

Guideline on participation in Polish capacity market for foreign capacity providers

Version: 1.2

Version history

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1 CAPACITY MARKET REGISTER

Capacity Market Register is an electronic platform for gathering, processing and exchange of commercial, billing and technical data in the Polish Capacity Market. It allows to participate in the certification and auction processes as well as to submit transactions on the secondary market. It was established pursuant to Article 95 of the Capacity Market Act. The requirements for operation and maintenance of the Capacity Market Register are regulated by the Capacity Market Act and the Capacity Market Rules. PSE S.A.(hereinafter "PSE") is the owner and administrator of the Capacity Market Register.

Capacity providers shall access the Capacity Market Register via Capacity Market User Portal (PURM) https://purm.pse.pl/. Active access to PURM requires creating an individual user account here. In order to create an account, it is necessary to provide:

- name and surname,
- e-mail address,
- telephone number.

The application for creating an account must be signed with a **qualified electronic signature**. Moreover, all applications and statements (including offers in the pre-auction) submitted via PURM have to be signed with user's qualified electronic signature.

The process of creating an account is described in details in section 2 of User Manual.



2 CAPACITY MARKET PROCESSES

European Commission decision approving Polish Capacity Market states that it shall be open for foreign capacity from neighbouring EU TSOs, whose power systems are electrically connected with Polish power system. The regulations foresee the direct participation of foreign capacity in the capacity auctions, called "target solution".

Since the maximum volume of capacity obligations to be contracted by foreign units from each zone for a given delivery year is defined by the Minister relevant for energy in the Regulation on the parameters of the main auction, PSE needs to pre-select those capacity providers which will be allowed to participate in the capacity auction for given delivery year. This process is called the **pre-auction**.

Pre-auction winners are eligible to participate in the next capacity market process which is the **main certification**. During the main certification, capacity providers establish capacity market units containing physical units i.e. generators or demand side response units.

According to ACER Decision No 36/2020 on technical specifications for cross-border participation in capacity mechanisms, foreign capacity providers shall have their eligible Capacity Market Units registered for a given Capacity Market in the EU Register. Foreign capacity providers shall request its TSO to perform the **Capacity Market Unit Registration (CMU Registration)** in the EU Register and provide its TSO with up-to-date data of its Capacity Market Unit. EU Register is the additional tool and does not replace the processes handled by the National Register (PURM). Registration in EU Register does not mean that given Capacity Market Unit (CMU) is approved to participate in the capacity auction. It still has to participate in the main certification process in order to fulfil additional requirements.

Capacity market units which have successfully passed the main certification are entered in the Capacity Market Register and being granted a certificate allowing them to participate in the upcoming capacity auction i.e. **main auction (T-5)** or **additional auctions (T-1)** and **secondary market**. After winning the capacity auction, capacity provider is granted the capacity agreement. All abovementioned processes are presented on the graph below and described in subsequent sections.

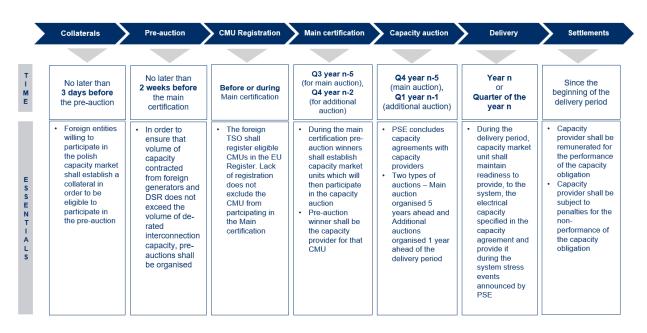


Figure 1 -Capacity market essentials



2.1 Collaterals

According to §3(8) of the Regulation of the Minister of Energy of 3rd September 2018 on the financial collateral to be provided by the capacity providers and the pre-auctions' participants, capacity provider willing to take part in the pre-auction shall establish a collateral, solely in cash, in the amount of 43 **PLN/kW** of capacity to be offered in each pre-auction. The deadline for collateral establishment is 3 days before the pre-auction. The collateral shall be considered to be properly established if it is paid within the required time and in the correct currency (PLN only) to the PSE's bank account indicated below:

