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## REGULATION OF THE MINISTER OF ENERGY<sup>1</sup> of 18<sup>th</sup> July 2018

### **on the execution, settling and demonstrating the capacity obligation and concluding transactions on the secondary market**

Pursuant to Article 68 of the Act of 8 December 2017 on the capacity market (Journal of Laws of 2018, item 9), the following is hereby ordered:

#### Chapter 1

#### **General provisions**

**§ 1.** The Regulation sets out the detailed terms and conditions for the execution, settling and demonstrating the capacity obligation and the detailed conditions for concluding transactions on the secondary market, including:

- 1) the security standard applicable to the supply of electricity to end users, understood as the permissible expected interruption in the supply of electrical capacity to end users, expressed in hours per year;
- 2) the procedure for announcing a system stress event and the cases in which the operator may not announce a system stress event despite the surplus capacity available in the daily planning processes of the system's operation being below the required value;
- 3) days and hours of potential system stress events;
- 4) the manner of determining the capacity provided as a result of temporary reduction of the capacity taken off from the grid by demand side response capacity market units;
- 5) the manner in which demonstration is conducted;
- 6) requirements applicable to the admissibility of trading of capacity obligations and of their reallocation, including the minimum value of such obligation that may be transferred;
- 7) the manner in which unit penalty rates for the failure to perform the capacity obligation are calculated.

**§ 2.** Terms used in the Regulation shall mean:

- 1) daily balancing - activities of the operator carried out in the process of daily planning of the system operation on the n-1 day, as a result of which, for the n day, the generation units' work schedules and the size of their loads are determined in order to balance the electricity generation with the grid demand and to ensure the required reserves and system constraints management;
- 2) daily balance update - activities of the operator carried out in the process of daily system operation planning on day n, as a result of which the operator updates the daily balance prepared on day n-1 for day n;
- 3) grid demand - demand for capacity of customers connected to the transmission and distribution grids as well as directly to devices, installations or grids of other energy companies, increased by losses in the transmission and distribution grid, reduced by capacity directly supplied by generation sources to customers omitting the grid belonging to other energy companies;

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<sup>1</sup> The Minister of Energy manages the department of government administration - energy, pursuant to § 1 (2) (1) of the Regulation of the Prime Minister of 13<sup>th</sup> December 2017 on the detailed scope of activities of the Minister of Energy (Journal of Laws, item 2314).

## Chapter 2

**Standard for security of supply to final customers**

**§ 3.** The standard of security of supply to end customers, defined as the number of hours in a year in which it is permissible for the total net maximum capacity of generating units connected to the system to be imbalanced with the grid demand increased by the minimum generation capacity reserve referred to in § 4 and taking into account the planned international exchange schedule with countries other than those listed in Article 6(6) of the Act of 8 December 2017 on the capacity market, hereinafter referred to as the "Act", is 3 hours.

**§ 4.** The minimum generation reserve for meeting the security of supply standard to end customers shall be calculated in accordance with the formula:

$$R_{min} = 1.2 \times P_{max}$$

where the symbols mean:

$R_{min}$  – the minimum generation reserve, expressed in [MW],

$P_{max}$  – the net maximum capacity of the largest, in terms of capacity, generation unit connected to the system, expressed in [MW].

## Chapter 3

**System stress event**

**§ 5. 1.** The operator shall announce the system stress event after the determination, during the daily balancing process or after updating the daily balance, that the surplus of total net maximum capacity of generating units connected to the system, reduced by the capacity losses resulting from repairs, emergency stoppages, atmospheric conditions and grid limitations as well as by the net maximum capacity of the generating units connected to the system that was not offered to the operator above the grid demand, is less than the required value determined in accordance with Article 9g(4)(9) of the Act of 10<sup>th</sup> April 1997 – Energy Law (Journal of Laws of 2018, items 755, 650, 685, 771, 1000 and 1356), subject to § 6(1).

2. When determining the surplus referred to in section 1, the operator shall take into account the planned international energy exchange schedule.

**§ 6. 1.** The operator may not announce the system stress event if:

- 1) during the daily balancing process or after updating the daily balance, the surplus of total net maximum capacity of generating units connected to the system, reduced by the capacity losses resulting from repairs, emergency stoppages, atmospheric conditions and grid limitations as well as by the net maximum capacity of the generating units connected to the system that was not offered to the operator above the grid demand, is not more than 4 percentage points lower than the required value determined in accordance with the Article 9g(4)(9) of the Act of 10<sup>th</sup> April 1997 – Energy Law, and
- 2) it concludes that there is no risk to the coverage of the grid demand.

