

Organization of the operations of the retail electricity market according to the Law of Ukraine on the Market of Electricity

.....

Kristian Takac

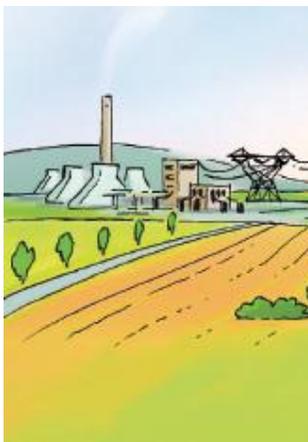
1 What is electricity retail market?

Defining characteristics

- > Final sale of electricity from generation to the end-use consumer (for end consumption).
- > Supply – either monopoly or liberalized (competitive), suppliers.
- > Prices for end-consumer – either regulated (in around 50% of the EU MS) or free/market based. Electricity retailers offer fixed/variable electricity prices to their customers and manage risks involved in purchasing electricity from spot markets. Regulator may impose cap (for social or other reasons).
- > Role of the end-consumer changing (prosumer, distributed generation, demand response, etc)

GENERATION

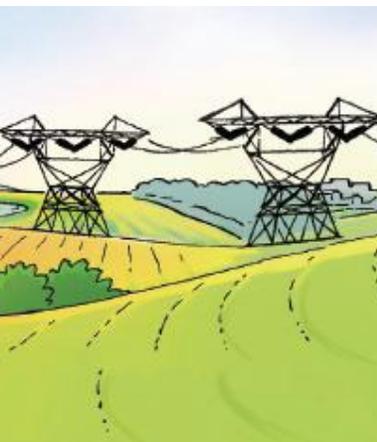
Energoatom, Ukrhydroenergo, DTEK, etc.



Produces and sells electricity either directly to traders, suppliers or (large) end-consumers

TRANSMISSION

Ukrenergo, (Energoynok)



Maintains/develops TSO grid
Procures AS and regulatory energy after gate closure

DISTRIBUTION

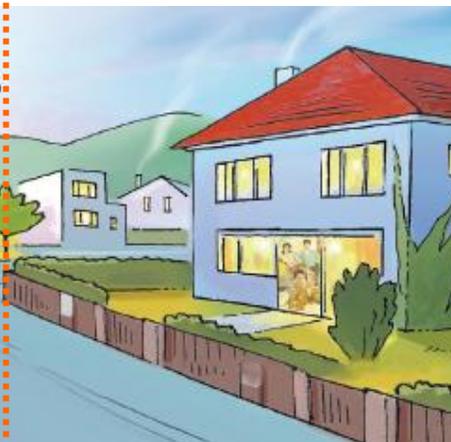
Oblenergos (currently non-unbundled)



Maintains/develops DSO grid
Paid for delivering electricity to end consumers

SUPPLY

Oblenergos (currently non-unbundled)



Buys from generators, sells to end-consumer
Must respect cap price for HH and deliver at regulated tariff
Special category of suppliers - USS, SLR

END-CONSUMER

Pays for consumed electricity, services and for all tariffs (DSO, TSO, RES)



