



In each issue of the ERRA Newsletter we present a member organisation through current regulatory issues they are facing that can be relevant and informative for other ERRA members. In this issue of the newsletter we introduce the **Energy Regulatory Office of Poland** through 4 current regulatory topics.

Poland recently adopted a decision to introduce a capacity market. What are your experiences with implementation of dual-commodity market model?

As of 18 January 2018, a new public aid mechanism has come into force based on Act of 8 December 2017 on capacity market (hereinafter "The Capacity Market Act"). The aim of this mechanism is to guarantee security of electricity supply. Introduction of capacity market means that the structure of current energy market shall be changed from energy only market to dual commodity market, on which not only energy is traded, but also steadiness to deliver power to the system.

The Capacity Mechanism will allow for contracting capacity a few years in advance based on multiannual demand forecasts. The contracts are assigned through a system of descending-price auction. Those Capacity Market Units (CMUs) that win the auctions will be obliged to remain on standby and to deliver power during periods of highest demand (so-called



"Capacity Obligation"). The Capacity Market Act envisions that power deliveries will take place between 2021 and 2047. Capacity Obligations will be a subject to further trade.

The qualification process will start with the so-called "General Certification" which is carried out at the beginning of each year. It aims at providing TSO with the general information needed to properly determine the capacity auction parameters and monitor market performance. The General Certification concerns single physical units – however aggregation is possible at a later stage, during the certification to main auctions (so-called "Main Certification").

General Certification is mandatory for all existing generating units located in Poland with a gross capacity equal to or higher than 2 MW, regardless of their participation in the capacity market. It is only voluntary for existing generating units smaller than 2 MW, DSR and new generating units. However, it is necessary for any capacity provider who would like to participate in the further steps of the capacity market qualification process.

During the General Certification process, owners of a physical unit must submit basic identification, technical and economic data. DSR units are exempted from providing the list and location of their metering points at this stage of the qualification process. The data submitted for the General Certification is verified by TSO in cooperation with the relevant distribution system operator (DSO).

The General Certification process is carried out through a dedicated IT system called the Capacity Market Registry. The outcome of the process for a given physical unit is a status record in the Capacity Market Registry. The General Certification gives access to the second step of the qualification process called Main Certification, during which capacity providers seek to be certified as CMUs for the next auction.

The Main Certification process is carried out before each auction. During this process, several physical units may be aggregated with a view to be certified as a single CMU ("Aggregated CMU").

Each capacity market auction is a Dutch auction, in which all winning CMUs receive the same price for the service of availability that they provide. The auctioneer announces a high price at the beginning of the auction and eligible participants submit bids to indicate how much capacity they are willing to provide at that price. This process is repeated in successive rounds according to a pre-determined schedule.

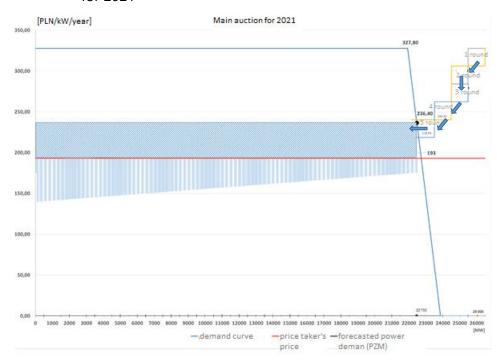
The Capacity Market Act imposes a series of duties on the President of Energy Regulatory Office (hereinafter "President of ERO"). Primarily it was the approval of the Capacity Market Rules. In addition, it is the responsibility of the President of ERO to confirm and announce the final results of each capacity auction. Regulator is also responsible for consulting the parameters of the main energy auction.

The President of ERO has issued several announcements regarding the obligation to participate in General Certification which aims at providing the TSO with general information required to properly determine the capacity auction parameters and monitor market performance.

As of 2018, 1167 CMUs have been registered and their net capacity equals to 47,1 GW. Only 19 proceedings have been initiated due to a failure to meet the obligation to register in the General Certification.

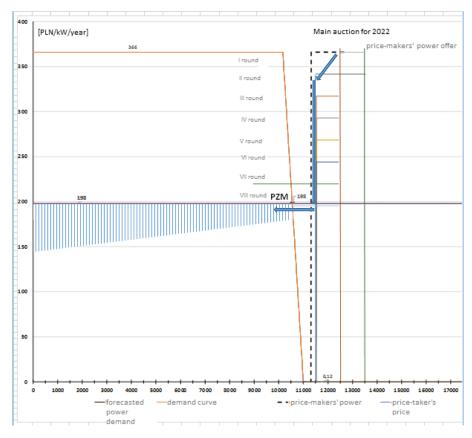
The results of three Main Auctions are shown below.