2. The operator shall immediately inform the minister relevant for energy and the President of Energy Regulatory Office about the occurrence of the event referred to in section 1.

**§ 7. 1.** The system stress event shall be announced only for the following hours:

- 1) 7<sup>00</sup> a.m. – 8<sup>00</sup> a.m.,
- 2) 8<sup>00</sup> a.m. – 9<sup>00</sup> a.m.,
- 3) 9<sup>00</sup> a.m. – 10<sup>00</sup> a.m.,
- 4) 10<sup>00</sup> a.m. – 11<sup>00</sup> a.m.,
- 5) 11<sup>00</sup> a.m. – 12<sup>00</sup> p.m.,
- 6) 12<sup>00</sup> p.m. – 1<sup>00</sup> p.m.,
- 7) 1<sup>00</sup> p.m. – 2<sup>00</sup> p.m.,
- 8) 2<sup>00</sup> p.m. – 3<sup>00</sup> p.m.,
- 9) 3<sup>00</sup> p.m. – 4<sup>00</sup> p.m.,
- 10) 4<sup>00</sup> p.m. – 5<sup>00</sup> p.m.,
- 11) 5<sup>00</sup> p.m. – 6<sup>00</sup> p.m.,
- 12) 6<sup>00</sup> p.m. – 7<sup>00</sup> p.m.,
- 13) 7<sup>00</sup> p.m. – 8<sup>00</sup> p.m.,
- 14) 8<sup>00</sup> p.m. – 9<sup>00</sup> p.m.,
- 15) 9<sup>00</sup> p.m. – 10<sup>00</sup> p.m.,

- on days from Monday to Friday, excluding public holidays.

2. The announcement of the system stress event may refer:

- 1) a single hour, or
- 2) several hours, if the operator determines more than one system stress event in a given day.

#### Chapter 4

#### **Determination of the capacity delivered by the demand-side response capacity market units**

**§ 8. 1.** The volume of capacity delivered as a result of temporary reduction of the capacity taken off the grid by the demand-side response capacity market unit shall be determined separately for each full hour of the temporary reduction, as the difference between the base profile and the actual amount of the electricity supply measured at all measurement points of this unit at the points of connection to this grid.

2. Where, under contracts for the provision of electricity transmission or distribution services or separate regulations, an electricity customer has the right to temporarily feed the electricity into the grid, the actual volume of supply may be less than zero and such case shall be taken into account as an additional reduction in the volume of capacity taken off the grid.

3. Where the demand-side response capacity market unit comprises more than one physical demand-side response unit, one overall base profile for that capacity market unit and one overall actual electricity supply shall be established.

**§ 9. 1.** The base profile shall be determined using the historical profile method subject to § 10 i § 11.

2. The base profile determined using the historical profile method equals the sum of:

- 1) the reference profile being a series of arithmetic mean values of actual electricity supply volumes to the capacity market unit, determined for each hour indicated in accordance with § 7.1, rejecting the highest and the lowest value, in the reference period directly preceding the day for which the reference profile is determined, covering the 10 consecutive days, referred to in § 7.1, during which the system stress event did not take place, and
- 2) a correction calculated as the difference between the average of the actual electricity supply volumes for the fifth, fourth and third hours preceding the beginning of the first system stress event in a given day and the average electricity supply volumes for the same hours resulting from the reference profile referred to in point.

**§ 10. 1.** A base profile may be determined on the basis of the forecasted profile method where the capacity provider:

- 1) submits an application to the operator, to apply, in reference to the given demand-side response capacity market unit, the forecasted profile method, and
- 2) accomplishes correctness of forecasting referred to in § 11(5), for the given demand-side response capacity market unit, for at least 30 consecutive calendar days.

2. The forecasted profile method is applied from the first day of the month following the confirmation of the successful forecasting by the operator, to the day of:

- 1) losing of forecasting correctness;
- 2) failure to submit electricity supply forecasts for a period of 5 consecutive calendar days;
- 3) a request from the capacity provider to the operator not to use the forecasting profile method.

3. Should the cases referred to in section 2(1)-(3) occur, the historical profile method shall be applied to the given capacity market unit starting from the day following the day on which:

- 1) the information about the loss of forecasting correctness is provided to the capacity provider by the operator;
- 2) a failure to submit the forecasts referred to in section 2(2) occurred;
- 3) a submission of the application referred to in section 2(3) occurred.