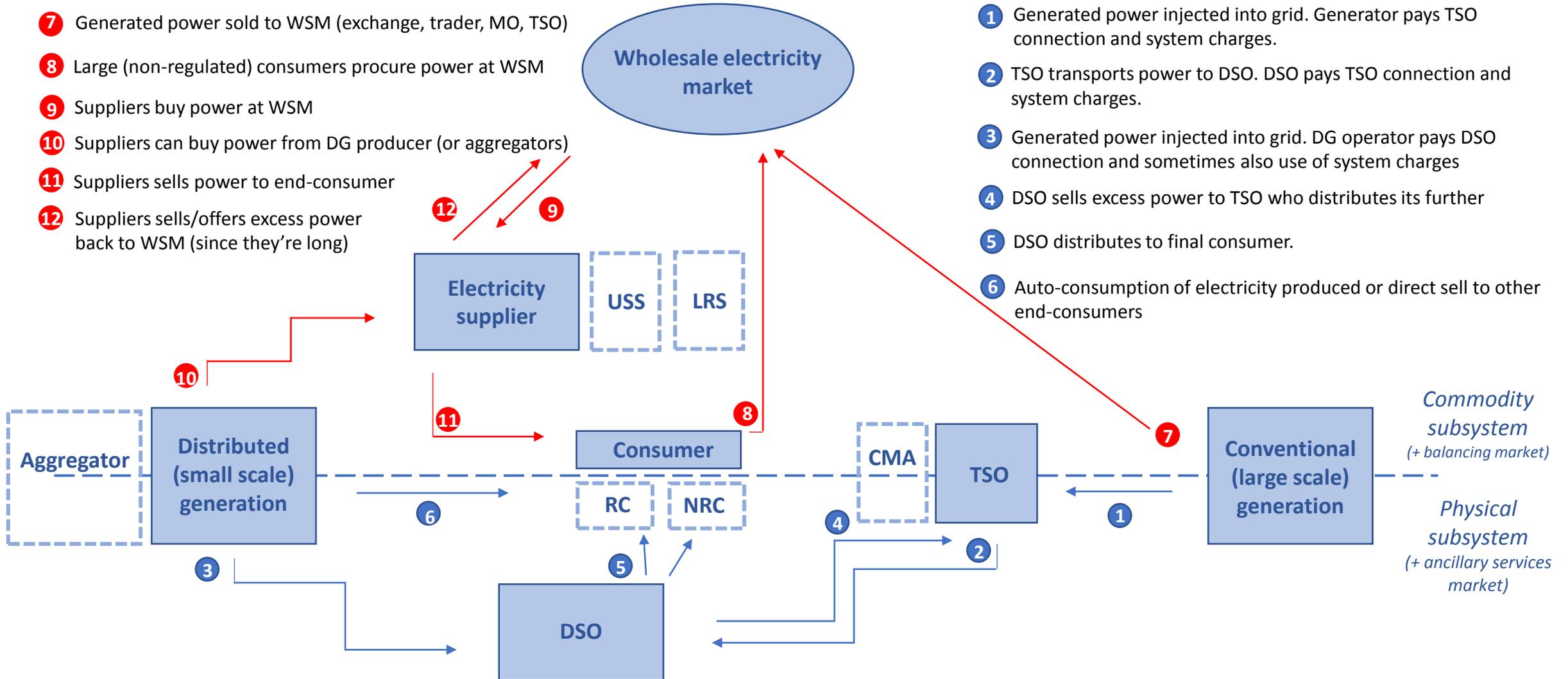
End-user prices for HH and SMEs regulated (through price cap)
Some large energy-intensive consumers exempted from tariffs
Households usually pay more than (large) industrial consumers

1 Electricity retail market; functional scheme

Schematic view of the physical flows/relations (blue) and commercial flows/relations (red)

- 7 Generated power sold to WSM (exchange, trader, MO, TSO)
- 8 Large (non-regulated) consumers procure power at WSM
- 9 Suppliers buy power at WSM
- 10 Suppliers can buy power from DG producer (or aggregators)
- 11 Suppliers sells power to end-consumer
- 12 Suppliers sells/offers excess power back to WSM (since they're long)

