

Technical Rule no. 10 rev.3 MPE

(pursuant to Article 4 of the Integrated Text of the Electricity Market Rules, approved by Decree of the Minister of Productive Activities of 19 December 2003 and subsequent amendments)

Title	Checks of technical adequacy of bids with respect to margins
Reference Legislation	Article 41 and Article 51 of the Integrated Text of the Electricity Market Rules

In force from 21 September 2021

1. Foreword

Articles 41 and 51 of the Integrated Text of the Electricity Market Rules (hereinafter “ME Rules”) lay down the technical adequacy requirements of the bids/offers presented, respectively, on the MGP and on the MI, referring to the Technical Rules for further applicable provisions.

In particular, Article 51, paragraph 51.4, of the ME Rules, provides that, in each MI-A auction session, each set of balanced bids/offers is considered congruous, among other aspects, if the sum of the specified quantities of electricity in supply offers is equal to the sum of the quantities of electricity specified in the purchase offers, taking into account a tolerance margin specified in the Technical Rules.

2. Technical adequacy checks of simple bids with respect to margins

Pursuant to articles 41 and 51 of the ME Rules:

- a) the supply offers presented on each spot energy market are congruous with respect to the margins if the quantity specified in the offer does not exceed the step-up margin for the purposes of the market session for which the offer is presented, relative to the period relevant to which the offer refers, or if:

$$QEV_m^i(k, h) \leq M_m^+(k, h) - QEVCong_m(k, h) - QEVAcc_m(k, h) + QEAAcc_m(k, h)$$

for offers referring to a PDO¹

$$QEV_m^i(K, h) \leq M_m^+(K, h) - QEVCong_m(K, h) - \sum_{k \in K} QEVCong_m(k, h) + QEAAcc_m(K, h) + \sum_{k \in K} QEAAcc_m(k, h) - QEVAcc_m(K, h) - \sum_{k \in K} QEVAcc_m(k, h)$$

for offers referring to a PZ²

If this condition is not met the offer:

- if presented on the MGP or MI-A, will be adjusted by the system to the extent of the margin and therefore considered adequate for this quantity;
- if presented on MI-XBID, will be rejected as non-congruous.

¹ PDO: offer point.

² PZ: zonal portfolio.

- b) the purchase offer presented on each spot energy market are congruous with respect to the margins if the quantity specified in the offer is not greater than the step-down margin for the purposes of the market session for which the offer is presented, relating to the period relevant to which the offer refers, or if:

$$QEA_m^i(k, h) \leq M_m^-(k, h) - QEACong_m(k, h) + QEVAcc_m(k, h) - QEAAcc_m(k, h)$$

for offers referring to a PDO

$$QEA_m^i(K, h) \leq M_m^-(K, h) - QEACong_m(K, h) - \sum_{k \in K} QEACong_m(k, h) +$$

$$QEVAcc_m(K, h) + \sum_{k \in K} QEVAcc_m(k, h) - QEAAcc_m(K, h) - \sum_{k \in K} QEAAcc_m(k, h)$$

for offers referring to a PZ

If this condition is not met the offer:

- if presented on the MGP or MI-A, will be adjusted by the system to the extent of the margin and therefore considered adequate for this quantity;
- if presented on MI-XBID, will be rejected as non-congruous.

where

$M_m^+(k, h)$ is the step-up margin for the purposes of the market m and related to the PDO k and to the relevant period h . It should be noted that for the purpose of determining the margin, the maximum limit of the feasibility interval is considered, if present;

$M_m^-(k, h)$ is the step-down margin for the purposes of the market m and related to the PDO k and to the relevant period h . It should be noted that for the purposes of determining the margin, the minimum limit of the feasibility interval is considered, if present;

$M_m^+(K, h) = \sum_{k \in K} M_m^+(k, h)$ is the step-up margin for the purposes of the market m and relating to the PZ k and to the relevant period h , obtained as the sum of the step-up margins of all the PDOs belonging to the PZ k ;

$$M_m^-(K, h) = \sum_{k \in K} M_m^-(k, h)$$

is the step-down margin for the purposes of the market m and related to the PDO k and to the relevant period h , obtained as the sum of the upward margins of all the PDOs belonging to PZ k ;

$QEA_m^i(k, h)$ is the quantity of energy specified in the purchase offer i presented on the market m (including that, for the MGP only, specified in the withdrawal programs presented on the PCE³ and subjected to a verification of congruity with respect to the margins valid for the MGP) referring to the PDO k and to the relevant period h ;

$QEV_m^i(k, h)$ is the quantity of energy specified in the sale offer i presented on the market m (including that, for the MGP only, specified in the injection programs presented on the PCE and subjected to a verification of congruity with respect to the margins valid for the MGP) referring to the PDO k and to the relevant period h ;

$QEA_m^i(K, h)$ is the quantity of energy specified in the purchase offer i presented on the market m and referring to the PZ K . and to the relevant period h ;

$QEV_m^i(K, h)$ is the quantity of energy specified in the sales offer i presented on the market m and referring to the PZ K . and to the relevant period h ;

$QEACong_m(k, h)$ is the quantity of energy of the other purchase offer already presented and verified as being adequate on the market m and referring to the PDO k and to the relevant period h ;

$QEACong_m(K, h)$ is the quantity of energy of the other purchase offer already presented and verified as being adequate on the market m and referring to the PZ K . and to the relevant period h ;

$QEVCong_m(k, h)$ is the quantity of energy of the other sale offers already presented and verified as being suitable on the market m and referring to the PDO k and to the relevant period h ;

$QEVCong_m(K, h)$ is the quantity of energy of the other sale offers already presented and verified as being suitable on the market m and refer to the PZ K . and the relevant period h ;

³ PCE: Energy Accounts Platform (Piattaforma Conti Energia) referred to in Annex A of AEEG Resolution no. 111/06 and subsequent amendments.

