Ukrainian electricity wholesale market opening

A critical assessment of the first two months

Introduction

Based on the Electricity Market Law adopted in 2017, Ukraine’s retail electricity market opened on 1 January 2019, followed by the wholesale market on 1 July 2019. Under the new legal regime, retail market opening consists of customers, including household and small non-household customers, being eligible to choose their supplier; appointment of universal service suppliers;¹ and selection of a supplier of last resort in order to ensure that customers which remain without a supplier² continue to be supplied with electricity.³ The new legal regime also replaced the single buyer model of the wholesale electricity market with a market model based on bilateral, day-ahead (DAM) and intraday (IDM) markets, as well as markets for balancing and ancillary services, where participants can trade electricity freely.

Market opening in Ukraine did not happen overnight. Legislative, regulatory and technical reforms were undertaken to make changing the market model possible and to avoid major problems that would discredit the electricity sector reforms. To start with, Ukraine’s single buyer, Energorynok, was restructured into three companies - a Guaranteed Buyer, a Market Operator and Enegorynok, the latter of which was tasked to deal with outstanding debts.⁴ The transmission system operator (TSO), Ukrenergo, was assigned the roles of a commercial metering administrator as well as a settlements administrator.

The opening of the Ukrainian electricity market is an obligation that the country undertook under the Energy Community Treaty.⁵ Ukraine is the last Contracting Party to the Energy Community Treaty to reform its electricity market. All other Contracting Parties have had in place a wholesale market where generators, traders, suppliers and industrial customers can trade electricity freely at least on a bilateral market. Even though no other Contracting Party except Serbia has organised a DAM, and no other Contracting Party except Bosnia and Herzegovina has a balancing market, most Energy Community Contracting Parties also have market-based balancing mechanisms and established balancing responsibility.

¹ In the first two years after market opening, the incumbent suppliers would perform the functions of universal service suppliers.
² In case of bankruptcy or liquidation of previous supplier, revocation of license of previous supplier and other cases explicitly stipulated in Article 64 of the Law.
³ The transitional provisions of the Law stipulate that large customers had to choose a supplier within 18 months of the entry into force of the Law, i.e. by 11 December 2018; alternatively, a supplier of last resort would supply them for a period of up to 90 days.
⁴ Based on the Electricity Market Law, Energorynok was to be restructured into three companies: Energorynok (to remain and deal with debts); Guaranteed Buyer (entrusted with tasks related to RES) and a Market Operator. The CMU adopted a Resolution on establishment of the Guaranteed Buyer and Market Operator No. 324, 17.04.2019. CMU approved the Charter of the State Enterprise “Guaranteed Buyer“ by Resolution No. 455 of 22.05.2019 and the Charter of the State Enterprise “Market Operator“ by Resolution No. 454 of 22.05.2019. NEURC issued licenses by Resolution No. 1216 of 25.06.2019 to the market operator and by Resolution No.1217 of 25.06.2019 to the guaranteed buyer.
⁵ https://www.energy-community.org/legal/acquis.html.
Despite all efforts, not all reforms were completed on time, and not all IT platforms and software systems were properly tested. Until the last days of June 2019, scepticism and uncertainty were shared by both national stakeholders and market players, as well as by some members of the international community, on whether the wholesale market would actually be opened or whether the reform would be postponed. Postponing the market opening would have required amendments to the Electricity Market Law, which due to the political situation and the country’s upcoming parliamentary elections, was not possible.

In spite of these difficulties, the new wholesale electricity market model in Ukraine took effect on 1 July 2019, essentially without major problems. Disruptions were avoided due to strong regulation through various price caps imposed by the national regulatory authority (NEURC) and Public Service Obligations imposed by the Cabinet of Ministers’ PSO Act, designed to keep the market largely foreclosed in practice. Yet, the regulations go well beyond what is necessary to protect households. In fact, the single buyer market model that should have been replaced by a competitive electricity market structure, allowing market participants to buy and sell electricity on the bilateral, day-ahead and intraday markets and to offer capacities and electricity for balancing and ancillary services, is still in place in practice with little electricity of the incumbent generators being sold on the free market. In fact, 53% of generated electricity was being traded on the open market in the first two months.

In this analysis, we reflect on the experience gained in the first two months of wholesale electricity market opening in Ukraine.