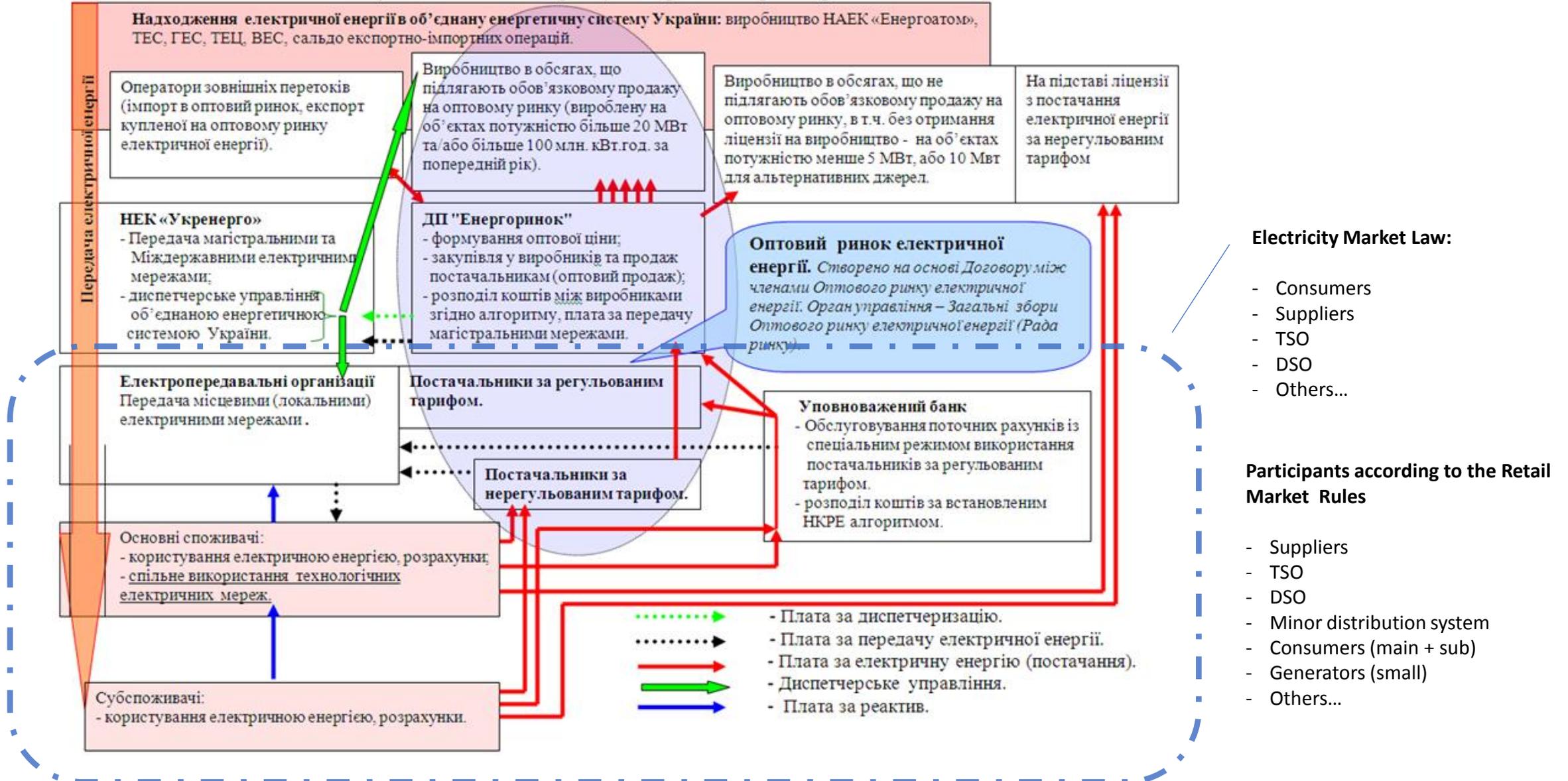
- 1 Generated power injected into grid. Generator pays TSO connection and system charges.
- 2 TSO transports power to DSO. DSO pays TSO connection and system charges.
- 3 Generated power injected into grid. DG operator pays DSO connection and sometimes also use of system charges
- 4 DSO sells excess power to TSO who distributes its further
- 5 DSO distributes to final consumer.
- 6 Auto-consumption of electricity produced or direct sell to other end-consumers



2 Electricity retail market in the Ukrainian context

8

Функціональна схема ринку електричної енергії України



2 Electricity retail market in Ukraine; legal context

Electricity retail market regulated by:

> **Electricity Market Law (No. 4493)**

Sets general conditions for electricity supply to consumers (Art. 56)

Lists rights and obligations of electricity suppliers (Art. 57)

Lists rights and obligations of a consumer, describes principles of the switching procedure (Art. 58, 59)

Lists principles on consumer right protection and protection of vulnerable consumers (Art. 60, 61) and contains details on PSO, USS, SLR (Art. 62, 63, 64)

Contains general principles of the retail market functioning and dispute settlement procedure (Art. 72, 76)

> **Retail Market Rules (NEURC Decision No. 312/2018)**

Regulates relations between electricity consumer and supplier in the process of electricity supply, as well as other market participants providing services related to electricity supply (transmission, distribution, supplier, commercial metering provider), provides details on service rendering and on rights and obligations of the retail market participants, including consumers. Outlines the supplier switching procedure, commencement and termination of the supply contracts and the dispute settlement and mechanism.

