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Official Gazette dated 09/05/2021, numbered 31479

#### STORAGE ACTIVITIES IN THE ELECTRICITY MARKET REGULATON

#### CHAPTER ONE Purpose, Scope, Legal Basis and Definitions

#### **Purpose and scope**

**ARTICLE 1** – (1) The purpose of this Regulation is to set out the procedures and principles regarding the establishment of electricity storage units or facilities, their connection to the transmission or distribution system, and the use of these units or facilities in market activities within the scope of the Electricity Market Law No. 6446, dated 14/03/2013.

(2) Hydroelectric power plants that have pumped storage and uninterruptible power supplies which are installed in order to be used during power cut offs shall be outside of the scope of this Regulation.

#### Legal Basis

**ARTICLE 2** – (1) This Regulation has been prepared based on the Electricity Market Law No. 6446, dated 14/03/2013.

#### Definitions

**ARTICLE 3** – (1) The following definitions shall apply in the implementation of this Regulation;

a)<sup>1</sup> Electricity storage facility: A facility that can store electricity by converting it into another energy type and feed the stored energy into the system for use by converting it back into electricity;

b) Relevant legislation: Laws, Presidential decrees, Presidential decisions, regulations, communiqués, licenses, circulars and Board decisions regarding the electricity market;

c) Relevant standard: TS, EN, IEC, ISO standards and other international standards, in order of priority, relating to the equipment, connection system and performance criteria to be used in the electricity storage facility;

ç) Relevant technical legislation: Relevant regulations, communiqués and other legislation issued by the Ministry of Energy and Natural Resources;

d) Board: Energy Market Regulatory Board;

e) Authority: Energy Market Regulatory Authority;

f) Independent electricity storage facility: An electricity storage facility which is connected directly to the network without having any connection with a generation or consumption facility;

g) Network operator: Relevant distribution license holder legal entity for a network of 36 kV and lower voltage, TEİAŞ for a network higher than 36 kV voltage;

ğ) TEİAŞ: Turkish Electricity Transmission Corporation;

<sup>&</sup>lt;sup>1</sup> Amended pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

h) Wholesale electricity market: Electricity markets such as the power futures market, dayahead market, intraday market, balancing power market and ancillary services market, organized by the bil ateral agreements market or a market and/or system operator, where wholesale trade of electricity, capacity or derivative products thereof are carried out;

1) Electricity storage facility adjoined to the consumption facility: An electricity storage facility connected to the same measurement point as a consumption facility;

i) Electricity storage unit adjoined to the generation facility: An electricity storage unit within the boundaries of the power plant site, which can store the electricity generated in the generation facility or the electricity withdrawn from the system, and which can feed the stored energy into the system for reuse;

j) Ancillary services: Ancillary services as defined in the Electricity Market Ancillary Services Regulation published in the Official Gazette dated 26/11/2017 and numbered 30252;

k) YEK Support Mechanism (YEKDEM): A support mechanism that includes the prices, periods, volumes to be enjoyed by and the procedures and principles of payments to be made to generation license holder legal entities that are engaged in generation activities based on renewable energy resources directly and to individuals who are engaged in generation activities based on renewable energy resources within the scope of exempt generation via the assigned supply companies in their region pursuant to the Law on the Utilization of Renewable Energy Resources for the Purpose of Generating Electricity, dated 10/05/2005 and numbered 5346 and other relevant legislation;

l)<sup>2</sup> Electricity generation facility with storage: Generation facility established within the scope of the tenth and eleventh paragraphs of Article 7 of the Law.

(2) Terms that are used in this Regulation but not defined in the first paragraph shall have the meanings and scope attributed to them in the relevant legislation.

#### **CHAPTER TWO**

# Electricity Storage Units and Facilities and Activities to be Carried Out Through These Units and Facilities

#### Electricity storage units and facilities and principles of establishment and connection

**ARTICLE 4**-(1) The activities to be carried out through electricity storage units or facilities can be carried out through the following within the limits set forth in this Regulation;

a) Electricity storage unit adjoined to the generation facility;

b) Electricity storage facility adjoined to the consumption facility;

c) Independent electricity storage facility;

c)<sup>3</sup> Electricity storage facility that is established by network operators.

