US\$ = 2.3599; TRY/US\$= 3.0679

\*\* Exports were negligible in October (0.155 GWh)

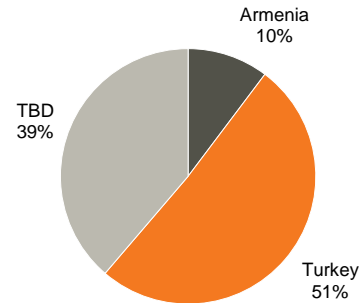


Figure 1: NTC usage of Turkish Interconnection Line, 2017(MW)



Source: GSE

Figure 2: Planned export, 2017 (GWh)

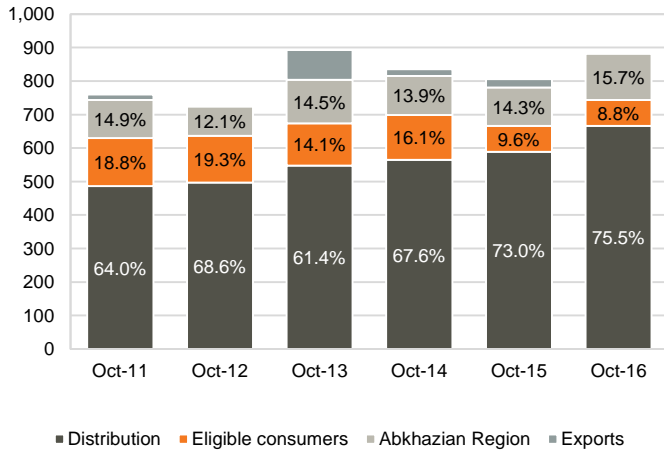


Source: GSE

### Electricity Consumption, Exports, and Generation

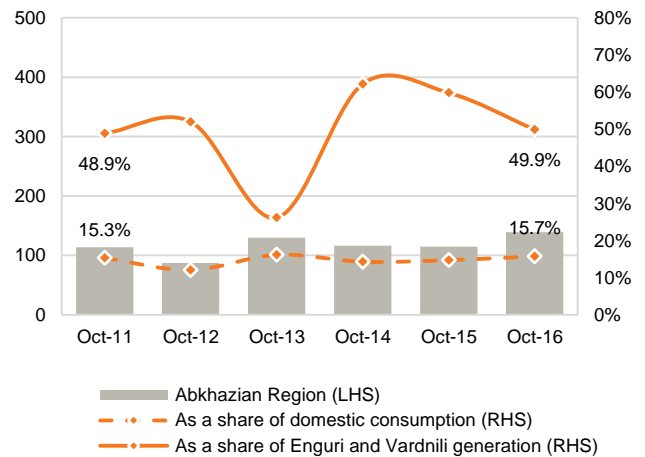
Domestic consumption increased 13.0% y/y in October 2016, with Tbilisi and the Abkhazian region driving the growth. DNO consumption was up 13.2% y/y, with the greater Tbilisi area (Telasi subscribers) posting an outsized 24.9% y/y growth rate. Usage of Energo-Pro subscribers was up 8.0% y/y, while Kakheti Energy Distribution usage was up 5.0% y/y. Consumption of eligible consumers was largely flat, down 0.2% y/y from an already very low base in October 2015 (-42.4% y/y). Georgian Manganese drove the trend in direct consumption, up only 5.7% y/y from the October 2015 low base (-47.4% y/y). Consumption of the Abkhazian region was up 20.8% y/y, following a 17.3% y/y increase in September 2016. Electricity exports were negligible. A significant amount of electricity transit (130.6 GWh) took place from Azerbaijan to Turkey.

Figure 3: Domestic electricity consumption and export, GWh



Source: ESCO

Figure 4: Electricity consumption, Abkhazian Region (GWh)