> **TSO (No. 309/2018) and DSO Codes (No. 310/2018)**

Outlines conditions for (dis)connection of supplier or consumer, including the procedure of suspending and restoring electricity supply to the consumer (at the request of the supplier)

> **Commercial Metering Code (No. 311/2018)**

Regulates conditions for providing commercial metering services to relevant market participants (consumers, suppliers).

> **Bilateral contracts between market participants**

3 Electricity retail market in Ukraine; general assessment of provisions

In general, Ukrainian legal framework for the retail market is in line with the EU practice and standards (some provisions go further than practice in the EU). However, the preconditions for a functioning retail market are met partially:

1. Liberal wholesale and retail market

Well-functioning wholesale market with transparent price mechanisms is essential to drive efficient price signals for retail market customers. Large price differences within or between regions may distort competition between electricity suppliers.

Regulated tariffs should exist only where necessary to facilitate opening of a market. If too large segment and/or loosely defined group eligible for social or subsidized prices (regulated tariffs), it might constitute market entry barrier for new suppliers.

Unbundling of supply and retail functions from DSOs to minimize risk that the dominant undertaking limits access to grid and prevent cross-subsidization between generation, distribution and supply activities of VIU.

2. Established and efficient retail market processes

Retail market processes such as data requirements and data exchange procedures should be easy so that consumers can easily switch a supplier and market participants share information efficiently.

Procedures should be in place to ensure a continuous energy supply, e.g. supplier of last resort provisions should be applied in cases of failed supplier switching or a bankrupt supplier.

3. Reliable source of information

Customers need access to **clear facts on the roles and obligations of the suppliers, DSOs** and other relevant market participants. Detailed information on supplier switching procedure must be available. Complaint procedure and consumer's right must be clearly described.

4. Adequate complaints, dispute settlement and redress procedures

Customer complaints should, in the first instance, be handled consistently within a reasonable timeframe by the suppliers themselves. If not successful, then by independent service, i.e. ombudsman, regulator (preferably out-of-court dispute settlement to keep costs down).

3 Electricity retail market in Ukraine; general assessment of provisions

Liberal wholesale and retail market

Well-functioning wholesale market with transparent price mechanisms is essential to drive efficient price signals for retail market customers.

- While unbundling and competition on the retail market should in principle happen before 1 July 2019, the wholesale market will be up and running only after that date. Suppliers will not be able to source their energy/create their portfolio competitively.
- It is not clear what will happen after 1 July 2019, how the wholesale market will look like and what effect it will have on “USS customers”. If prices shoot up, will the USS be able to cover the difference between the wholesale market price and the price at which they need to re-sell the power to the USS customers?
- After July 2019, only up to 10% will be offered at day-ahead market, rest most probably sold through bilateral contracts. At the same time cross-border import limited. Where will new suppliers (other than current oblenegos) source their electricity?

Regulated tariffs should exist only where necessary to facilitate opening of a market. If too large segment and/or loosely defined group eligible for social or subsidized prices (regulated tariffs), it might constitute market entry barrier for new suppliers.

- Until July 2019 and probably also some time after 2019 (prior to the choice of supplier, electricity supply to large consumers shall be provided under regulated tariff) prices will remain regulated.
- How will the regulated supply under USS be phased out? Will it be phased out?

Unbundling of supply and retail functions from DSOs to minimize risk that the dominant undertaking limits access to grid and prevent cross-subsidization between generation, distribution and supply activities of VIU.

- NEURC, prior to the start of the new electricity market operation must ensure that cross-subsidies between different categories of consumers are eliminated.
- According to the Law, the VIUs should not later than 7 months from the entry of the Law into force (January 2018), inform NEURC about unbundling measures that have been taken; any analysis on how things are developing available? Limited guidance to Oblenergos on how unbundling should be carried out.
- Two weeks ago suppliers created by oblenegos obtained licenses from NEURC (No. 429/2018). By December 2018, customers shall sign contracts with the new suppliers. For now only legal entities without any real assets. Important for USS to have tariffs in place by then (because cross-subsidy not possible anymore). Important to have the relevant methodologies (Методология определения тарифа на поставку ПУУ, Методология определения розничного тарифа ПУУ) and tariffs approved. Government should proceed with defining the criteria for USS selection and hold competition.
- How will split of assets be carried out if no RAB inventory in place (and no incentive based regulation for DSOs in place)?