**Public Service Obligations**

The PSO Act, adopted in June 2019, stipulated that during the first 18 months after market opening, *Energoatom* was obliged to sell 75% and *Ukrhydroenergo* 20% of their portfolio to the Guaranteed Buyer (a new state enterprise created by the restructuring of Energorynok). The Guaranteed Buyer was obliged to sell this electricity to universal service suppliers (USS). Additionally, *Energoatom* had to sell 15% of its portfolio through auctions to the network operators (the TSO and DSOs) for covering network losses. The sales to both the Guaranteed Buyer and to the TSO and DSOs were to be at a price specified in the auction, but not exceeding a threshold price defined by NEURC as a weighted average actual price for electricity sold by the specific producer in April-May 2019.

The PSO Act has already been amended several times, and the latest version was adopted on 21 August 2019. The new PSO Act is not only increasing the volumes that the incumbent state-owned nuclear and hydro generators are obliged to sell for PSO purposes, but it brings back the single buyer model. While under the previous version of the PSO Act the generators were holding auctions for bilateral contracts to which the Guaranteed Buyer, the TSO and DSOs were participating, the

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6 53% of electricity consist of: 38,43% - DAM/IDM (this amount includes obligations of Energoatom and Ukrhydroenergo and other participants (TPPs, CHPs) to sell on the DAM 10% of their generation; and 14,57% of generation was sold through the bilateral contracts and balancing market.

7 The PSO act contains no validity period. However, it stipulated that the Standard Agreement between GB and USS shall be valid between 1 July 2019 and 31 December 2020 (Annex 2 to the PSO act approved by the CMU Resolution No.483 of 05.06.2019 (amended by the CMU Resolution No.512 of 12.06.2019, was concluded for the period from 1 July 2019 to 31 December 2020).

8 PSO act, p.6. approved by the CMU Resolution No.483 of 05.06.2019 (as amended by CMU Resolution No.512 of 12.06.2019).

9 CMU Resolution No.803 of 21.08.2019.
new PSO Act requires that Energoatom and Ukrhydroenergo sell all the volumes required under the PSO Act to the Guaranteed Buyer. The latter in turn shall sell not only to the universal service suppliers but also to the TSO and the DSOs. Under the PSO Act of 21 August 2019, Energoatom is obliged to sell all electricity, except the amount which according to the Electricity Market Law shall be sold on the DAM, to the Guaranteed Buyer through electronic auctions. Since the Electricity Market Law requires a compulsory sale of 10% by producers on the DAM (during the first year of the DAM’s functioning), this means that the remaining 90% of the electricity produced by Energoatom must be sold in bilateral auctions to the Guaranteed Buyer only. The volumes that Ukrhydroenergo has to sell to the Guaranteed Buyer have also increased to 35% instead of the 20% required under the PSO Act from June 2019. Ukrhydroenergo has to sell the additional 10% on the DAM, and the remaining 55% at a market segment of its choice.

The new PSO Act also amends the wording on the electricity volumes to be purchased for covering the network losses from “not less than 80%...” to “at the amount of 80%...”, without specifying how the 80% is to be calculated; whether each DSO and TSO shall procure every hour the 80%, or the monthly volume of each DSO and TSO shall be 80%, thus allowing the purchase of different volumes at different hours.

In this manner, the Guaranteed Buyer became the old-new single buyer; it has an obligation to purchase electricity from RES producers as well as from Energoatom and Ukrhydroenergo, and then resell it to the universal service suppliers and all network operators (the TSO and DSOs) for losses. Choosing a supplier of their choice by the universal service suppliers as well as the network operators (as all other eligible customers) is in practice not allowed; in order to benefit from the cheap electricity, the network operators and the universal service suppliers have an incentive to comply with the PSO Act and to purchase all electricity from the Guaranteed Buyer.

