

Georgia's Energy Sector Electricity Market Watch

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GNERC sets new tariffs for generation, transmission, dispatch and distribution for the regulation period January – December, 2016. Selected generation facilities (some HPPs/all TPPs), the transmission and dispatch licensee (GSE), and all distribution network operators (DNOs) fall under the status of a regulated entity. 9 regulated HPPs, currently owned and operated by Energo-Pro Georgia – one of the three DNOs in the country - got their tariffs revised (See Table 1). New tariffs are set so as to cover the capital and operating expenditures for the year 2016 and deliver a margin predetermined by GNERC. Guaranteed capacity (GC) fees and per kWh

Electricity market highlights	
Weighted average price of electricity in Georgia, November*	USc 5.5 / kWh
Weighted average price of electricity in Turkey, November*	USc 4.7 / kWh
Average export price for Georgian electricity, November*	USc 4.2 / kWh
Average import price for electricity, November*	USc 5.8 / kWh
Y/Y increase in domestic consumption** in kWh, 11M15	3.4%
Y/Y increase in exports in kWh, 11M15	23.7%
Y/Y increase in exports to Turkey in kWh, 11M15	39.4%

^{*}Average exchange rates in November GEL/US\$ =2.4017; TRY/US\$=2.8712

generation tariffs for TPPs were also revised (See Table 2). The transmission tariff for GSE was reduced to GEL 0.00754 (-0.5%) and the dispatch fee was reduced to GEL 0.00098 (-3.9%) per kWh. The cross-border transmission licensee, Energotrans, had its tariffs increased for the 500kV domestic grid to GEL 0.0042/kWh (+55.6%) and reduced for the 400kV export line to GEL 0.0029/kWh (-17.1%). Revised tariffs are in effect through December 31, 2016.

Table 1: Revised tariffs for generation, transmission and dispatch for selected entities

HPP	Revised tariff, GEL/kWh	Change
Satskhenisi HPP	0.062	+164.8%
Ortachala HPP	0.025	No change
Atshesi HPP	0.041	+5.6%
Rioni HPP	0.038	+9.3%
Gumati HPP	0.024	-34.5%
Lajanuri HPP	0.021	-45.7%
Dzevrula HPP	0.028	-28.2%
Shaori HPP	0.026	-32.3%
Zahesi HPP	0.052	+268.0%

Source: GNERC

Table 2: Revised tariffs for TPPs

ТРР	Revised GC fee, GEL/day	Change	Revised generation tariff, GEL/kWh	Change
G-Power TPP (110MW)	41,671	-1.6%	0.085	+12.3%
Mtkvari Energetika TPP (300MW)	59,957	-6.0%	0.108	-1.1%
Tbilsresi (300MW)	49,400	+10.5%	0.113	+10.9%

Source: GNERC

A 433MW installed capacity cascade, Namakhvani HPP, should be granted a construction permit in the beginning of 2016 and is up for open EOI starting December 25, 2015. The Namakhvani cascade will consist of two HPPs with estimated annual generation of 1,514gWh and estimated initial investment cost of US\$ 730mn. The project implementation model will be a BOO (Build-Operate-Own). The cascade project is currently owned by GEDF, a state-owned energy investment fund.

The energy sector is the second largest recipient of FDI in Georgia with almost US\$ 860mn invested over the past five years. At 15% of total FDI, it is second only to the transport and communication sector (23.4% of total over the past five years). The bulk of the energy FDI falls on the electricity generation sector. Over the past three years, US\$ 283mn was invested in HPPs through which an additional 170MW of installed capacity was added to the grid, according to the Ministry of Energy. Commercial banks are actively involved in the development, with over US\$ 100mn of financing made available over the past three years.

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^{**} Including Ahkhazian Region



Electricity Generation, Consumption and Exports

Electricity consumption was down 4.3% y/y in November 2015. The only rise in consumption (+7.1% y/y) was observed in the Abkhazian Region, which accounted for 20% of total electricity consumed in November 2015. In 11M15, the Abkhazian Region accounted for 16.7% of total domestic consumption, in line with its share over the past five years, but the growth rate of consumption more than doubled, reaching almost 10% y/y in 11M15. Direct consumers are the key contributors to the decline in Georgian electricity consumption, with direct consumption down 32.1% y/y in November 2015. Domestic consumption is up 3.4% y/y in 11M15. Exports were down 28.1% y/y from 28gWh in November 2014 to slightly over 20gWh in November 2015. Paravani HPP was the sole exporter in November, exporting exclusively to Turkey. Export revenue was down 59.9% y/y in November 2015, bringing down the average export price to USc 4.2 from USc 7.2 in November 2014. Exports are up 23.7% y/y in 11M15.

Electricity generation posted a slight increase of 0.9% y/y in November 2015. TPP output was up 29.9% y/y, while HPP-generated electricity declined 9.6% y/y due to low precipitation. TPP-generated electricity represented 30% of the country's energy balance, up from 23% in November 2014. Gardabani TPP accounted for nearly 1/3 of total TPP generation, while Mtkvari TPP provided the rest. Imports were down 40.1% y/y, with TPP-generated electricity displacing imports.

Figure 1: Electricity generation and consumption, gWh

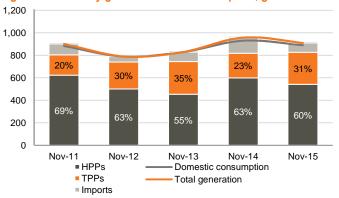
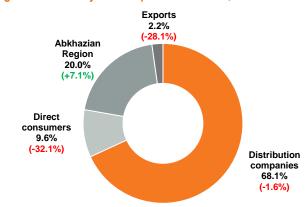


Figure 2: Electricity consumption breakdown, November 2015

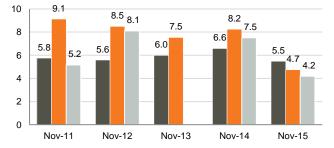


Source: ESCO Source: ESCO

Electricity Prices in Georgia and Turkey

In November 2015, the weighted average price of electricity on the Georgian market declined 16.9% y/y in US\$ terms, from a relatively high base in November 2014, but was up 12.3% y/y in GEL terms on the back of the currency depreciation. However, in November 2015, a significant portion of electricity imports were displaced by domestic TPP-generated electricity, easing the pressure on price, as the average price of TPP-generated electricity from the new Gardabani TPP (supplied bulk of TPP electricity to the grid in November) is almost half the import price in GEL terms. Electricity prices in Turkey declined 25.9% y/y in TRY terms and 42.2% y/y in US\$ terms, also largely due to the national currency depreciation. Georgian electricity remains competitive on the Turkish market as the average export price from Georgian suppliers was 11% lower than the market clearing price in Turkey in November 2015.

Figure 3: Electricity prices in Georgia and Turkey



- Weighted average electricity price in Georgia, USc/kWh
- Market clearing price of electricity in Turkey, USc/kWh
- Average export price for Georgian electricity, USc/kWh

Source: ESCO, EPIAS



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