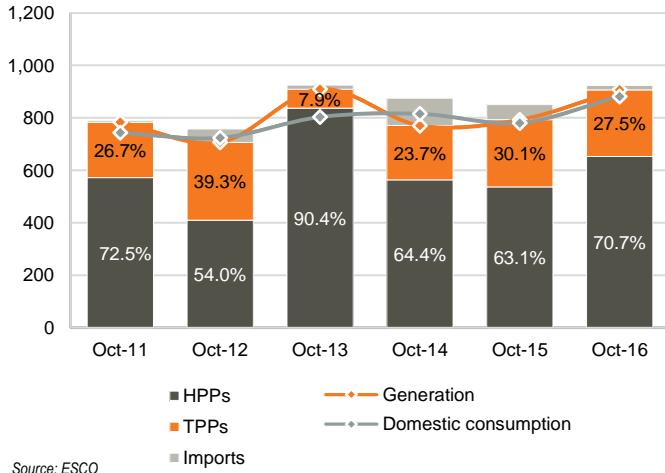


Source: ESCO

Domestic consumption needs were met almost entirely by domestic generation in October 2016, with imports accounting for a mere 1.8% of total electricity supplied to the grid. Total generation was up 14.4% y/y, with regulated HPP generation increasing 25.3% y/y and accounting for 86.9% of total hydro generation. Generation by Enguri and Vardnili was up 44.8% y/y, while generation by deregulated HPPs increased 1.7% y/y. TPP generation was roughly flat (-0.6% y/y). Guaranteed capacity was provided by each of the five guaranteed capacity sources for the entire month. The GC fee almost quadrupled (3.9x), to USc 0.92/kWh, compared to October 2015 and was up 8.3% m/m. Electricity imports in October 2016 were down 71.0% y/y, with Azerbaijan the sole source of imports.

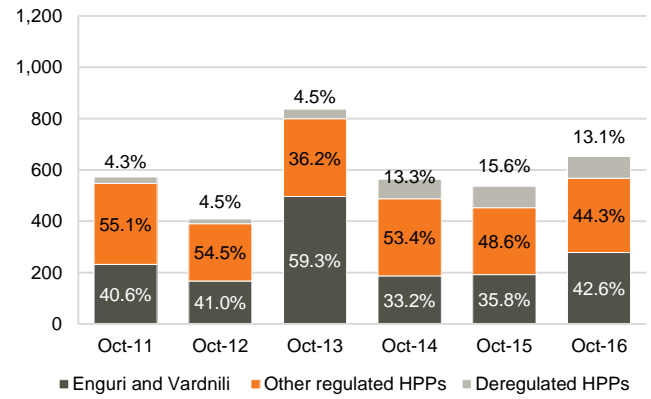


Figure 5: Electricity generation, import, and domestic consumption, GWh



Source: ESCO

Figure 6: Hydro generation, GWh

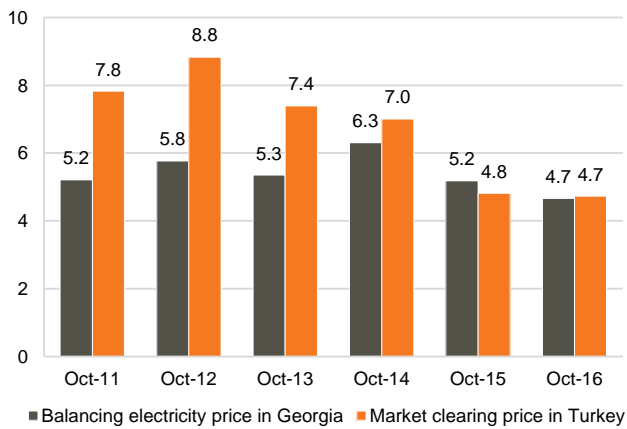


Source: ESCO

### Electricity Prices in Georgia and Turkey

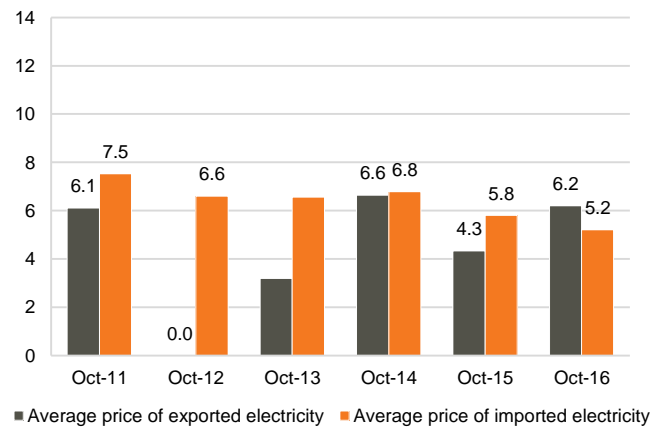
Wholesale market prices in Georgia decreased 10.1% y/y to USc 4.7/kWh, 1.5% below the Turkish market clearing price in October 2016. Turkish electricity prices decreased 1.8% y/y to USc 4.7/kWh from a significantly low base in October 2015 (-31.3% y/y). 6.3% of total electricity supplied to the grid was traded through the market operator, with the rest traded through bilateral contracts.

Figure 7: Electricity prices in Georgia and Turkey, USc/kWh



Source: ESCO, EPIAS

Figure 8: Average prices for imports and exports, USc/kWh



Source: ESCO, GeoStat  
Note: Exports were negligible in October 2016.



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