The new PSO Act of 21 August 2019 changed both the threshold price as well as the price at which the Guaranteed Buyer shall sell electricity to the universal service suppliers. The threshold price shall be determined as the weighted average actual price of each producer (Energoatom and Ukrhydroenergo) in April-May and “shall include since 1 July 2019 the excise tax for the cost of a sold commodity." The price at which the Guaranteed Buyer sells to the universal service suppliers was previously a fixed price for household customers for the second quarter of 2019 (but not less than 10 UAH). The amended PSO Act defines this price as the “average weighted fixed price + TSO tariff + DSO tariff + costs of USS activity.” The new PSO Act also specifies that the Cabinet of Ministers shall approve the fixed price.10

Finally, the amended PSO Act stipulates that the Guaranteed Buyer is to use any remaining income to compensate RES producers under the feed-in tariff regime. This in essence means that the Guaranteed Buyer purchases cheap electricity from Energoatom and Ukrhydroenergo at a threshold price and from RES producers under the feed-in tariff regime. After satisfying the needs of the universal service suppliers and the network operators for losses, it sells the remaining volumes on the DAM/IDM at higher prices. Even though the Guaranteed Buyer is being constrained by the obligation to bid at the price at which it bought the electricity under the PSO Act, it is still being paid

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10 The CMU Resolution No.512 of 12.06.2019 provided that the “fixed price for HH is on the level of HH tariffs (and listed NEURC’s resolutions by which such HH tariffs were approved) + TSO tariff + DSO tariff + costs of USS activity”. The CMU Resolution No.803 of 21.08.2019 stipulates that the price is a “weighted fixed price + TSO tariff + DSO tariff + costs on USS activity.” It is also not clear how the “weighted fixed prices” will be calculated, whether that would be done based on the different categories of HH (with different tariffs), some of them have metering differentiated by time and thus also different coefficients are applied for the different time periods.
at the higher market price – constrained by price caps imposed by NEURC. The difference between the Guaranteed Buyer’s income and the expenses it incurs when performing the obligations imposed on it through the PSO Act are to be used to compensate RES producers at the “green” tariff price.

The PSO Act designed in this manner, not being consulted with the Energy Community Secretariat and not taking into account the Secretariat’s proposals for introducing financial contracts instead of maintaining a single buyer, goes well beyond what is necessary to ensure affordable prices for household customers. In addition to not respecting the procedural requirements to consult the Secretariat, the Cabinet of Ministers has imposed public service obligations on a few important state-owned incumbent undertakings, failing to respect the proportionality requirements and foreclosing the wholesale market instead of introducing competition. The PSO Act as designed is also not compliant with the requirement stemming from the electricity acquis that the network operators (the TSO and DSOs) have to purchase electricity for covering the network losses according to transparent, non-discriminatory and market-based procedures. The effects of the new amended PSO Act on the different market segments are reflected in the paragraphs below.

Opening of different market segments

As the 2017 Law envisaged, all market segments (bilateral, DAM, IDM, balancing and ancillary services) were introduced at the same time.

Bilateral market

The Electricity Market Law makes bilateral auctions through an electronic platform mandatory for state-owned generation companies (i.e. for Energoatom, Ukhydroenergo, Centrenergo, state-owned CHPs etc), but not for privately-owned ones (mostly thermal power plants). However, the freedom of the state-owned companies to conclude bilateral contracts is strictly limited by the PSO Act adopted by the Cabinet of Ministers of Ukraine in June 2019. The PSO Act applies to Energoatom, which covers more than 50% of the overall Ukrainian production, and Ukhydroenergo.

Therefore, the auctions for bilateral contracts obligatory for the state-owned generators cannot be considered competitive. In the auctions for universal service and for network losses, only one buyer is allowed to participate (the Guaranteed Buyer), purchasing at a predetermined price. The network operators (the TSO and DSOs) and the universal service suppliers are not allowed to bid at the auctions organised by Energoatom and Ukhydroenergo. Instead, the Guaranteed Buyer is doing this on their behalf, essentially replacing the old single buyer model with another single buyer regime.

In July 2019, the Guaranteed Buyer’s needs for universal service were sufficiently covered by electricity from Energoatom and Ukhydroenergo and the Guaranteed Buyer participated in the DAM and IDM markets. As the dominant undertaking, the Guaranteed Buyer has access to a large amount of cheap electricity (from Energoatom and Ukhydroenergo), and in case it obtains more than what is necessary for universal service and the network operators, it can sell the remaining electricity at higher prices at the organised market segments. This possibility is strengthened by the amended PSO Act due to the higher volumes that it can purchase at the bilateral auctions (90% of Energoatom’s portfolio and 35% of Ukhydroenergo’s). The profit it makes is then used for

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11 This includes: CHPs (including Kaluska CHP of which privatization has been initiated recently), Trypilska TPP – part of Centre and Dnister pumped-storage hydro station – it is separate state owned company (not part of Ukhydroenergo).
purchasing electricity from the RES producers (for which it is being compensated by the TSO) and for reimbursing the universal service suppliers for the supply of household customers.