Graph 1. The course of the first Main Auction with the delivery period for 2021



Source: ERO based on the data published by PSE S.A. https://www.pse.pl/aukcja-glowna-na-rok-dostaw-2021

Graph 2. The course of the second Main Auction with the delivery period for 2022



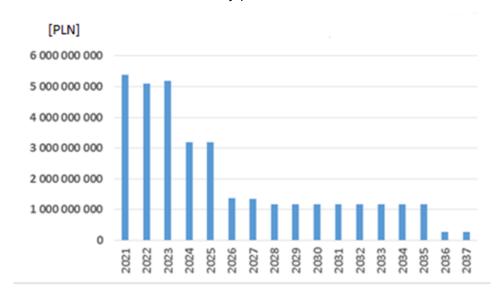
Source: ERO based on the data published by PSE S.A. https://www.pse.pl/aukcja-glowna-na-rok-dostaw-2022

Graph 3. The course of the third Main Auction with the delivery period for 2023



Source: ERO based on the data published by PSE S.A. https://www.pse.pl/aukcja-qlowna-na-rok-dostaw-2023

Chart 1. Costs of annual capacity agreements as a result of the main auctions for the delivery period of 2021-2023



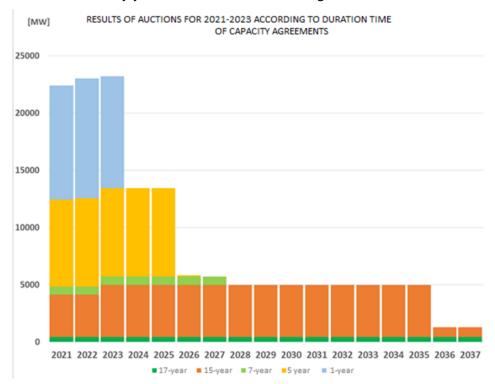
Source: ERO based on the data published by PSE S.A.:

https://www.pse.pl/documents/20182/316843399/Wstepne wyniki aukcji 2021 d o publikacji 2018 11 20.pdf

https://www.pse.pl/documents/20182/98611984/Wstepne wyniki aukcji 2022 do publikacji 2018 12 07.pdf

https://www.pse.pl/documents/20182/98611984/Wstepne wyniki aukcji 2023.pdf

Chart 2. Account of capacity agreements resulted from main auctions for delivery years of 2021-2023 according to its duration



Source: ERO based on the data published by PSE S.A.:

https://www.pse.pl/documents/20182/316843399/Wstepne wyniki aukcji 2021 d o publikacji 2018 11 20.pdf

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There has been a considerable change in market concentration in the electricity sector between 2016 and 2017, as both CR3 and HHI indexes have increased. What were the main drivers behind this change and what are the possible regulatory implications?

The largest market share in the electricity generation sub-sector in 2017, which amounted to 43.5%¹, was maintained by the PGE Polska Grupa Energetyczna S.A. capital group (an increase of 7.7 percentage points compared to the previous year, as a result of the acquisition of generation assets of the EDF group by the PGE Polska Grupa Energetyczna SA). On the other hand, TAURON Polska Energia S.A. was the leader on the final sales market with 10.8% share (increase by 0.6 percentage points compared to the previous year).

The market share ratio of the three largest entities, measured according to the energy introduced into the grid (taking into account the amount of energy delivered directly by generators to end users), in 2017² increased significantly and amounted to 69.0% (an increase of 14.1 percentage points in comparison with the previous year). Similarly, the ratio of the share of the three largest generators in the installed capacity has significantly increased by 12.3 percentage points. The three largest

¹ Share calculated according to the volume of electricity introduced to the grid. However, when calculating this indicator, the entity structure was taken as of December 31, 2017, i.e. after the acquisition of EDF Group generation assets by PGE Polska Grupa Energetyczna S.A.

producers (grouped in capital groups: PGE Polska Grupa Energetyczna S.A., TAURON Polska Energia S.A., ENEA S.A.) have in total almost 2/3 of installed capacity and accounted for almost 70% of electricity production in Poland. The indicators described above are presented in table 1. The importance of producers operating within the three dominant entities in the electricity generation market has significantly increased. It was due to acquisition of generation assets from other capital groups, i.e. respectively: EDF and ENGIE Energia Polska.