PL56 1240 5918 1111 0000 4913 7468

BIC/SWIFT:PKOPPLPW

In the title of the bank transfer one shall specify the information about pre-auction which the capacity provider intends to participate in: "Pre-auction | Country | Year" for example:

- Lithuanian units participating in pre-auction for the main auction for delivery year 2028
 "Pre-auction Lithuania 2028"
- Swedish units participating in pre-auction for the main auction for delivery year 2028 "Pre-auction Sweden 2028"
- Slovak units participating in pre-auction for the main auction for delivery year 2028
 "Pre-auction Slovakia 2028"

In case of willingness to participate in the pre-auctions for additional auctions, the title of the bank transfer should be for example:

- Lithuanian units participating in pre-auction for the additional auction for first quarter of delivery year 2025
 - "Pre-auction Lithuania Q12025"
- Swedish units participating in pre-auction for the additional auction for second quarter of delivery year 2025
 - "Pre-auction Sweden Q22025"
- Slovak units participating in pre-auction for the additional auction for fourth quarter of delivery vear 2025
 - "Pre-auction Slovakia Q42025"

The issue that requires emphasizing is that if a capacity provider wants to participate in the pre-auctions for the main auction and four additional auctions (for each quarter), capacity provider must provide collaterals in five separate transfers with the appropriate titles listed above.

If the collateral is properly established, capacity provider will be eligible to submit offers in the given preauction.

2.2 Pre-auction

During the pre-auction, foreign capacity providers compete with each other by offering the capacity obligation in the Polish capacity market. Pre-auctions are organised separately in regard to each of the zones i.e.:

- CZ/DE/SK synchronous profile zone comprising transmission systems of 50Hertz, ČEPS and SEPS
- LT transmission system of Litgrid
- SE transmission system of Svenska Kraftnät



Pre-auctions are conducted electronically via PURM, after the Regulation referred to in Article 34 of the Capacity Market Act enters into force, but no later than **2 weeks before main certification**. The date and time of beginning and end of each pre-auction shall be published by PSE on its <u>website</u> and in PURM, no later than **7 calendar days** in advance.

2.2.1 Assignment of the bidder role

In order to be able to submit offers in the pre-auction, user needs to be assigned with **bidder role** regarding given capacity provider. Being granted with the bidder role requires user to submit an application via PURM to be assigned with one. After logging in, a dedicated application form can be found which requires information such as:

- name of the capacity provider,
- legal form of the capacity provider,
- · capacity provider's tax identification number,
- · capacity provider's address,
- power of attorney drawn up according to the appendix 4.3 to the Capacity Market Rules with the bidder role selected (available for download here).

Filled form shall be signed with user's qualified electronic signature and sent to PSE which then verifies its completeness and assigns user with the bidder role in regard to capacity provider indicated in the application. From now on, user is eligible to submit offers during the pre-auction in regard to that capacity provider. What is important, user must be assigned with the bidder role **before the day of the pre-auction**.

The process of submitting the application to be assigned with bidder role is described in section 5 of <u>User Manual</u>.

2.2.2 Participation rules

During the pre-auction, **users who have bidder roles assigned**, submit offers on behalf of the capacity providers. Pre-auction offer shall contain:

- · capacity Provider's identification data,
- offered volume of capacity obligation (not less than 2 MW),
- price of the capacity obligation (zł/kW/year),
- offer's CO₂ emission factor (CO₂ emission factor of each physical unit which will replace that offer during the main certification must not exceed that value, for example if the offer is assigned with emission of 500 g/kWh, all physical units which will form part of capacity market unit replacing that offer must have an emission factor not exceeding 500 g/kWh),
- information whether the offer is divisible or not,
- account number to which the collateral shall be refunded.

Submitted offer shall be signed with user's the qualified electronic signature. The total volume of capacity obligation offered by the capacity provider in the pre-auction **shall not exceed the volume covered by the collateral established before the pre-auction**. In case capacity provider submits offers for a higher volume, offers with the lowest price will be selected so that their total volume is not higher than the volume covered by the established collateral.