In July and August 2019, the Guaranteed Buyer sold the electricity necessary for households’ needs to the universal service suppliers at regulated prices via direct bilateral contracts. After the adoption of the new PSO Act of 21 August 2019, it has to also sell via direct bilateral contracts the electricity necessary for covering network losses.

Besides Energoatom and Ukrhydroenergo, only a few other state-owned companies (Centrenergo and Kaluska CHP-New) performed auctions via bilateral contracts. The thermal power producers, amounting to more than 30% of the Ukrainian electricity generation, were mainly selling on the DAM. Industrial customers purchased electricity from producers via bilateral contracts, the DAM and IDM.

Besides selling to the Guaranteed Buyer, Energoatom is also obliged to sell not more than 15% of its electricity to the DSOs and the TSO at a loss. The amount of electricity should cover not less than 80% of their needs. The amended PSO Act fixes this amount to exactly 80%, and, instead of being sold directly to the network operators, the volumes have to be sold to the Guaranteed Buyer, which shall then resell them to the TSO and DSOs. These sales, taking place in an electronic auction, are also subject to a threshold price pursuant to the PSO Act. During the first electronic bilateral auction on 27 June 2019, some DSOs procured more electricity than necessary to cover losses. This triggered amendments to the Regulation on the bilateral auctions by the Auction Committee before the second auction was organised on 24 July 2019, introducing volume limits on the electricity that could be procured by DSOs and the TSO to cover their losses through the bilateral auctions.

As is evident from the explanations above, not a lot of electricity is left for the free market (to be sold in free bilateral contracts or on the organised market segments) by Energoatom and Ukrhydroenergo after the obligations under the PSO Act are fulfilled. The remaining 10% of electricity was sold by Energoatom on the DAM and IDM and 80% of electricity was sold by Ukrhydroenergo on the DAM, IDM and balancing market.

Day-ahead and intraday markets

Even though sufficient liquidity is crucial for the efficient functioning of organised markets, no measures were taken by NEURC to oblige certain market participants to sell or buy on the DAM in order to ensure its liquidity. This is in spite of the fact that the Electricity Market Law allows for such measures. For example, the Electricity Market Law allows NEURC to impose an obligation on producers (except small hydro and other RES) to sell up to 15% of their monthly volumes of electricity on the DAM, as well as additional amounts to be bought by the TSO, DSOs and producers of electricity at pumped storage plants.

According to the Final and Transitional Provisions of the Electricity Market Law (p.9), the marginal lower limit of compulsory sales of electricity by producers on the DAM (other than producers engaged in RES generation) may not be less than 10% of their monthly volume of electricity supply for the corresponding period in the previous year during the first year of the DAM’s operation.

12 According to the information from the meeting of the Auction Office on 19 July 2019, the forecasted production of Energoatom amounts to 5673 mln. kWh (15 % is 851 mln. kWh). The necessary amount for covering losses (based on the actual data for August 2018) is 1121,6 mln. kWh (80% of losses – 897,3 mln. kWh).
As explained above, the network operators are granted access to cheap electricity within the PSO framework, and the 15% of Energoatom’s portfolio covered 76% of the TSO and DSOs demand to cover losses in July 2019. The increased volumes (90% from Energoatom and 35% from Ukrhydroenergo) will easily cover the 80% required by the amended PSO Act.

Besides the lack of liquidity, the DAM and the IDM do not allow for a freely established price reference to develop based on a marginal price. Instead, via amendments to the DAM/IDM Rules of 24 June 2019, NEURC approved price caps that are valid for the first nine months following the wholesale market opening, i.e. until March 2020. Based on these rules, the Market Operator calculated price caps on the DAM and IDM:

- at hours of minimum load (period from 00:00 to 08:00, and from 23:00 to 24:00) – the product of the maximum value of the average actual daily wholesale market prices for electricity in hours (from 00:00 to 08:00 and from 23:00 to 24:00) of minimal load\(^{13}\) for the last three calendar months before the date of commencement of the DAM and IDM\(^{14}\) and coefficient\(^{15}\), which is defined as the ratio of the actual wholesale market price without subsidies and the actual wholesale market price for the last three calendar months before the date of commencement of the DAM and IDM\(^{16}\);

