



## ENERGY REGULATORY AUTHORITY

### METHODOLOGY ON THE ASSESSMENT OF THE ELECTRICITY DAY-AHEAD MARKET READINESS

#### PART I GENERAL PROVISIONS

##### Article 1 Purpose

This methodology defines the principles and indicators that will be taken into consideration by the ERE for the assessment of the electricity day-ahead market readiness, based on the provisions of the Law no. 24/2023 "On the promotion of the use of energy from renewable sources".

##### Article 2 Legal basis

This methodology is designed in support of point 5 of article 30 of law no. 24/2023 "On the promotion of the use of energy from renewable sources" as well as articles 18, point 1, letter "a" and 20, letter "ç" of law no. 43/2015 "On Power Sector", as amended.

##### Article 3 Definitions

1. In this methodology, the following terms have this meaning:
  - **"Energy Regulatory Entity"** or **"ERE"** is the regulatory authority of the electricity and natural gas sector in Albania.
  - **"Contracts for Differences" (CfDs)** is a financially regulated support contract where the Renewable Energy Operator pays the priority producer the difference between the guaranteed price and the reference price when the reference price is lower than the guaranteed price and the priority producer pays the difference to the Operator of Renewable Energy when the reference price is higher than the guaranteed price.
  - **"Power purchase agreement (PPA)"** is a support agreement, where OER guarantees the mandatory physical purchase of electricity generated by producers for a fixed price.
  - **"Conversion CfD"** is the conversion of an agreement for the purchase of energy into a contract for difference, in accordance with article 30 point 5, of law no. 24/2023 "On the promotion of the use of energy from renewable sources".

- “ALPEX” is the entity responsible for the management and organization of the wholesale electricity market in Albania in accordance with law no. 43/2015 "On the electricity sector" as amended.
  - “DAM” is the electricity market where the delivery of Buy and Sell Orders placed on the day before delivery in the interval from Gate Opening Time to Gate Closing Time.
  - “ACER” is the agency for the cooperation of energy regulators of the European Union.
2. The terms, the definitions of which are not listed in point 1 of this article, refer to the terms and definitions defined in law no. 24/2023 "On the promotion of the use of energy from renewable sources" and Law no. 43/2015 "On Power sector", as amended.

## **PART II**

### **PRINCIPLES OF THE METHODOLOGY FOR ASSESSING THE READINESS OF THE ELECTRICITY DAY AHEAD MARKET**

#### **Article 4**

##### **The basic principles of the methodology for assessing the readiness of the electricity day-ahead market**

1. ERE's market readiness assessment will only include the day-ahead electricity market, since this assessment is related to the conversion of power purchase agreements (PPAs) to contracts for difference (CfD).
2. In accordance with the principles defined in this methodology, ERE must assess whether the following criteria are sufficiently met:
  - a) an operational power exchange has been created that offers reference prices for the relevant settlement period for the day-ahead market for a consecutive 10-month period.
  - b) the principles and rules for the integrity and transparency of the sale of energy in the market, including for persons who professionally organize transactions;
  - c) the traded volumes in the DAM relative to the physical size of the market are on a comparative level with volumes in DAMs in European Union countries.
3. ERE in the preparation of the day-ahead market readiness assessment, will take into account the coupled Albania-Kosovo market, during the periods when both markets were coupled and have produced results.
4. ERE has the right to select several day-ahead markets in the European Union to perform an appropriate comparative assessment and take into consideration the methodologies used by ACER for the assessment of market readiness.
5. ERE will request from the Albanian Power Exchange detailed data on offers, prices and volumes of the day-ahead market as well as comparative data from the selected countries to perform the assessment using the selected indicators and market characteristics.
6. In addition to the indicator values calculated and published by ACER, ERE will use data published by the regulatory authorities of the respective comparative countries and by the power exchanges themselves. In cases where ERE needs confidential data that is not publicly available to perform the market readiness assessment, it will have to obtain it from regulators or other power exchanges.
7. ERE will organize a public consultation with interested parties regarding the market readiness assessment and will publish a report of this assessment together with its findings.

