

General Review of Power Markets in Georgia

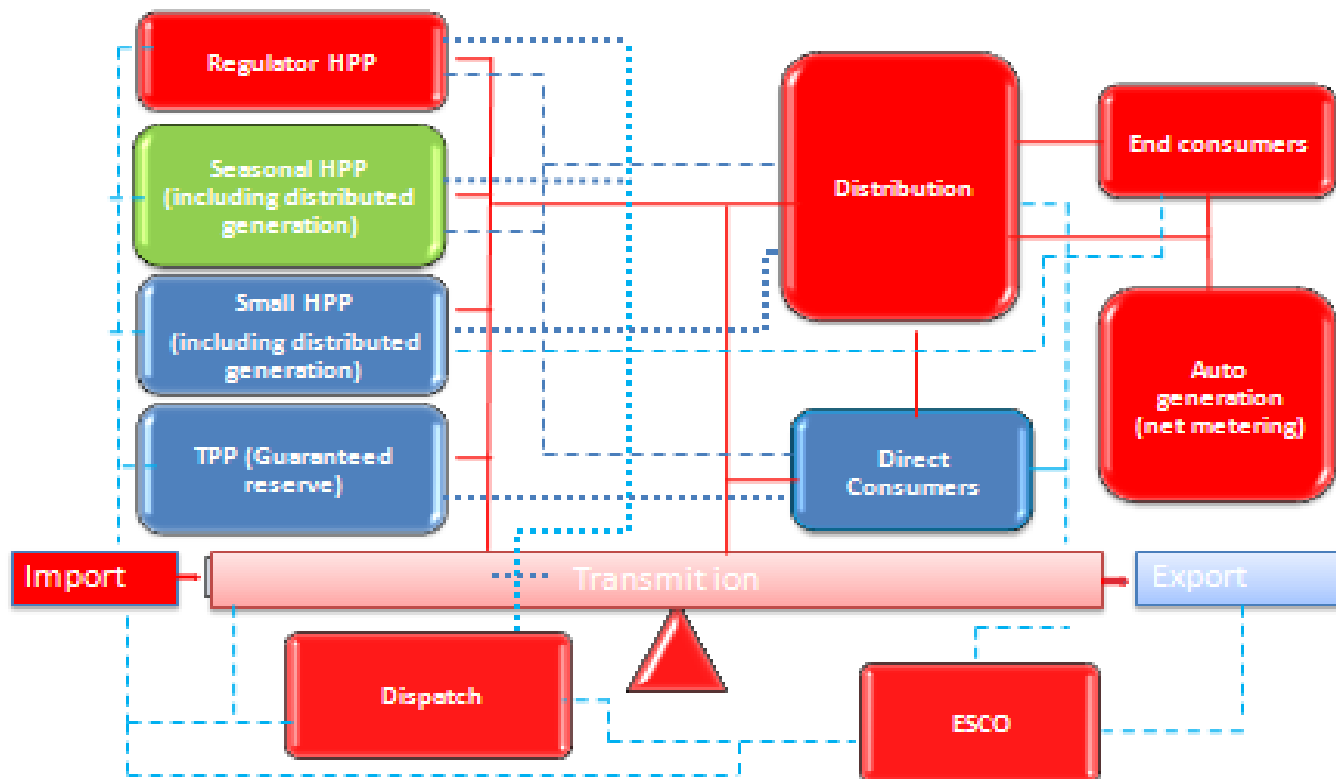


Nugzar Beridze
Georgia, Tbilisi, 2014

Contents

- Current status of power market in Georgia;
- Legal and regulatory framework developments;
- Review of GEMM 2015.

Existing market structure



Subjects of power market (1)

- **Generation sources:**

- ✓ **Regulating power plants** – working with regulated tariffs and licensed by the Commission;
- ✓ **Partly deregulated seasonal PPs** – working with capped tariffs defined and licenses issued by the Commission;
- ✓ **Deregulated PPs (save the small PPs)** – working with free tariffs and licensed by the Commission;
- ✓ **Guaranteed reserve sources (thermal PPs)** – working with two-rate tariffs and licensed by the Commission;
- ✓ **Small PPs** – working without license and Commission regulated tariffs;

Subjects of power market (2)

- **Power transmission:**
 - ✓ Functioning in accordance with the license issued by the Commission and with the tariffs set for the voltage levels;
- **Dispatch:**
 - ✓ Only one Dispatch License can be issued;
 - ✓ Working with fixed tariff and license;
- **Commercial System Operator:**
 - ✓ Trading the balancing power and guaranteed reserve;
 - ✓ Keeping the power trade unified database;
 - ✓ Working at the prices set by the Commission;
- **Import:**
 - ✓ Can be done by any person, at the price that is calculated with the formula set by the Commission;

Subjects of power market (3)

- **Exporters:**
 - ✓ Can be done by any person at a free price;
- **End user:**
 - ✓ **Direct consumer** – consumers entitled to purchase the power from any source with the direct contracts (by 2017 the market will be fully liberalised);
 - ✓ **Retail consumers** – consumers of the distribution utility, who receive power at the prices capped by the Commission. Are entitled to purchase power from small PPs by the direct contract.