 $(2)^4$  The second paragraph of Article 15 of the Electricity Market Licensing Regulation published in the Official Gazette dated 02/11/2013 and numbered 28809 shall apply to the connection of electricity storage units adjoined to the generation facility, electricity storage unit within an electricity generation facility with storage and independent electricity storage facilities to the system and system usage.

 $(3)^5$  Electricity storage facilities can be installed at unlicensed electricity generation facilities that receive an invitation letter within the framework of the Unlicensed Electricity Generation in

<sup>&</sup>lt;sup>2</sup> Inserted pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

<sup>&</sup>lt;sup>3</sup> Amended pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

<sup>&</sup>lt;sup>4</sup> Amended pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

<sup>&</sup>lt;sup>5</sup> Inserted pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

the Electricity Market Regulation published in the Official Gazette dated 12/5/2019 and numbered 30772, and where monthly offsetting is made for surplus energy generated. However, the electricity storage facilities to be established in this manner shall meet the conditions specified in the sixth paragraph of Article 37 of the Unlicensed Electricity Generation in the Electricity Market Regulation.

## Electricity storage units adjoined to the generation facility

**ARTICLE 5** –  $(1)^6$  Generation license holder legal entities may install an adjoined electricity storage unit to a licensed generation facility.

 $(2)^{7}$ 

 $(3)^8$  The energy withdrawn from the network to the electricity storage unit adjoined to the generation facility and electricity storage unit established within the electricity generation facility with storage and fed back to the network shall be outside of the scope of any incentive or purchase guarantee provided in connection with the energy generated by the relevant generation facility.

 $(4)^9$  The energy loss in the electricity storage unit established within the electricity generation facility with storage and the electricity storage unit adjoined to the generation facility shall be outside of the scope of any incentive or purchase guarantee provided in connection with the energy generated by the relevant generation facility. No compensation shall be paid for the energy losses incurred in this manner. $(5)^{10}$  The electricity storage unit established within the electricity generation facility with storage and the electricity storage unit adjoined to the generation facility shall be registered as a separate settlement supply/draw unit.

 $(6)^{11}$ 

 $(7)^{12}$  The energy volume to be supplied to the system on a settlement period basis by electricity generation facilities with storage and electricity generation facilities with an adjoined electricity storage unit shall not exceed the generation volume that said generation facility can produce with its installed electrical capacity annotated to its license.

 $(8)^{13}$  The connection of the electricity storage unit within the electricity generation facility with storage and the electricity storage unit adjoined to the generation facility shall be made according to the connection method specified in Annex-1.

(9)<sup>14</sup> Electricity generated in electricity generation facilities with storage shall be supplied to the transmission or distribution system through the electricity storage unit. If electricity generation facilities with storage are installed according to the connection method defined in the eighth paragraph, the energy fed to the system shall be considered to have been fed to the system through the electricity storage unit. All necessary measures shall be taken by the relevant network operator to ensure the implementation of this paragraph regarding connection configurations, and monitoring of metering and operational status.

 $(10)^{15}$  Among the electricity storage units installed within the scope of this Article, those that meet the necessary conditions in accordance with the relevant legislation may participate in

<sup>&</sup>lt;sup>6</sup> Amended pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

<sup>&</sup>lt;sup>7</sup> Repealed pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

<sup>&</sup>lt;sup>8</sup> Amended pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

<sup>&</sup>lt;sup>9</sup> Amended pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

<sup>&</sup>lt;sup>10</sup> Amended pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

<sup>&</sup>lt;sup>11</sup> Repealed pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018. <sup>12</sup> Amended pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

<sup>&</sup>lt;sup>13</sup> Inserted pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

<sup>&</sup>lt;sup>14</sup> Inserted pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

<sup>&</sup>lt;sup>15</sup> Inserted pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

ancillary services and those that qualify as balancing units may participate in the balancing power market.

 $(11)^{16}$  The provisions of this Article shall be applied without prejudice to the special provisions regarding electricity storage units established within electricity generation facilities with storage.

#### Electricity storage facilities adjoined to the consumption facility

**ARTICLE 6** – (1) An electricity storage facility may be established by consumers, provided that an affirmative connection opinion is given by the relevant network operator, its installed capacity does not exceed the contract power of the relevant consumption facility under the connection agreement, and it is at the same measurement point.

 $(2)^{17}$ 

(3) An electricity storage facility adjoined to the consumption facility may only be established to meet the needs of the relevant consumption facility. In case energy is supplied to the network from the electricity storage facilities adjoined to the consumption facility, such energy shall not be taken into account in the settlement supply volumes of the relevant supplier.