3

Electricity retail market in Ukraine; general assessment of provisions

Established and efficient retail market processes

Retail market processes such as data requirements and data exchange procedures should be easy so that consumers can easily switch a supplier and market participants share information efficiently.

- Switching procedure defined in the Retail Market Rules is correct and follows the EU practice. However, unclear how the exchange of data between market participants will function in practice. Commercial Metering Administrator (TSO) has not yet taken decision on how exactly the system (DataHub) where metered data will be stored and processed look like. What happens when system not up and running in the given time frame? Is there a need for complicated and centralized system when all households and small enterprise consumers to be supplied under USS?
- Commercial metering providers; who will those entities be and how will the responsibility vis-à-vis the Commercial Metering Administrator be ensured (for example in case of bankruptcy)? Wouldn't it be worthwhile to consider only DSOs as metering providers?

Procedures should be in place to ensure a continuous energy supply, e.g. supplier of last resort provisions should be applied in cases of failed supplier switching or a bankrupt supplier.

- Role and responsibilities of Last Resort Supplier defined in the Law and Market Rules is sufficiently well defined. Details of the supply conditions will be clear after NEURC has set the methodology and the tariff for SLR and competition has been held. SLR's should ideally be dominant and well established suppliers (today's oblenergo suppliers).
- One issue which is not sufficiently clear is what happens after the expiry of the 90 days to a customer that still cannot pay and cannot be disconnected (vulnerable consumers as defined by Art. 7/15 of the Law). How will the category of vulnerable consumers be defined and where is the Government in the procedure?

3 Electricity retail market in Ukraine; general assessment of provisions

Reliable source of information

Customers need access to **clear facts on the roles and obligations of the suppliers, DSOs** and other relevant market participants. Detailed information on supplier switching procedure must be available. Complaint procedure and consumer's right must be clearly described.

- As suppliers have received licenses only recently, it is too early to say to what extent suppliers have/are publishing necessary information on the websites. NEURC conducted a survey in the previous weeks and only few oblenergos were informing about the changes (DTEK Kievski Elektromerezhi). NEURC's website relatively good.
- Complaint procedure described as well as other relevant consumer information (compulsory supply contract details) in the Retail Market Rules relatively well defined. Usage of public agreements (publiczny dogovora) might be problematic, as consumer does not necessarily read the contract before joining (and not sure what happens if consumer disagrees or wants to modify some provisions).

Adequate complaints, dispute settlement and redress procedures

Customer complaints should, in the first instance, be handled consistently within a reasonable timeframe by the suppliers themselves. If not successful, then by independent service, i.e. ombudsman, regulator (preferably out-of-court dispute settlement to keep costs down).

- Complaint and dispute settlement procedure well described by the Retail Market Rules. So far, no practical experience of the functioning of the mechanism. Not sure how the absence of the Ombudsman affects the efficiency of the system. Establishment of stronger ADR mechanism could be considered.

4 Electricity retail market in Ukraine; selected issues

Universal Service Suppliers

Aim and definition

To ensure general public economic interest.. necessary for satisfying the demands of the citizens, population and the state and to ensure sustainable long-term development.. special obligations (PSO) may be imposed. PSOs shall be of temporary character and proportional to the purpose (Art. 62).... Article 63 (USS) comes into effect within 12 months upon publication of the Law (11.06.2018).

Latest development

On 14.6.2018 NEURC issued licenses for suppliers (No. 429) but not for USS. Procedure for holding tenders to select USS not adopted yet (despite the 11.6.2018 deadline). Two weeks a Government representative mentioned that the Government will soon (last week) publish the criteria for selectin USS. Two weeks ago, NEURC published proposal for Methodology for establishing tariff for USS supply (Методология определения тарифа на поставку ПУУ). As far we know, the tariff proposal does not reflect some of the costs that USS/DSO will have (billing costs/call centre/IT costs – split into two).

Challenges

There is an overall question mark regarding the financing of the USS during the coming months as tariffs for new USS not adopted yet and will be efficient as of 01.12.2018. The newly set-up suppliers cannot perform (since no assets and staff) and finance (since cross-subsidisation not allowed) the USS functions. Oblenergos likely to assume the USS functions since the Law puts the USS obligation on suppliers unbundled from oblenergos for the period of 2 years (without competition). The Methodology and tariffs should be adopted as soon as possible to regulate the situation.