After the pre-auction, PSE verifies submitted offers and select those which will be accepted. Selection rules are set forth in Articles 9(4)-(6) of the Capacity Market Act. According to these provisions, the selection shall be made in the following steps:

1. submitted valid offers shall be ranked from the cheapest to the most expensive, whereby:



- in regard to offers with the same price, the order is determined by the value of the unit CO₂ emission factor starting from the lowest,
- in regard to offers with the same price and the same CO₂ emission factor, the ranking is determined by the time of the offer's submission
- 2. from among the offers thus ranked, those which total capacity does not exceed the demand in a given pre-auction shall be subsequently accepted
- 3. If the last offer, the selection of which together with the previous offers would cause the total capacity to be greater than the demand in a given pre-auction, and this offer
 - Is divisible the offer shall be partially accepted;
 - Is indivisible the offer shall be rejected.
- 4. in case of rejection of an indivisible offer, another offer shall be checked. If this offer is also indivisible, no further offers shall be considered.

Accepted offers are being entered into the Capacity Market Register. Within **7 calendar days after the pre-auction**, PSE shall inform the capacity provider about acceptance or rejection of his offers. Pre-auction results are being published by PSE no later than **5 working days after the capacity auction** which the pre-auction concerned.

2.3 Main certification

After the pre-auction, capacity providers whose offers were accepted in its course, may participate in the next capacity market process which is the main certification. Main certification is a process enabling PSE to verify the parameters of each capacity market unit and admit it to participate in the upcoming capacity auction. The purpose of certification is therefore:

- establishment of a capacity market unit and admitting it to the main auction and secondary market for a given delivery year or
- establishment of a capacity market unit and admitting it to an additional auction (1 or more) and secondary market for a given delivery year.

During the main certification, capacity provider shall replace his offers, accepted during the pre-auction, with capacity market units comprising physical units. It is essential that a single pre-auction offer can be only replaced by single capacity market unit.

Capacity provider shall submit an application for certification to PSE during the **first 10 working days** of the main certification. To make the submission easier, capacity provider should prepare data listed below:

- 1. capacity provider's and physical unit's owner identification data
 - name,
 - VAT identification number,
 - address and correspondence address.
- 2. power of attorney (if needed) drawn up according to appendix 4.3 do Capacity Market Rules authorising user to submit an application for certification on behalf of the capacity provider
- location and basic technical parameters of the physical units forming part of the capacity market unit
 - unit's address,
 - net and gross attainable capacity,
 - energy production technology,
 - basic and additional energy source,
- 4. advanced technical and economic parameters of the capacity market unit