(4) Electricity storage facilities established by the legal personality of an organized industrial zone within the boundaries of the OIZ shall be deemed as electricity storage facilities adjoined to the consumption facility within the scope of this Article.

#### Independent electricity storage facilities

**ARTICLE 7** – (1) One or more independent electricity storage facilities may be established under the same supply license, on condition of holding a supply license and having no less than 2 MW installed capacity. The energy supplied to and withdrawn from the system by these facilities shall be taken into account in the settlement supply/draw volume of the relevant market participant.

(2) Among the electricity storage facilities established within the scope of this Article, those facilities that meet the necessary conditions under the Electricity Market Ancillary Services Regulation may participate in ancillary services, and those that qualify as balancing units may participate in the balancing power market.

#### Electricity storage facilities established by network operators<sup>18</sup>

**ARTICLE 8** – (1) Distribution companies may establish electricity storage facilities, subject to Board approval on a facility basis, within the scope of investment plans, provided that they can demonstrate by cost-benefit analyses that it is indeed more economical than a new network investment.

(2) Electricity storage facilities to be established by distribution companies may not be used for any purpose other than distribution activities.

(3) TEİAŞ may establish storage facilities within the scope of pilot schemes and without being a subject of commercial activity, provided that it is included in the investment plans.

#### CHAPTER THREE Miscellaneous and Final Provisions

<sup>&</sup>lt;sup>16</sup> Inserted pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

<sup>&</sup>lt;sup>17</sup> Repealed pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

<sup>&</sup>lt;sup>18</sup> Amended pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

# Transactions within the scope of the relevant technical legislation and relevant standards

**ARTICLE 9** – (1) Project design, installation, connection to the system, acceptance, operating of electricity storage units and facilities within the scope of this Regulation and, if deemed necessary, testing activities shall be carried out as defined in the relevant technical legislation, relevant standards and technical criteria.

(2) Necessary measures shall be taken by the network operator regarding electricity storage facilities that do not meet the conditions required by the relevant technical legislation and relevant standards, including disconnection of the electricity storage unit or electricity storage facility from the network until compliant without need for notification, in situations that pose a threat in terms of safety of life and/or property or in risky situations that negatively affect the safety of the electrical system.

## Expropriation ARTICLE 10<sup>19</sup>

#### Electricity storage facilities to be established within the scope of R&D

**ARTICLE 11** – (1) An electricity storage facility with a maximum installed capacity of 1 MW may be established by universities, technology development zones and industrial zones in order to be used in R&D activities. The energy supplied by these facilities to the system shall not be taken into account in the settlement supply volumes of the relevant market participants.

#### **Application start date**

**PROVISIONAL ARTICLE 1** – (1) Applications for electricity storage units or electricity storage facilities that fall within the scope of this Regulation may be made one month after the date of announcement by TEİAŞ of the criteria stated in Provisional Article 1 of the Electricity Network Regulation published in the Official Gazette dated 28/05/2014 and numbered 29013 *bis*.

#### Enforcement

**ARTICLE 12** -(1) This Regulation shall enter into force on the date of its publication.

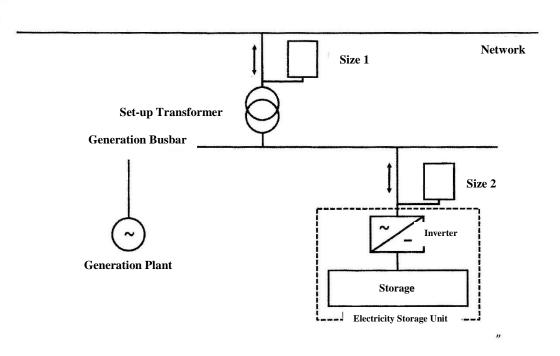
#### Execution

**ARTICLE 13** - (1) The provisions of this Regulation shall be executed by the President of the Energy Market Regulatory Authority.

<sup>&</sup>lt;sup>19</sup> Repealed pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.

# ANNEX-1<sup>20</sup>

Annex-1: Connection Configuration of the Electricity Generation Facility with Storage and Electricity Storage Unit Adjoined to the Generation Facility



<sup>&</sup>lt;sup>20</sup> Inserted pursuant to the Regulation published in the Official Gazette dated 19 November 2022 and numbered 32018.