$QEAAcc_m(k, h)$ is the quantity of energy of the other purchase offers already accepted on the market m and refer to the PDO k and the relevant period h ;

$QEAAcc_m(K, h)$ is the quantity of energy of the other purchase offers already accepted on the market m and referring to the PZ K . and to the relevant period h ;

$QEVAcc_m(k, h)$ is the quantity of energy of the other sale offers already accepted on the market m and referring to the PDO k and to the relevant period h ;

$QEVAcc_m(K, h)$ is the quantity of energy of the other sale offers already accepted on the market m and referring to the PZ K . and to the relevant period h ;

Example 1 - verification of the adequacy of simple bids and recalculation of margins

Assume that the margins for the purposes of the MGP relating to hour h are those indicated below. Therefore the PDOI k can only increase its own injection (to the extent of 100 MWh) and the PDOP s can only increase its withdrawal (to the extent of 60 MWh).

$$\begin{aligned} M_{MGP}^+(k, h) &= 100 \text{ MW}; \\ M_{MGP}^-(k, h) &= 0 \text{ MW} \\ M_{MGP}^+(s, h) &= 0 \text{ MW}; \\ M_{MGP}^-(s, h) &= 60 \text{ MW} \end{aligned}$$

The market participant submits the offers indicated below in the MGP, which are both congruous with respect to the margins ($80 < 100$ and $50 < 60$).

$$\begin{aligned} OV_{MGP}(k, h) &= (80 \text{ MWh}, 10 \text{ €/MWh}) \\ OA_{MGP}(s, h) &= (50 \text{ MWh}, 50 \text{ €/MWh}) \end{aligned}$$

Assume that both offers submitted on the MGP have been fully accepted. If GME does not receive updated margins for the purposes of the MI by the deadline, it obtains them by correcting the margins for the purposes of the MGP for the quantities accepted on the market. In particular, the new margins are those indicated below.

$$\begin{aligned} M_{MI}(k, h) &= 20 \text{ MW} \\ M_{MI}^-(k, h) &= 80 \text{ MW} \\ M_{MI}(s, h) &= 50 \text{ MW} \\ M_{MI}^-(s, h) &= 10 \text{ MW} \end{aligned}$$

If the same market participant submits the purchase offer indicated below on the MI, the first bid is adequate ($80 = 80$), while the second is adjusted to 10.

$$\begin{aligned} OA_{MI}(k, h) &= (80 \text{ MWh}, 20 \text{ €/MWh}) \\ OA_{MI}(s, h) &= (20 \text{ MWh}, 50 \text{ €/MWh}) \end{aligned}$$

3. Technical adequacy checks of multiple bids with respect to the margins

The offers that compose a multiple offer are checked individually, starting from those with higher priority up to those with lower priority according to the criteria set out in the previous paragraph.

4. Technical adequacy checks of balanced bids

Balanced offers are sets of sale offers at a price equal to the minimum technical limit and purchase offer at a price equal to the maximum technical limit presented in each session of the MI-A also by different participants, provided that they refer to the same relevant period and to the offer points belonging to the same geographical or virtual zone, such that the respective quantities balance and are identified as mutually balanced by means of a specific alphanumeric code chosen by the participants.

Balanced offers can only be submitted on the MI-A and pursuant to Article 51, paragraph 51.4 of the ME Rules, they are subject to both individual adequacy checks and to joint adequacy checks.

In particular, the offers indicated as mutually balanced are congruous with respect to the quantities if they are:

- a) individually congruent with respect to the margins;
- b) referring to the same market, the same day and the same relevant period;
- c) referring to PDOs belonging to the same geographical or virtual zone or limited production pole;
- d) such that the sum of the quantities of electricity specified in the supply offers indicated as mutually balanced are equal to the sum of the quantities of electricity specified in the purchase offers indicated as mutually balanced, or if:

$$\sum_{bil=x} QEV_{MI}^{bil}(k, h) = \sum_{bil=x} QEA_{MI}^{bil}(k, h)$$

where

$QEA_{MI}^{bil}(k, h)$ is the quantity of energy specified in the balanced the purchase offers referring to the bid point k and to the relevant period h, presented on the MI-A;

- $QEV_{MI}^{bil}(k, h)$ is the quantity of energy specified in the balanced sale offer referring to the offer point k and to the relevant period h, presented on the MI-A;
- bil is the generic alphanumeric balancing code;
- x is the specific value of the balancing code adopted by a set of offers