Table 1. Market share and state of concentration in the generation subsector³

Year	Number of	Number of	Share of	Share of the three biggest entities in electric Energy introduced to the grid [%]	HHI Indicator ⁴	
	entities with at least 5% share in installed capacity	entities with at least 5% share in electric Energy introduced to the grid	the three biggest entities as of installed capacity [%]		Installed capacity	Energy introduced to the grid
2016	5	6	50,8	54,9	1 309,3	1 640,0
2017	4	4	63,1	69,0	1 795,9	2 281,1

Source: Data of the Ministry of Energy and the ERO

The long-term downward trend, in particular regarding HHI indicators, measured according to installed capacity and according to the volume of

both according to the energy introduced to the grid and according to the installed capacity, the structure of the entity according to the state at December 31, 2017, i.e. after the acquisition of EDF Group generation assets by PGE Polska Grupa Energetyczna S.A.

² In calculating the market share ratios of the three largest entities, both according to energy introduced to the grid and according to installed capacity, the structure of the entity as of December 31, 2017, i.e. after the acquisition of EDF Group generation assets by PGE Polska Grupa Energetyczna S.A.

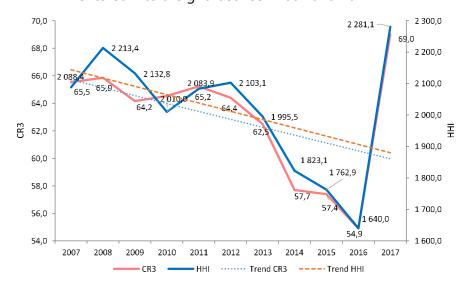
³ For all entities operating in the generation sector that are subject to statistical obligation, including installed capacity and energy introduced to the grid from wind and water sources. When calculating the market share ratios of the three largest entities and HHI indicators,

⁴ The Herfindahl-Hirschman index (HHI) is defined as the sum of squares of individual market shares of all entities forming a given branch: HHI> 5,000 - very high concentration, HHI from 1 800 to 5,000 - high concentration, HHI from 750 to 1 800 - concentration average, below 750 - low concentration (according to "Raport z postępów w tworzeniu wewnętrznego rynku energii elektrycznej i gazu", Brussels 2005 and J. Kamiński "Metody szacowania siły rynkowej w sektorze energetycznym", Polityka Energetyczna, Volume 12, No. 2/2, 2009).

energy introduced into the grid (taking into account the amount of energy delivered directly by generators to end users), in 2017 changed significantly. After a few years of decline in 2017 both indicators increased significantly and their increase amounted to 37.1% and 39.1%, respectively. It is worth emphasizing that this index calculated for production in 2017 reached a value that allows to conclude that the degree of concentration on the market has passed from medium to high. However, calculated for installed capacity – It is slightly below the high concentration limit.

The change in the concentration ratio and the market share ratio of the three largest entities in the generation sub-sector in 2007-2017 is presented in the graph below.

Graph 4. State of concentration of electricity production sub-sector as well as market shares of the biggest entities according to energy entered into the grid between 2007 and 2017



Source: Data of the Ministry of Energy and the ERO

This significant increase in market concentration may have a negative impact on the competition between the dominant entities. Those reservations were brought up by the President of ERO in a letter to the President of the Office of Competition and Consumer Protection. In general, with higher concentration market tends to suffer from reduced competition between entities which could possibly results in higher prices for the end users.

In addition, the fact that three main players are state-controlled companies creates a further risk of disturbance on the energy market.

Access to the cross -border infrastructure, capacity allocation and congestion management – ERO's activity in the scope of the development of common electricity market.

Since the adoption of European Commission's guidelines and network codes those acts are being implemented on the European, regional and national level by relevant regulatory authorities, incl. President of ERO. The engagement of the regulator focuses, among others, on approving the terms and conditions regarding capacity allocation and congestion management in day ahead, intra-day and long term timeframes.

President of ERO has supported Polish parties to become members of early implementation projects in this respect, which later were announced the European wide solutions for single day ahead and intra-day market coupling – Price Coupling of Regions/ Multi Regional Coupling and Local Implementation Projects for XBID. Representatives of ERO participate in task forces and working groups responsible for implementations of provisions of EU legislation not only on the European level, but also in the

capacity calculation regions (CCRs) established by ACER in the decision no.06/2016.

What constitutes a regulatory challenge is that Polish bidding zone borders are part of 3 different CCRs: Core by synchronous profile (borders with Germany, Czech Republic and Slovakia), Hansa by Polish-Swedish border and Baltic by Polish –Lithuanian border. All the sets of terms and conditions foreseen for regional approval need, therefore, be prepared and approved independently for 3 regions. From what we can observe the more rules proposed by TSOs differ from one region to another, the more regulatory scrutiny is required to align them so that the applied solutions could consistently function on the market. One of the most important for development of Polish market, and as it turned out one of the most difficult to align on by regulatory authorities, was the method for cross-zonal capacity calculation in Core region. Flow-based approach was chosen by TSOs there. ERO very much supported this approach and it was not contested by any of NRAs, unlike the particular deliverables for its implementation. As a consequence ACER issued the decision on this matter.