Ownership Structure of the Power Sector



Generation:

- ⇒ state share – 39%;
- ⇒ Energo-Pro Georgia – 17%;
- ⇒ Inter-Rao – 15%;
- ;
- ⇒ Other – 29%



Transmission:

- ⇒ GSE – 100% state-owned;
- ⇒ SakRusEnergy – 50% state-owned, 50% – Inter-Rao;
- ⇒ EnergoTrans 100% state-owned (GSE);



Dispatch:

- ⇒ GSE – 100% state-owned



Distribution:

- ⇒ Energo-Pro – 60%
- ⇒ Telasi-Inter-RAO – 31%
- ⇒ Kakheti Energy Distribution – 9%



Consumption:

- ⇒ Direct consumers – 7 (18% of the total consumption);
- ⇒ Retail consumers – 1,437,000 (82% of the total consumption)

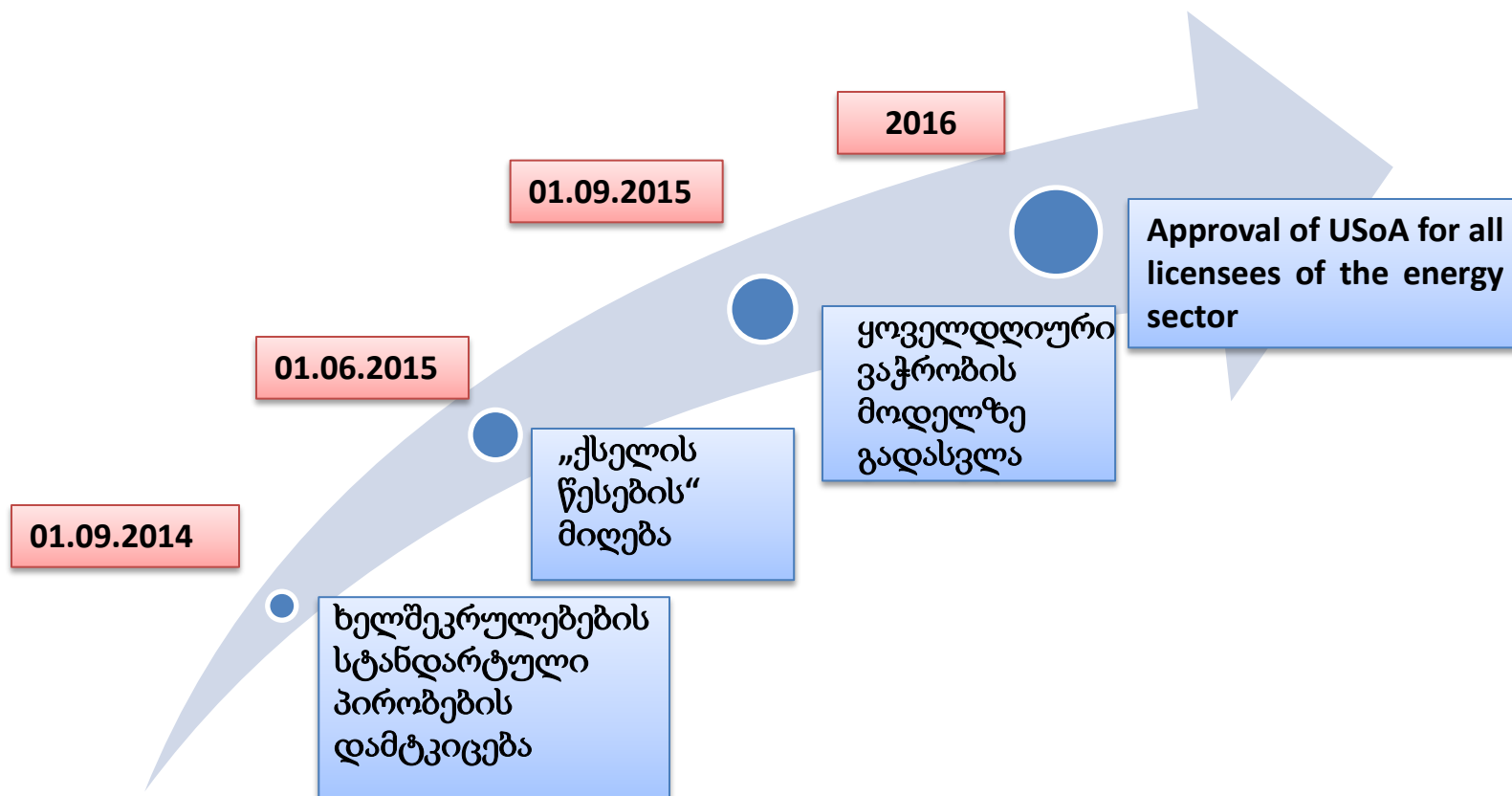
Main events of 2012–13

- Power consumption increased (by 2– 2%);
- For the first time in the last five years negative trade balance has been registered in 2012 (import – 614.6, export – 528.2 GWtH), the same should be expected for the current year;
- As for the generation, the trend of growing thermal power production has been reversed (2010 – 7%; 2011 - 21%, 2012 - 28 %, 2013–17%);
- Actual indicators of power market openness made 17 in 2012 and 19% in 2013;
- The market shares in generation were distributed as follows:
 - **2012 Enguri – 33%; Mtkvari – 11.8%; Tbilisresi – 11.7%;**
 - **2013 Enguri – 36%; Mtkvari – 8.8%; Vartsikhe – 8.4%;**
- Hirschman-Herfindahl Index:
 - **2012 – HHI = 1365**
 - **2013 – HHI = 1445**
 - I.e. the market is remaining moderately concentrated: $1001 < HHI < 1800$

Current amendments to the law (draft)

- The status of market operator shall be given to JSC Electric System Commercial Operator;
- The Commission shall be entitled to monitor the power markets;
- The Commission approves:
 - ✓ The standard conditions of the direct agreement on dispatch and transmission services, based on the proposals of the licensees;
 - ✓ The standard conditions of the agreements on ensuring guaranteed capacities and direct purchase of power, based on the proposal of market operator;
 - ✓ Grid Rules, which include both, transmission and distribution network rules;
 - ✓ Unified System of Accounting for the regulated utilities.

The schedule of amendments



Regulating transit (1)

- The agreement on technical provision of the power transit shall be made with dispatch licensee.
- No regulation fees are charged for power transit.
- The respective tariffs set by the Commission for transmission and dispatch services shall not be applied in case of power transit;

Regulating transit (2)

- The losses of the power incurred during the technical provisioning of the transit can be compensated by the supply of respective amount of power (compensating power);
- The dispatch and transmission licensees shall enter into the separate agreement, which shall stipulate the amount of compensation for the use of transmission licensee's networks.
- If there is no such agreement in place between the dispatch and transmission licensee, the compensation amounts shall be defined and reimbursed in accordance with the market rules.