- the rate of changes in the volumes of electricity generated by physical unit (net MW/minute),
- annual average of the net electricity generation efficiency (%),
- net electricity generation efficiency under normal conditions at net maximum capacity (%),
- net electricity generation efficiency under normal conditions at the technical minimum (%),
- net general efficiency (%) mandatory in regard to CHP units
- technical minimum for electricity generation (%).
- unit emission factor: CO₂ (g/kWh),
- unit emission factor: sulphur oxides (g/kWh),
- unit emission factor: nitrogen oxides (g/kWh),
- unit emission factor: dust (g/kWh).
- unit's variable costs (PLN/MWhnet),
- fixed operating costs (PLN),
- net current value of fixed assets forming part of the physical cross-border unit (PLN).
- 5. volume of offered capacity obligation (MW)
- 6. additional information and attachments:
 - information confirming the ability of physical cross-border unit to provide net maximum capacity during the delivery period for a continuous period not shorter than 4 hours (appendix 7.1 to the Capacity Market Rules),
 - confirmation issued by the relevant transmission system operator within whose territory the
 physical unit is located stating compliance with the actual situation of the technical parameters
 and location of physical unit (appendix 7.4 to the Capacity Market Rules),
 - commitment issued by the relevant transmission system operator within whose territory the
 physical unit is located, to provide the PSE with metering/billing data and data regarding bids
 submitted by a physical unit on the energy exchange and balancing market (appendix 7.5 to
 the Capacity Market Rules),
 - data necessary to verify the calculation of unit CO₂ emission factor or average annual CO₂ emission in regard to generating units constituting physical units forming part of capacity market unit to be created (appendix 7.10 to the Capacity Market Rules),
 - information on existing and planned time restrictions on the operation of a physical unit resulting from separate provisions, e.g. from environmental regulations,
 - declaration on meeting the emission limit (550 g of CO₂ from fossil fuels per 1 kWh of net electricity generated) in a given delivery period by any of the generating units included in the physical units forming a given capacity market unit,
 - declaration on the commencement of the commercial production before July 4, 2019 by all
 generating units included in the physical units constituting the capacity market unit or on the
 commencement of the commercial production by at least one generating unit forming the
 physical units constituting the capacity market unit on or after that date,
 - declaration that there are no circumstances referred to in Article 2(18)(a), (b), (c) or (e) of Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in in application of Articles 107 and 108 of the Treaty with respect to the capacity provider,
 - form containing Information provided when applying for state aid other than agricultural or fishing aid, de minimis aid or de minimis aid in agriculture and fishing, drawn up in accordance with the template attached as Annex No 1 to the Ordinance of the Council of Ministers of 29 March 2010 (Journal of Laws of 2010, No. 53, item 312) on the scope of information submitted by the entity applying for aid other than agricultural or fishing aid, de minimis aid or de minimis aid in agriculture and fishing, signed by persons entered in the appropriate register as authorized to represent the capacity provider,
 - statement on the economic position of the enterprise as a whole and
 - financial statements for the last 3 financial years.

The CO_2 emission factor and the annual average CO_2 emission shall be determined in line with the methodology defined in the <u>ACER opinion</u> however, application form requires to submit the carbon dioxide emission factor determined for the **whole capacity market unit**. Emission factors of sulphur



oxides, nitrogen oxides and dust are calculated for the whole capacity market unit as well, using data from the previous calendar year.

Moreover, capacity provider is also required to make consent to the acquisition of metering data of each physical unit by the PSE and declare that in relation to any physical unit that will be included in the capacity market unit to be created, the conditions listed in Article 16 (2) of the Capacity Market Act will not apply (it is a declaration that none of physical units will be supported by polish RES or CHP tender system).

Finally, the last section of the application regards to the volume of capacity obligation offered by the capacity market unit. Indicated volume shall be:

- no higher than net attainable capacity of capacity market unit,
- no less than 2 MW and
- no higher than the volume of capacity obligation accepted during the pre-auction.

Application shall be submitted via PURM. During the first 10 working days of the main certification, capacity providers may correct the application as many times as needed. Beyond this time, PSE starts the verification process and the possibility to freely rectify the application is disabled. If an application is found to contain any errors, PSE will request the capacity provider, via PURM, to rectify formal defects or deficiencies of the application, specifying such defects or deficiencies in the request and setting a time limit of at least 3 working days for the rectification. If the capacity provider has not rectified formal defects or deficiencies of the application within the time limit, PSE shall refuse to issue the certificate, informing the capacity provider thereof via PURM. If there are any objections to PSE's decision, capacity provider may send a complaint within 4 working days from the refusal. PSE shall consider the complaint within 7 calendar days of its submission.

2.4 Collaterals return

After the capacity market unit has been properly established (it has received certificate authorising it to participate in upcoming capacity auction), PSE is obliged to return collateral **in amount corresponding to the unit collateral rate (43 PLN/kW) and the offered capacity obligation** by that capacity market unit (in MW). If any difference between the volume of capacity obligation submitted in the pre-auction offer which was replaced by the capacity market unit and the offered capacity obligation by that capacity market unit exists, PSE retains the remaining collateral.

The collateral corresponding to volume of capacity obligations in rejected offers shall be released by PSE within **7 calendar days of pre-auction**. The same applies when there is a difference between the maximum volume of capacity obligations to be offered by given capacity provider, resulting from provided collateral, and the sum of capacity obligations in his accepted offers.