In order to couple Polish borders with the neighbouring Core region countries, ERO became involved in the interim project for the NTC-based market coupling between DE, AT, PL and 4MMC countries. The aim is to provide temporary coupling solution before Core Flow Based Market Coupling Project will go live. The project feasibility is still to be tested.

In the light of capacity allocation and congestion management guidelines implementation President of ERO designated 2 NEMOs in Polish bidding zone. Another NEMO is the "passporting" one – designated in another country but can offer day-ahead and intraday trading services with delivery in Poland. For that reason the arrangements regarding the multi-NEMO market environment needed to be established.

For the future ERO hopes for the smooth execution of the goals set by the current legislation and trusts the serious challenges arising from Clean Energy Package will not hamper the progress already made.

Customer protection is one of the main role of regulators. You recently enacted the implementation of Alternative Dispute Resolution (ADR) mechanisms. What has been your experience in applying ADR so far?

Consumer protection is one of the main roles of the President of ERO. In 2018 regulator carried out many activities aimed at protecting energy and gas consumers and empowering their position on the market.

In 2018 new legislation concerning supplier of last resort was drafted. In the Energy Law Act there was indirect slight regulation concerning the supplier of last resort in electricity sector and totally no regulation for natural gas customers. Such a situation was perceived by consumers as an additional risk in the case of discontinuation of activity by a given supplier. 2018 was a hard year for some alternative suppliers, mainly because of observed wholesale price increase, and some of them had to stop their business. In consequence, over 100 thousand of electricity customers and over 55 thousand of natural gas customers were remained without suppliers. Hence, there was immediate need to introduce the supplier of last resort solutions into legislation (the Energy Law Act and gas ordinance) in order to assure the continuity of supply for all customers.

Last year ERO started working on preparation of new price comparison tool for households and microenterprises in electricity and gas. The electricity comparison tool was introduced by ERO in 2011. It was very plain instrument for comparing savings of electricity household offers in

standardised manner. However, taking into consideration the changes on the market, the growing requirements of market participants, new complex offers and also Clean Energy Package assumptions, there was a need to prepare a new comparison tool. The new price calculator should cover offers for households in electricity and gas, and also microenterprises in electricity, including dynamic price contracts. The new comparison tool will be independent from market participants, free of charge, provide accurate and up-to-date information, accessible for persons with disabilities by making them perceivable, operable and understandable.

In 2018 ERO held many mutual meetings with suppliers and distribution companies in order to analyse the most urgent and important issues addressed in customer complaints, and prepare recommendations to deal with them. Each year the Single Point of Contact, functioning within ERO, receives thousands of customer complaints. In the process of dealing with the complaints, regulator analyses all cases and holds mutual meetings with energy companies, on which consumers complain more often. It is an effective tool to improve customer situation on the market and encourage companies to self-regulation to deal with problems.

In May 2017 Coordinator for Negotiation at the President of the ERO began its activity. It is an institution which provides customers with a possibility of alternative resolution of disputes with energy companies. The Coordinator for Negotiations initiates proceedings regarding out-of-court resolution of a dispute upon a request of consumer of gas, electricity or heat in the household, or at the request of the prosumer being a consumer.

The Coordinator conducts a proceeding on disputes between the abovementioned consumers and the energy company, when the dispute arises from one of the following contracts:

- 1) on connection to the electricity, gas or heat grid, including connection of a microinstallation,
- 2) on provision of services of transmission or distribution of electricity or natural gas,
- 3) on provision of services of transmission and distribution of heat,
- 4) on sales,
- 5) common service agreements

if the value of the amount in controversy is not less than 50 PLN and does not exceed 50 000 PLN.

The most common subject of the disputes are matters concerning the doubts as to the fairness of the settlements with the energy company or the misleading of the consumer when signing the contract with the company. Less often the cases of compensation for the destroyed household equipment are reported. Since the beginning of its functioning the Coordinator received more than 1000 cases, and in 2018 the number of logged disputes increased by 50%, comparing with the number of cases received in 2017. More than 500 ADR proceedings were carried out over the last year. More than 130 mediations were ended due to the lack of consent of energy company to participate in the mediation. In more than 200 cases the ADR proceedings were concluded with settlement between parties, which represents more than 50% of the mediations carried out on its merits - a procedure in which consent to participate was expressed. Bearing in mind the above numbers we can say that the awareness of energy consumers is growing, but further activities to empower energy customers and improve energy market are still needed.