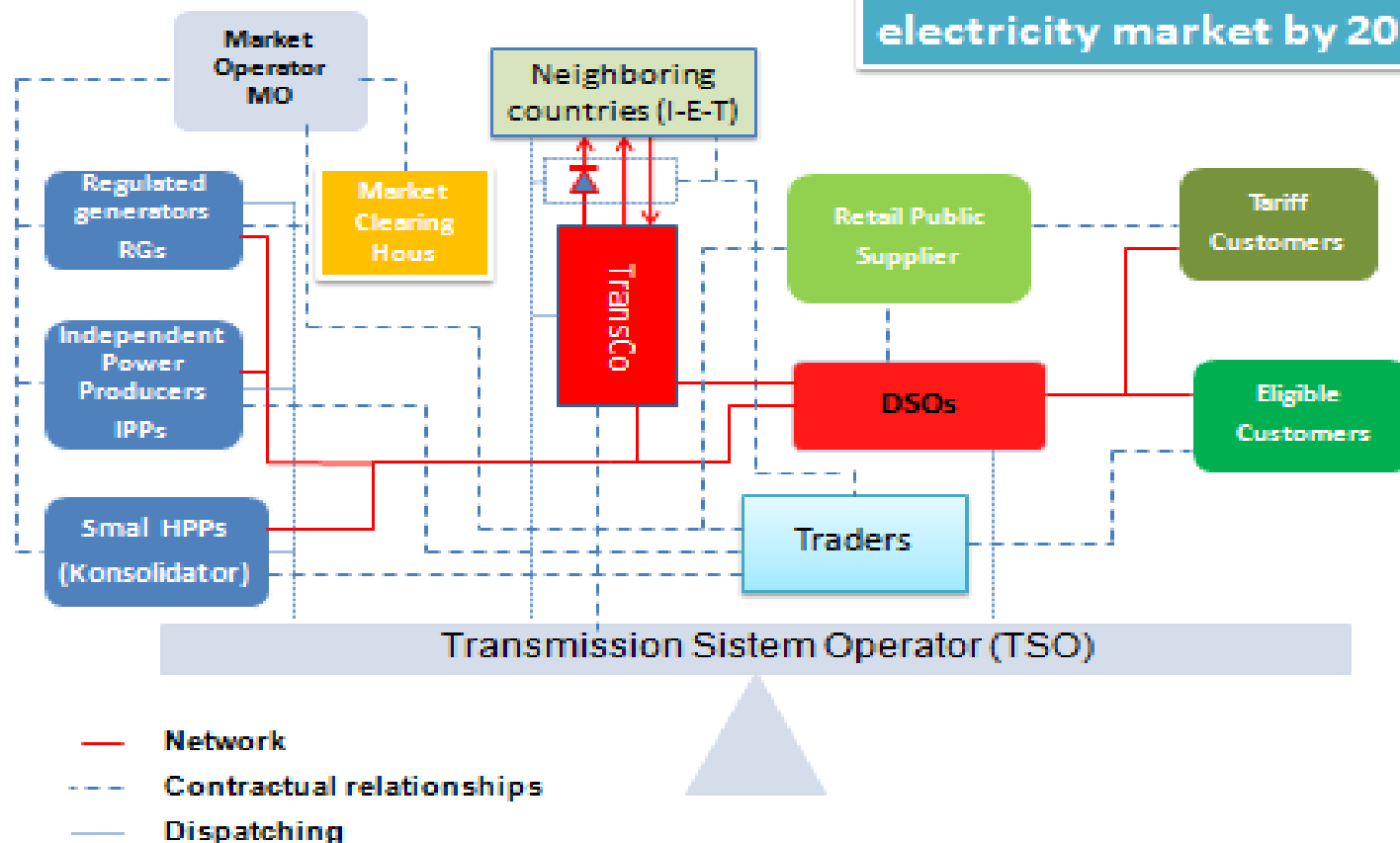
Regulating transit (3)

- In case the transmission licensee refuses to enter into agreement on transit of the power, it is obliged to bear the usage of it's network and provide the transmission services;
- The issues related to the power transit are also regulated by the rules of power (capacity) market and by the agreement on technical provisioning of power transit;
- The participants of transit process are obliged to submit information to the market operator;

Amendments to Market Rules

- Regulating power trade by the new transmission means;
- Rules for calculation and allocation of transboundary transmission capacities;
- On the auctions for transboundary transmission capacities.

Structure of the electricity market by 2015



Market Participants (1)

- **Regulated generators (RGs)**
 - ✓ Supply of the low-cost basic power to tariff customers;
 - ✓ Sell the power to the retail customers, upon their request, at the tariffs set by GNERC, in accordance with the direct annual contracts also approved by GNERC;
 - ✓ Sell power for compensation of ancilliary services and losses to TSOs;
 - ✓ Sell, exchange and/or purchase (in case they possess trading license) excessive power at the internal or external markets;
- **Independent Power Plants (IPPs)**
 - ✓ Entitled to select the market;
 - ✓ Entitled to sell power to the traders, retail suppliers or qualified consumers;
 - ✓ Entitled to enter into the long-term agreements and/or short-term agreements at the balancing market;
 - ✓ In case of purchasing power with the view of reselling it, they shall first receive the trading license.

Market Participants (2)

Small Hydropower Plants (Sm. HPPs)

- ✓ Can sell power to the free traders at the agreed prices;
- ✓ Can sell power to the retail customers at the prices set by GNERC (according to the simplified methodology);
- ✓ Can sell power to TSO or DSO, with the purpose of compensating losses incurred in accordance with the GNERC-approved contracts.

Traders

- ✓ Shall possess trading license;
- ✓ Can purchase and sell power at the local foreign country's markets;
- ✓ Can locally purchase power from RGs (excessive), IPPs and Sm.HPPs and sell it to the qualified or tariff consumers, **TSO** or **DSO** for compensation of losses;
- ✓ Can enter into long-term agreements of short-term bargains at the balancing market.