- at hours of maximum load (period from 08:00 to 23:00) – the product of the maximum value of the average actual daily wholesale market prices for electricity in the hour (08:00 to 23:00) of maximum load\(^{17}\) in the last three calendar months before the date of commencement of the DAM and IDM\(^{18}\) and coefficient\(^{19}\), which is defined as the ratio of the actual wholesale market price without subsidies and the actual wholesale market price in the last three calendar months before the date of commencement of the RDN and WRD.\(^{20}\)

Indeed the DAM and IDM prices aligned very closely to the price caps. In certain periods, the price of the IDM was even higher than on the DAM. Market participants showed limited interest to trade on the DAM and the IDM, and the traded volumes declined in the first couple of weeks. The Market Operator’s Report shows that the DAM was initiated at 41% and continued to decline during July 2019 to reach 35.7% at the end of the month. The thermal power plants, which were expected to set the marginal price, were trading through bilateral contracts and the balancing market, DAM and IDM. The TPPs could have set the price on the organised markets based on cost, however, due to the DAM/IDM rules, they had to also abide to the price caps. This discourages them from participating in these market segments, as otherwise they would be able to set higher prices.

Despite the fact that price caps are used also in other countries, including EU Member States, at the outset of organised market establishment and may be justified in an oligopolistic market such as the

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\(^{13}\) period end-start.

\(^{14}\) March-May 2019.

\(^{15}\) The coefficient is applied in the case of the obligation of the TSO to compensate the universal service suppliers in accordance with the procedure established by NEURC for economically justified costs associated with the performance of the specified by special service providers, as it was provided for in clause 13 of the PSO act (in the version of the CMU Procedure of June 5, 2019 No. 483 (without amendments));

\(^{16}\) March-May 2019.

\(^{17}\) Period start-end.

\(^{18}\) March-May 2019.

\(^{19}\) The coefficient is applied in the case of the obligation of the TSO to compensate the universal service suppliers in accordance with the procedure established by NEURC for economically justified costs associated with the performance of the specified by special service providers, as it was provided for in clause 13 of the PSO act (in the version of the CMU Procedure of June 5, 2019 No. 483 (without amendments));

Ukrainian one, these measures need to be limited in time and phased out in order to stimulate participation in these market segments and allow for competition to develop.

The volume traded on the DAM and the IDM during July 2019 was analysed by the Market Operator, and it amounts to:

on the DAM:
- 4068,4 GWh (in IPS of Ukraine);
- 2793 GWh (in Burstyn island);

on the IDM:
- 88,4 GWh (in IPS of Ukraine);
- 16 GWh (in Burstyn island).

The volume traded on the DAM and the IDM during August 2019 was also analysed by the Market Operator.

On the DAM during the first ten days, traded volumes decreased by 14,16% in comparison with the first 10 days of July and were:
- 1210,925 GWh (in IPS of Ukraine);
- 77,835 GWh (in Burstyn island).

On the IDM during the first 10 days, traded volumes decreased by 52,61% in comparison with the first 10 days of July, and were:
- 21,3 GWh (in IPS of Ukraine);
- 11,1 GWh (in Burstyn island).

On the DAM during the first 20 days, traded volumes decreased by 10,80% in comparison with the first 20 days of July and were:
- 2353,786 GWh (in IPS of Ukraine);
- 138,427 GWh (in Burstyn island).

On the IDM during the first 20 days traded volumes decreased by 19,31% in comparison with the first 20 days of July, and were:
- 48,252 GWh (in IPS of Ukraine);
- 20,66 GWh (in Burstyn island).

The decreasing volumes traded on both the DAM and the IDM and thus the dwindling interest of market participants reflect the lack of incentives, i.e. liquidity measures, to stimulate trade on these market segments. It also indirectly reflects the impact of the PSOs imposed on the main state-owned generation companies to sell a very large amount of their electricity volumes in bilateral contracts to the Guaranteed Buyer, leaving only very little electricity for trading on the short-term markets.
Balancing market

Since balancing refers to the timeframe after (IDM) markets have closed in which the TSO acts to ensure that demand is equal to supply, the functioning of the balancing mechanism is very important. The latter consists of balancing service provision and imbalance settlement. The balancing service provision takes place on the balancing capacity market (where generators or a demand-side submit bids or offers to deliver balancing energy in real-time) and the balancing energy market (where the TSO activates the contracts concluded in the balancing capacity market, which offer electricity at the least cost and the required technical specifications).