4. The occurrence of the case referred to in section 2(1)-(3) shall not prevent the resubmission of an application, to the operator, to apply the forecasted profile method to a given demand-side response capacity market unit.

**§ 11. 1.** In order to demonstrate the correctness of forecasting, in reference to the given demand-side response capacity market unit, the capacity provider shall provide the operator with electricity supply forecasts indicating the quantities of electricity supplied to the capacity market unit of each hour, at least for the hours referred to in § 7 (1), submitted no later than at 10<sup>00</sup> a.m on the day preceding the day to which the forecast refer.

2. After each month, during which the capacity provider has submitted the electricity supply forecasts, the operator shall verify the correctness of the forecasting by determining the average relative deviation of the declared electricity supply forecasts from the actual electricity supply.

3. The average relative deviation defining the deviation of the submitted supply forecasts from the actual electricity supply for the demand-side response capacity market unit shall be determined according to the formula:

$$\Delta_{ave} = \frac{\sum_{n=1}^{n=m} \left| \frac{E_{pn} - E_{Rn}}{E_{Rn}} \right|}{m} \cdot 100\%$$

where the symbols mean:

$\Delta_{ave}$ - average relative deviation, expressed in [%],

$E_{pn}$ - the forecasted volume of electricity supply for hour  $n$ , expressed in [MWh],

$E_{Rn}$ - the actual electricity supply for hour  $n$ , expressed in [MWh],

$m$  - the total number of hours analysed.

4. The operator shall inform the capacity provider whether or not the forecasting correctness has been achieved within 7 days of the end of the month in which the capacity provider was submitting the electricity supply forecasts.

5. If in the examined period of 30 consecutive calendar days for the hours referred to in § 7 (1), the average relative deviation referred to in Section 3 does not exceed 15%, the capacity provider shall achieve forecasting correctness with respect to the demand-side response capacity market unit.

6. The capacity provider shall lose its forecasting correctness in reference to the given demand-side response capacity market unit, if, after the end of the month in which the capacity provider was submitting the electricity supply forecasts for that unit to the operator, the average relative deviation referred to in section 3 exceeds 15%.

7. During the period when the forecasting profile method is applied to the demand-side response capacity market unit, the submitted electricity supply forecast for that unit is adopted as the base profile for the purpose of determining the amount of capacity delivered as a result of temporary reduction of electricity consumption.

## Chapter 5

### Demonstration of the ability to perform the capacity obligation

§ 12. The ability to perform the capacity obligation, referred to in Article 67(1) of the Act shall be demonstrated only for the hours indicated in accordance with § 7 (1).

§ 13. 1. The ability to perform the capacity obligation shall be demonstrated:

- 1) in case of the generating capacity market unit:
  - a) comprising only the generating physical units actively participating in system balancing within the central generation capacity balancing mechanism – by indicating a balancing offer, covering at least one hour, submitted in relation to this unit, accepted by the operator and performed in accordance with the rules specified in the instruction referred to in Article 9g of the Act of 10<sup>th</sup> April 1997. - Energy Law,
  - b) other than the one referred to in point (a) – by indicating one hour during which the unit produced electricity in accordance with its capacity obligation;
- 2) in case of demand-side response capacity market unit:
  - a) comprising only the demand-side response physical units actively participating in system balancing within the central generation capacity balancing mechanism –by indicating a demand reduction offer, covering at least one hour, submitted in relation to this unit, accepted by the operator and performed in accordance with the rules specified in the instruction referred to in Article 9g of the Act of 10<sup>th</sup> April 1997. - Energy Law,
  - b) other than the one referred to in point (a) – by indicating one hour during which the unit has reduced its electricity consumption in accordance with its capacity obligation;

2. If a test system stress event was announced in relation to the capacity market unit in a given quarter or if a system stress event was announced, it shall be deemed that the unit has demonstrated its ability to perform the capacity obligation referred to in Article 67(1) of the Act in the event of a positive test result of the test system stress event or the performance of the adjusted capacity obligation during the system stress event.

3. The test system stress event shall be announced no later than 8 hours before the start of the test system stress event, for one hour arbitrarily chosen in accordance with § 7 (1).