Market Participants (3)

Retail Suppliers (RPSs)

- ✓ Supply power only to tariff consumers according to the GNERC-approved agreement;
- ✓ Purchase power from RGs, IPPs and traders;
- ✓ Tariffs for the retail suppliers can be approved by GNERC;

Qualified Consumers

- ✓ Entitled to purchase power from any source;
- ✓ By 2017 all consumers will be qualified;

Tariff customers

- ✓ Are connected to the DSOs networks and purchase power from RPSs at the regulated prices;
- ✓ The qualified consumers are entitled to return to or remain the tariff consumer.

Service providers (1)

- Transmission System Operators (TSOs)
 - ✓ Separated from the transmission systems' owner, licensed by the Commission (only one TSO License is issued);
 - ✓ Balancing supply-demand between generation and consumption sides;
 - ✓ Shall ensure accessibility of reserves for elimination of disbalances;
 - ✓ Purchases ancillary services and manages contingencies;
 - ✓ Plans loads for short-, medium- and long-term periods and plans transmission system for 10-year period;
 - ✓ Purchases power for compensation of losses;
 - ✓ Receives compensation with the Commission-approved tariffs from the market participants for the services provided.
- Transmission Licensees (TransCo)
 - ✓ Are responsible by their assets for the physical functioning of transmission system;
 - ✓ Connect generation units and distribution networks to the transmission networks;
 - ✓ Invest into the network in accordance with the expected loads.

Service Providers (2)

- Market Operator (MO)
 - ✓ Ensure functioning of the balancing market, in order to balance the power sale-purchase contracts;
 - ✓ Develop balancing mechanism, in order to group the proposals received from the power generators and purchasers and identify the market price of the power (hourly balancing);
 - ✓ In the future, the power trading mechanism will be added to the balancing market;
 - ✓ Calculate reimbursements for the power (capacities) and submitting the information to the clearing houses;
 - ✓ The market operator will be licensed by the Commission.
- Market Clearing Houses (MCH)
 - ✓ Obligated to identify solvency of the market participants;
 - ✓ Shall register all the trading operations and ensure effecting the respective reimbursements;
 - ✓ Carries out efficient accounting, reimbursements and risk management control.

Service Providers (3)

- Distribution System Operators (DSOs)
 - ✓ Ensures proper functioning of the power distribution system;
 - ✓ Provides connection and metering services to the customers in a non-discriminatory manner;
 - ✓ Ensures supply of the power received from the transmission system;
 - ✓ Ensures, within its area, provision of transit services for the customers, auto-generation and generation units;
 - ✓ Satisfies the service standards;
 - ✓ Purchases power to compensate the losses in the network;
 - ✓ DSOs are licensed and their service tariffs are set by the Commission.

Supervision and Regulation (1)

❑ Implementation of the Energy Strategy in the sector:

- ❖ Monitoring the structure and functioning of the energy sector;
- ❖ Setting tariffs, fees and collectables in the fields of transmission, distribution and supply (in accordance with the methodologies);
- ❖ Issuing, renewing and withdrawing the licenses to/from the market participants; monitoring the compliance with terms and condition thereof;
- ❖ Approving, putting into effect, monitoring and amending Grid Code;
- ❖ Approving, putting into effect, monitoring and amending market operations' rules;
- ❖ Approving, monitoring and amending performance standards for the market participants;
- ❖ Approving the regulated contracts between market service providing companies;

Supervision and Regulation (2)

- ❖ Approving consumer service standards;
- ❖ Approving and monitoring technical and safety standards;
- ❖ Considering-resolving disputes between licensees and consumers;
- ❖ Participating in international and regional co-operation in the field of electric power;
- ❖ Protection of environment through participation in development and identification of the environmental standards;
- ❖ Approving Distribution Grid Code.
- ☐ The mandate of the commission shall be in compliance with the EU Directive 2003/54/ EC
- ☐ In order to ensure implementation of the 2015 model, the Commission shall consider and approve 24 documents that are new in their essence.

Benefits to Georgia

- Market liberalisation – developed competition;
Improved service and power quality;
Rational use of country's energy resources;
Improved economic and technical sustainability of the sector;
For generation sources:
 - ✓ Improved access to the transmission networks,
 - ✓ Modern trading instruments,
 - ✓ Risk mitigation means;
- Improved options of power trading at regional market through development of regulating frameworks and transboundary transmission capacities.

Contacts



Nugzar Beridze

Head of Electricity
Department, GNERC

nugzar.beridze@gnerc.org