The Ukrainian balancing market (energy only)\(^{21}\) started its operation also on 1 July 2019. According to the Market Rules, until the synchronization with ENTSO-E, the market participants\(^{22}\) have to submit price bids of not less than 85% (for down regulation) and not more than 115% (upward regulation) of the established price limit for the DAM for the same settlement period.

Following the market opening, activation of the balancing energy bids was not always provided by Ukrenergo in accordance with the merit order list, and in some hours the balancing price was not determined. According to NEURC’s recommendations, in such hours Ukrenergo applied the DAM price caps as the actual price on the balancing market. It could be observed that market participants were receiving dispatch instructions from Ukrenergo after selling electricity on the DAM, and they had to purchase electricity from the balancing market in the same settlement period again in order to comply with Ukrenergo’s request to provide balancing energy that is more expensive than sell it on the DAM during the same settlement period. This reduced the interest of the market participants to act as balancing service providers and amounted to financial losses of Ukrhydroenergo and some CHPs.

Ancillary services market

Ancillary services were not procured by Ukrenergo at all during July and August 2019, and Ukrenergo has cancelled the auctions for annual and quarterly procurement of ancillary services.\(^{23}\) The costs of ancillary services are included in the dispatch tariff of Ukrenergo, amounting to 428 mln UAH.\(^{24}\)

According to information published by Ukrenergo, there are still no qualified ancillary service providers, despite for example Ukrhydroenergo having applied for receiving the status of Ancillary Service Provider.

Market participants can receive the status of Ancillary Service Provider after being registered by Ukrenergo according to a procedure established by the Market Rules. In order to be registered as an Ancillary Service Provider, the candidates must have qualified (tested) units for provision of the ancillary service. The transmission Network Code contains the requirements to be checked during the qualification (testing) procedure to be organised by an independent company. Ukrenergo shall

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\(^{21}\) No balancing capacity contracts have been concluded before 1 July 2019, so no BSP (spell out) has been obliged to maintain certain capacity available and to offer electricity at the balancing energy market.

\(^{22}\) The Market Rules govern the procedure for registration as a BSP (in Ukraine, a BSP is only a provider of the balancing energy). P.4.2.4 provides that generation units (except RES producers) are obliged to be BSPs and propose bids for balancing energy (despite sold reserves) in volumes of available capacity.

\(^{23}\) [https://ua.energy/novyj-rynok-e/rynok-dopomizhnyh-poslug/#1538032249011-abadd3b9-db7c0102-9e8d](https://ua.energy/novyj-rynok-e/rynok-dopomizhnyh-poslug/#1538032249011-abadd3b9-db7c0102-9e8d).

\(^{24}\) NEURC Resolution No.954 (p.1.8 on the page 6) and NEURC Resolution No.1622 (p.1.8 on p. 5).
ensure participation of its representatives in such a prequalification process and approve a report to be prepared after the prequalification (tests).

Reasons for the delayed prequalification of the market participants’ equipment for provision of the ancillary services include legal uncertainty related to the recent frequent changes of the secondary legislation (Ukrenergo’s tariffs), plans for decreasing the final electricity price as well as concerns about Ukrenergo’s acceptance of the prequalification tests.

Remaining open issues

IT platforms and software systems

In terms of IT systems and software platforms, the IT platform for the DAM and the IDM were procured and tested timely before the market opening. They are now used and applied by the Market Operator. In a few cases during July and August 2019, results of the IDM could not be determined.

Ukrenergo procured IT platforms for ensuring performance functions of the Settlements Administrator, Commercial Metering Administrator and procurement of ancillary services and balancing energy. The status of their implementation is still not fully clear as settlements and invoicing are performed by Ukrenergo with a delay of more than 10 days. Additionally, there are complaints about mistakes and quality of data used for settlements.