Apart from procedural/financial questions, more fundamental issues;

- What is the financial impact of the USS system? If USSs are to source their electricity at free market for given market price, if they are to sell a given volume at regulated price and they are to be fully compensated through tariffs, who bears the costs and what are the expected costs?
- Is it necessary to regard all HHs/SMEs as eligible for USS, no differentiation possible? Is the support proportional to the aim?
- How long is the system to work? Would the PSO pass the "temporary character" test if EU State Aid rules were to be applied?
- What is the impact on the competition? If USS tariffs too low, will other (non-oblenergo) suppliers be interested in the future? If too high – current USS lock in market share, no competition in the HH/SME segment, no switching...

4 Electricity retail market in Ukraine; selected issues

Vulnerable Consumers

Aim and definition

Defined loosely (Art. 61); Vulnerable consumers shall receive financial support and be protected against disconnection (in certain periods). Cabinet of Ministers to define the categories of vulnerable consumers and the procedure of registration of vulnerable consumers. As this procedure is not defined yet (as far we know), no assessment possible at this stage. To note, the Law also operate wit the term "protected consumers" (Art. 60). It is assumed that the definition of vulnerable consumer will follow the principles of PSO (clearly defined, transparent, non-discriminatory, temporary) and that the scope of eligible consumers will be narrower (not encompass all HH/SMEs). Not clear what impact on the state budget and how is going to be financed.

Examples from other countries

Energy poverty is defined in the EU as a situation in which households are not able to adequately heat their homes or meet other required household energy services at an affordable cost (1). Estimates suggest around 10-25% of the European population might be affected by energy poverty while other estimates suggest that in some MS (BG, RO, LT, LA, IR), risk of energy poverty might reach up to 40-50% (2). Reasons for energy poverty varies too: (high) energy prices, energy (in)efficiency and (low) household income. Mainly because of the massive RES support, electricity end-prices have increased over the recent years (reaching more than 300 EUR/MWh in Germany, for example). Since the Directives 2009/72/EC and 2009/73/EC leave it to the MS to define energy poverty, the concept differs. Most frequently, energy poverty is defined as a situation where the households spend too high proportion of its disposable income on expenditure for energy (usually above 10%). In Slovakia, the definition is following; Energy poverty is a status when average monthly expenditures of household on consumption of electricity, gas, heating and hot water production represent a substantial share of average monthly income of the household.

Measures to fight energy poverty

Measures usually fall into one or all groups; 1) disconnection safeguards, 2) social tariffs or 3) financial transfers. Sometimes suppliers themselves contribute with gas/electricity rebates and direct debt assistance to households (UK Trust Fund).

Financial transfers usually part of minimum income support schemes (distributed through social welfare system) which itemised energy and other financing measures providing explicit support for energy-related payments.

Disconnection safeguards aim to ensure HH can maintain energy connection, offer acute and preventive support, sometimes followed by complementary measures (debt management and customer engagement). Financing of the measures often falls on the energy supply companies and other customer groups.

Social tariffs provide financial relief to (vulnerable) households in regulated energy markets. Targeting of beneficiaries and providing adequate subsidy amount can prove difficult because of the associated negative impact on the actual consumption of energy, on the energy markets, and on the overall cost of the measure

4 Electricity retail market in Ukraine; selected issues

DSO Unbundling

When DSO part of VIU, VIU must ensure independence of DSO and abstain from interfering in operational and system development activities of the DSO and in HR matters (so that DSO can independently decide on connection to the distribution system and provision of distribution related services). When conducting its activities and using own name and brand, the DSO, being part of VIU, shall not create confusion as of its affiliation to VIU (Art. 47).

To properly fulfill these conditions, the DSO must be at least legally **and functionally** unbundled from VIU. It means that the separation of supply-related activities from oblenenergo cannot be pro-forma only, creation of legal entity is not sufficient. Supplier must have sufficient assets to carry out its activities independently from DSO and DSO must be able to perform distribution related activities with its own assets, independently from other activities within VIU. By the time of splitting of the assets, the VIU should have clear understanding of its assets base and which asset relates to which activity. It is also important for the Regulator, as he will need to establish the tariffs on the basis of the DSO asset base (in case the incentive, RAB based methodology is applied in the future).

