# Electricity Trading, Clearing and Settlement

Georgian Stock Exchange
And
Georgian Central Securities Depository

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## Need for transition to hourly trading and its prospects



- It is necessary to harmonize Georgian electricity market with those of Russia, Turkey and South-East Europe in order to facilitate crossborder electricity trading with them
- Hourly trading incentivizes electricity generators to make additional investments and enables consumers to make accurate forecast
- Allocates balancing costs to qualified entities that caused misbalance
- Will help to reduce retail tariffs due to better planning, optimized dispatching and lower reserve cost

#### Power Exchange



- Georgian Stock Exchange (Exchange) will set up a separate trading section, or establish a new subsidiary, which will operate organized Power Exchange
- Exchange will gradually introduce electricity trading on day-ahead, intraday and balancing markets
- Exchange will enable trading with long term standardized weekly, monthly, quarterly and yearly contacts. It can be done with actual electricity delivery or without it, i.e. like any other futures contract on commodities that settles in cash

#### Power Exchange



- On Day Ahead Market (DAM) standardized energy contracts are traded separately on each of the 24 hours of the following day. The deadline for submitting bids is 12:00 and after that hourly market prices are determined and published
- Transmission grid constraints are taken into consideration during the price formation process. Information regarding those constraints is provided in advance by Transmission System Operator (TSO)
- Exchange undertakes continuous monitoring of transactions (price, time and volume), saving trading results in its own database and publishing them on its website. It also provides for anonymity of market participants

#### Power Exchange



- Exchange sends information regarding transactions to the Central Depository for further processing (clearing and settlement); trading data is also shared with the regulator and TSO
- In case of suspicious transaction (e.g. price manipulation) Exchange acts immediately in accordance with the law and its own regulations. It may impose sanctions such as fines, suspension or termination of membership

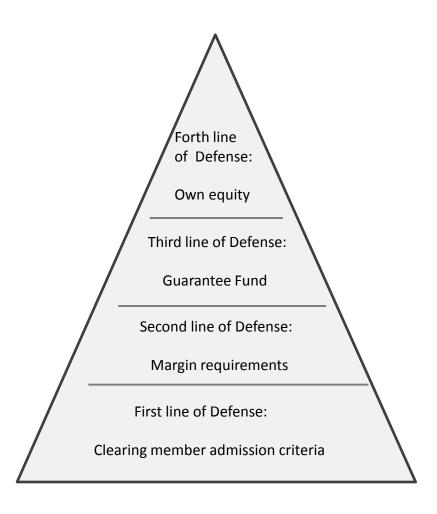
#### **Central Depository**



- Performs duties of Clearing House, clears and settles on-exchange and OTC (bilateral) trades
- Acts as a guarantor for both parties to a trade: becomes a buyer for every seller and a seller for every buyer. When substituting a seller it relies on contract signed with TSO on guaranteed supply of electricity
- Manages collateral such as cash, securities and other liquid assets.
   Performs initial evaluation and subsequent marking to market of such assets, makes margin calls when necessary
- Monitors and manages cash designated for margins and guarantee fund. Does final cash settlement among clearing members

### Central Depository – Four Lines of Defense





#### **Central Depository**



- Analyzes and selects settlement banks for final cash settlement
- Sets list of assets eligible for collateral: cash and cash equivalents in GEL/USD/EURO; bank guarantees; government and/or other types of liquid securities
- Marks to market assets provided by participants and makes margin calls when necessary
- In case of clearing member's inability to provide additional collateral, automatically liquidates positions and uses cash sitting in a margin account of defaulted party for honoring its obligations, also imposes fines

#### **Central Depository**



- Depositing and settlement of amounts belonging to market participants occurs within CD, except when market participant chooses to withdraw money from CD and transfer it to its own bank account
- It is possible to conduct clearing and settlement of OTC (bilateral) trades based on similar principles once these trades are reported to and registered in the trading system of the Exchange by both parties to the trade

#### Settlement Scheme