Financial guarantees and debts

For the first ten days of July, NEURC, at the initiative of Ukrenergo, adopted a decision that financial guarantees on the balancing market should not be applied, i.e. in the first ten days it was free to trade on the balancing market without the provision of financial guarantees. Additionally, the Market Rules (p.6.1.1) exempt the Guaranteed Buyer, the Market Operator, the TSO and DSOs from submitting financial guarantees to the TSO even though they are balancing responsible parties, hence discriminating against suppliers and other market participants that are required to submit financial guarantees.

Another alarming issue is the default status of Ukrinterenergo (which was designated by the Cabinet of Ministers as a supplier of last resort), what is linked with its insolvency. The debts of Ukrinterenergo are increasing due to non-payments from certain consumers, e.g. water suppliers, which under normal circumstances should be required to pay for electricity at balancing market prices. As such, Ukrinterenergo is not allowed to participate in any segment of the market (bilateral, DAM, IDM). It is unrealistic to expect the supplier of last resort to ensure the supply of customers in case of bankruptcy by other suppliers.

Finally, historically cumulated debts, which continue to be accumulated also by Ukrinterenergo, have not been resolved. The CMU Resolution No. 570 of 05.07.2019 on amendments of some CMU Resolutions amending the CMU Resolution No. 1023 of 12.12.2018 on designation of Ukrinterenergo as a supplier of last resort stipulates that the Ministry of Regional Development,  

25 https://zakon.rada.gov.ua/laws/show/570-2019-%D0%BF.  
Construction and Utilities shall ensure measures are put in place to solve the issue related to Ukrinterenergo’s debts.

Transparency and data publication shall be improved and NEURC rules on data publication\(^\text{27}\) should be implemented. In particular, the quality of the registries shall be improved by both Ukrenergo and the Guaranteed Buyer. Stricter requirements are necessary in relation to the balance responsible party registry in order to ensure that DSOs and suppliers (already unbundled) cannot be in the same balancing group and that DSOs cannot be balance responsible parties for suppliers.

**Regulatory monitoring**

NEURC has not yet approved the reporting forms for monitoring of wholesale electricity market functioning. It has made drafts available on 19 July 2019 for public hearing purposes.

**RES**

The Guaranteed Buyer is obliged to buy all electricity produced from renewable energy sources at green tariff prices, pursuant to a PSO imposed by the Electricity Market Law until 1 January 2030. The Guaranteed Buyer has to sign a bilateral agreement with the producers for whom the green tariff is set, based on a template (standard) contract approved by the regulator. The purchase of electricity by the Guaranteed Buyer is done at the green tariff price based on forecasting data,\(^\text{28}\) and the Guaranteed Buyer sells that electricity on the DAM and the IDM. The TSO, Ukrenergo, is obliged to compensate the Guaranteed Buyer for the difference between the cost of electricity purchased by it at the green tariff price and its costs of selling on the DAM and the IDM, as well as costs associated with the settlement of the electricity imbalance of the balancing group of the green tariff producers\(^\text{29}\) and costs prescribed in the cost estimate of the Guaranteed Buyer for its activities.

Before 1 July 2019, the compensation for RES producers was provided on the wholesale electricity market by SE Energorynok through the Wholesale Electricity Market (WEM - the market operated by Energorynok before 1 July 2019) price\(^\text{30}\) (the transmission tariff, losses in the transmission system and other wholesale price components, including compensation to RES producers, were part of the WEM price before 1 July 2019), and was not a separate component of the transmission tariff. Since 1 July 2019, such costs are included in the transmission tariff and are to be compensated by Ukrenergo to the Guaranteed Buyer.

**Transmission tariffs**

The transmission tariffs increased as of July 2019, which led to an increase of final prices for customers other than those benefiting from regulated prices under the PSO Act. The reasons include the fact that when NEURC calculated the threshold prices (based on the WEM price for April-June


\(^{28}\) The GB prepares a forecast based on data received from the RES producers. The settlement of the purchased and sold electricity – based on metering data received from the commercial metering administrator (CMA) – Ukrenergo – p.7 of the GB Rules (NEURC Resolution No.641 of 26.04.2019).

\(^{29}\) The Guaranteed Buyer is also a BRP for the balancing group of the green tariff producers.