Furthermore, PSE together with the return of the collateral, shall return the additional interest on the amount of the provided collateral equal to 70% of the reference rate announced by the National Bank of Poland.

2.5 Capacity auction

Polish capacity market includes two types of capacity auctions: main auction (T-5) and additional auction (T-1). Both of them are held electronically via PURM. The Polish Minister relevant for energy publishes the parameters of the upcoming capacity auctions no later than 18 weeks before the main auction. Auction parameters are available here.

Capacity auctions in Polish capacity market are conducted in the form of a **dutch auction** (**pay-as-clear**). It consists of number of rounds during which participants can submit an exit offer. Not submitting an exit offer in given auction round will be treated as acceptance of the starting price of the next round.



The capacity auction shall end after the conclusion of the last capacity auction round or after the conclusion of the round as a result of which, after exit bids have been taken into account, the remaining volume of capacity obligations is not greater than the demand resulting from the capacity demand curve for the starting price of a subsequent round. Upon completion of the auction, capacity providers whose units have won the auction enter into capacity agreements with PSE.

Foreign capacity market units take part in the Polish capacity auctions in a "passive" way i.e. during the auction, capacity provider is not obliged to take any action. Offers submitted during the pre-auction are **automatically submitted in the capacity auction** as exit offers. Each capacity auction may result in four different clearing prices:

- Price paid to Polish capacity market units equal to the auction clearing price;
- Price paid to capacity market units from the synchronous profile zone set by the last accepted offer submitted by German, Czech or Slovak capacity market unit;
- Price paid to capacity market units from Lithuania set by the last accepted offer submitted by Lithuanian capacity market unit;
- Price paid to capacity market units from Sweden set by the last accepted offer submitted by Swedish capacity market unit.

An example of capacity auction clearing is shown on figure 2 below.

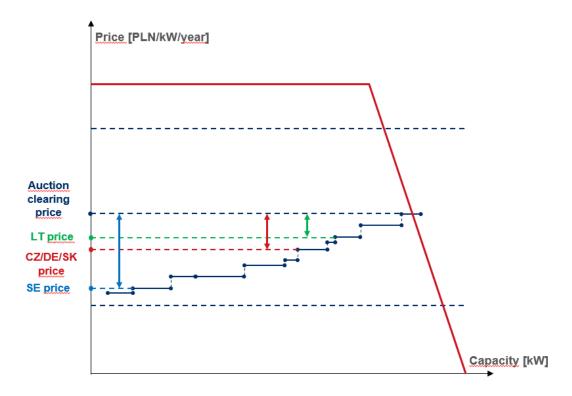


Figure 2 – Exemplary capacity auction

If the auction clearing price regarding given zone is higher than the price specified by capacity provider during the pre-auction, the capacity market unit wins the auction, if not, capacity market unit does not win the auction and is not granted the capacity agreement. All capacity market units within one zone receive the same auction clearing price.

Provisional results of a given capacity auction are published by PSE on its website within 3 working days from the capacity auction. The capacity agreement shall be deemed concluded at the time at which the provision results are announced, under the condition precedent that announcement of the final results of the auction has been made. The Polish President of ERO shall announce the final results



of the capacity auction on ERO's website, on the first working day following the 21st day from the capacity auction.

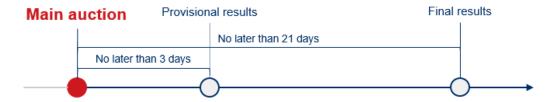


Figure 3 - Capacity auction results



3 RELEVANT DOCUMENTS AND CONTACT

Website: www.rynekmocy.pl

 On our website, you can find the information regarding polish capacity market such as legal basis, schedule, instructions regarding the IT system, capacity auction results and FAQ

E-mail: rynek.mocy@pse.pl

• If you are not able to find necessary information on our website, please do not hesitate to contact us via e-mail

Phone number: +48 22 242 24 66

• Dedicated contact for questions regarding the participation of foreign capacity in the Polish capacity market