**Article 5**  
**Indicators for assessing the electricity day-ahead market readiness**

1. ERE, in preparing the report for the assessment of the electricity day-ahead market readiness, must take into account the following factors:
  - a) **Availability of day-ahead prices of the Albanian Power Exchange**, which means receiving an uninterrupted signal of the day-ahead market price from the power exchange for a 10-month period.
  - b) **Churn Factor**, which is defined as the amount of electricity traded in a market compared to the total consumption. In the context of the day-ahead market (DAM), the churn factor provides an indication of the magnitude of trading on power exchanges relative to the physical market size and is generally below 1, as in most markets buyers and sellers have the option to trade outside the day-ahead market. The calculation of churn factors in the Albanian market will require data on the volumes traded on DAM and on the hourly energy consumption in the relevant market areas. This factor will be determined through one of the following methods:

$$\sum_h \frac{\text{Volume of DAM Trades in hour } h}{\text{Consumption in hour } h}$$

Or:

$$\frac{\sum_h \text{Volume of DAM Trades in hour } h}{\sum_h \text{Consumption in hour } h}$$

where  $h$  is each hour in year  $Y$

2. ERE will review ACER's methodology of the churn factor calculation applicable to relevant comparators to assess the suitability of the published indices for comparison with the Albanian Power Exchange churn factors. The comparison between different markets should take into account the traded volumes in the day-ahead market through power exchanges as opposed to other avenues to trading.
3. In order to provide a comprehensive assessment of market readiness, ERE, in addition to the indicators defined in point 1 of this article, may also consider the following indicators, where their applicability will depend on the availability of data for the intended comparative analysis:
  - a) **Bid-ask spread**, which is defined as the difference between the minimum unsuccessful ask (selling) price and the maximum unsuccessful bid (buying) price. The bid-ask spread reflects the transaction cost associated with an instantaneous change in a market participants' contractual position. Therefore, this spread provides a direct measure of liquidity in terms of the market participants' ability to trade marginal incremental volumes of energy without significantly moving the price. In order to calculate bid-ask spread, it is necessary to collect data on the aggregate hourly supply and demand curves in the relevant day-ahead market. In the absence of aggregate curve data, these can be calculated from information on individual bids and offers. After analyzing the gap between supply and demand from ALPEX and the benchmark countries, ERE will determine the most appropriate measure of the bid-ask spread for comparison, which could be expressed either an absolute spread

(adjusted with inflation as necessary) or a percentage difference relative to an average price level in each market.

- b) **Market Depth**, which is an indicator that measures the size of trade transactions that can be made with small differences between supply and demand. The market depth measure can provide more information on market liquidity than just the bid-ask spread, as this measure takes into account the volume of buy/sell offers that can be met in the market. As part of the market readiness assessment, ERE should consider whether the depth of the market can accommodate renewables within merit order, based on demand in the system, and should focus on the issue of whether the capacity of renewables, which is expected to be included in the CfD scheme, will be able to trade on the day-ahead market at a non-negative price.

## **Article 6**

### **Compilation of the report on the electricity day-ahead market readiness assessment**

1. ERE shall perform the market readiness assessment no earlier than 10 (ten) months from the set-up of the Albanian Power Exchange.
2. The drafting of the report by ERE on the readiness assessment of the electricity day-ahead market is done taking into consideration the following factors:
  - a) Assessment of the availability of the day ahead market prices of the Albanian Power Exchange.
  - b) Calculation of the Churn factor for the Albanian Power Exchange and its comparison with the churn factor of selected EU markets and comparative periods.
  - c) In cases where it is possible and deemed appropriate by ERE, the calculation of the “bid-ask” spread and its comparison with the comparative EU markets and periods.
  - d) In cases where it is possible, the assessment of the market depth of the Albanian Power Exchange.
  - e) In cases where it is possible, in the calculation of the above indicators, the coupling of Albania and Kosovo market will be taken into account, considering the coupled markets as one.
  - f) In cases where it is possible, a qualitative assessment of the impact of the market couple of the comparative EU countries on the selected liquidity indicators will be carried out.
  - g) In cases where it is possible, a qualitative assessment will be carried out on how other relevant factors of market competition affect the readiness of the day-ahead market in Albania.
3. After carrying out the first readiness assessment of the of the day-ahead electricity market, ERE prepares every 6 months the report on the assessment of the readiness of the day-ahead market.

## **Article 7**

### **Selection of Comparative Countries of the European Union**

1. ERE will compare the churn factors with the levels observed in other power exchanges in the European Union, as defined in law no. 24/2023 "On promoting the use of energy from renewable sources".
2. In carrying out the readiness assessment of the day-ahead market of the Albanian Power Exchange by ERE, in order to allow the conversion of PPAs to CfD, the comparison

should be limited to the day-ahead markets of the EU countries, which have introduced contracts for difference.

3. The liquidity of the Albanian day-ahead market should be evaluated against the liquidity indicators of the relevant EU day-ahead market, for the periods when the "Contract for Difference" was implemented.

## **PART III FINAL PROVISIONS**

### **Neni 8 Review and change of methodology**

This methodology is subject to review and change by decision of the ERE board, in accordance with the Regulation on Organization, Operation and Procedures of ERE.

### **Article 9 Entry into force**

This methodology enters into force immediately after publication on the Albanian Official Gazette.