\(^{30}\) The transmission tariff including losses in the transmission system as well as other components of the wholesale price—RES compensation - were part of the WEM price before 1 July 2019. While the transmission tariffs were approved by NEURC based on costs calculated and submitted by Ukrenergo, the money flow differed since Ukrenergo was receiving payments through the WEM as its costs were included in the WEM price. Ukrenergo was not being paid by market participants based on contracts concluded with them, as is the case as of 1 July 2019.
2019), it did not take into account that transmission tariffs would be separate from those prices and would be calculated in addition. NEURC’s decisions approving Ukrenergo’s transmission and dispatch tariffs in June 201931 have been challenged in court. In the meantime, the approval of the PSO Act, which stipulated that 80% of the losses shall be covered by Energoatom, resulted in a lowering of the transmission tariffs.32 On 15 August 2019, NEURC initiated a review of the transmission tariff due to changes in the Guaranteed Buyer budget and changes in the forecasted transmitted electricity,33 and, on 20 August 2019, it initiated a review of the dispatch tariff due to changes of the basis for tariff calculation (the volume of transmitted electricity and changes of the produced electricity to the injected electricity).34 On 30 August 2019, NEURC approved a new transmission tariff for Ukrenergo.35

1. Concluding remarks

On 1 July 2019, the wholesale electricity market in Ukraine started operating within the new legal regime that was supposed to replace the single buyer model. Despite numerous unresolved issues, all market segments (except the market for ancillary services) started functioning without major problems due to strong market regulation via various price caps as well as PSOs that do not allow full competition to develop. Ensuring that the price caps and other restrictive measures such as disproportionate PSOs are limited in time and phased out in order to stimulate participation to the market and allow competition to develop should be treated with high priority by the Cabinet of Ministers and NEURC.

However, the latest amendments to the PSO Act of 21 August 2019 speak to the contrary – the electricity volumes to be sold within the public service obligations’ framework have increased, and they cannot be sold in direct bilateral contracts to the universal service suppliers and network operators. Being sold instead in auctions at which the prices and volumes are fixed, they have to be sold by the state-owned incumbent generators to the Guaranteed Buyer only – the new single buyer on the Ukrainian wholesale market.

Despite the fact that the PSO Act was already changed several times, the amendment procedure is not duly followed and the act is not being consulted with the Energy Community Secretariat. The Cabinet of Ministers has not followed the Secretariat’s proposal for including financial bilateral

31 NEURC Resolution on the approval of the transmission tariff No. 954 of 07.06.2019 - 347,43 UAH/MWh (for period from 01.07.2019 till 31.12.2019) and NEURC Resolution on the approval of the dispatch tariff No.955 of 07.06.2019 - 8,90 UAH/MWh (for period from 01.07.2019 till 31.12.2019).
33 Draft of NEURC Resolution on the approval of the transmission tariff of 15.08.2019 proposed that the transmission tariff is set at the level of 159,3 UAH/MWh (it is expected that the proposed tariff will be valid for the period from 01.10.2019 till 31.12.2019).
34 Draft of NEURC Resolution on the approval of the dispatch tariff of 20.08.2019– 8,04 UAH/MWh (it is expected that the proposed tariff will be valid for the period from 01.10.2019 till 31.12.2019). Such amendments were proposed because Ukrenergo previously calculated the dispatch tariff based on volumes of gross production, but according to the Transmission Network Code it should be taking into consideration the injection into the system.
contracts, which in other countries have proven to be the best mechanism to hedge the universal service suppliers and to ensure that the potential windfall profits of the generation companies will be transferred to consumers. Instead, it has replaced the single buyer model with auctions to which only one buyer (the Guaranteed Buyer) is allowed to participate while purchasing at a predetermined price from state owned generators.

Moreover, the problems with historical debts and unpaid bills that bring into question the operation of the supplier of last resort, Ukrinterenergo, have yet to be addressed.

The Secretariat welcomes the start of operation of the new wholesale electricity market model in Ukraine. Introducing bilateral and short-term markets was long awaited in this Contracting Party of the Energy Community. However, while market segments are operating and the market participants are gaining experience in trading on the new wholesale market, the successful start of this new experience was overshadowed by disproportionate PSOs imposed on the main market participants. Therefore, the Cabinet of Ministers and NEURC are invited to address the remaining open issues, to ensure the phasing out of the limitations in due time and to impose further obligations on market participants to participate in the organised market segments in line with the Policy Guidelines of the Energy Community Secretariat.36