4. If, in the first two months of a given quarter, it has not been possible for a given capacity market unit to deliver the required amount of capacity for more than 75% of the number of hours during which a demonstration could take place, because of the grid congestion or operational instructions from the operator or the distribution system operator, the capacity provider may, no later than 21 days before the end of the quarter, request the grid congestion to be removed or to operational instructions preventing a demonstration to be stopped:

- 1) to the operator, when the grid constraints or operational instructions apply to the operator, or

2) to the distribution system operator, in cases other than those referred to in point 1, and inform the operator thereof.

5. The removal of the grid congestion or the cessation of the operational instructions in order to allow the demonstration shall cover not less than 75% of the hours remaining in the period between the date of the request referred to in section 4 and the end of the quarter concerned.

6. In case of failure of the relevant electricity system operator to remove the grid congestion or to stop issuing operational instructions preventing demonstration within 14 days from the date of submission of the application referred to in section 4, it shall be deemed that the ability to perform the capacity obligation has been demonstrated.

**§ 14. 1.** If the demand-side response capacity market unit, referred to in § 13 (1)(2)(b), is used to provide, to the operator, an ancillary service involving the reduction of energy consumption at the operator's request, provision of such service may be indicated as the time during which the unit supplied capacity to the system, if in a given quarter covered by the capacity agreement there was a temporary reduction of energy consumption for the purpose of providing this service.

2. If, in the first two months of a given quarter, the service referred to in section 1 is not provided due to a lack of instructions from the operator, the capacity provider may request such instructions to be issued by the operator before the end of the quarter.

3. If the demand-side response capacity market unit, referred to in § 13 (1)(2)(b), is not used to provide the ancillary services involving the reduction of energy consumption to the system operator at the operator's request, and no test system stress event or system stress event has been announced with reference to this capacity market unit in the first two months of a given quarter, the capacity provider, no later than 7 days before the end of a given quarter, may request a test system stress event to be announced by the operator.

4. If, within 7 days of receipt of the request referred to in paragraph 2, the operator has not issued the instructions to the demand-side response capacity market unit to provide the service, referred to in paragraph 1, or has not announced a test system stress event in accordance with the request referred to in paragraph 3, the ability to perform the capacity obligation shall be deemed to have been demonstrated by that unit.

## Chapter 6

### Conditions for concluding transactions on the secondary market

**§ 15. 1.** The secondary trading of the capacity obligation as well as the reallocation of performed capacity obligation shall take place in relations to the hours indicated in accordance with § 7 (1).

2. The minimum amount of the capacity obligation to be transferred as a result of a secondary trading and to be cleared within the scope of reallocation of performed capacity obligation shall amount to 0.001 MW.

3. Each capacity obligation may be subdivided into any number of subdivisions, taking into account the provisions of paragraph 1 and 2, either under the secondary trading or the reallocation of performed capacity obligation.

4. A capacity obligation of a capacity market unit may be transferred to another capacity market unit, if the total amount of capacity obligation of the capacity market unit to which the capacity obligation is being transferred does not exceed:

- 1) the product, resulting from the certificate issued for that entity, of its net maximum capacity and the value of de-rating factor referred to in Article 18 of the Act, or
- 2) the net maximum capacity of that unit, provided that in such case the product referred to in point 1 may be exceeded for no more than 300 hours in a calendar year.

5. The provision of paragraph 4 shall not apply to the reallocation of performed capacity obligation.

## Chapter 7

### The penalty unit rate for non-performance of the capacity obligation

**§ 16. 1.** The penalty unit rate for non-performance of the capacity obligation applicable in the delivery year  $n$  shall be calculated according to the formula:

$$SK_n = 0,3 \times \frac{PKB_{n-2}}{E_{n-2}}$$

where the symbols mean:

- $SK_n$  - penalty unit rate in year  $n$ , expressed in [PLN/MWh],
- $PKB_{n-2}$  - value of gross domestic product in Poland for the year falling 2 years before the year of delivery  $n$ , defined in current prices, published by the President of the Central Statistical Office, expressed in [PLN],
- $E_{n-2}$  - amount of electricity consumed in the calendar year falling 2 years before the delivery year  $n$ , published by the Central Statistical Office in the document "Consumption of fuels and energy carriers", expressed in [MWh].

2. The penalty unit rate is determined with the accuracy of PLN 0.01.

Chapter 8

**Final Provision**

§ 17. This Regulation shall enter into force on the day following that of its publication.

Minister of Energy: *K. Tchórzewski*