Technical Rule no. 4 rev. 02 PCE

(under article 4 of the Rules Governing the Forward Electricity Account Trading Platform – PCE Rules)

Title	**Validation and technical adequacy verifications and Guarantee Coverage**

Reference Legislation	Article 34, para. 34.3; Article 35, paras. 35.3 and 35.4; Article 37, para. 37.3; Article 38, paras. 38.3 and 38.5, Article 42, para. 42.3 and Article 60, para. 60.3 of the Rules.

In force from 1 December 2016

successfully verified by the Director of Markets of AEEG (Autorità per l'Energia Elettrica e il Gas – electricity & gas regulator) under Resolution of 5 April 2007, as amended and supplemented

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1. Foreword

Article 34, para. 34.3 and Article 37, para. 37.3 of the PCE Rules provide that, if the request for or the confirmation of registering of a transaction is deemed to be invalid, GME shall – in accordance with the modalities indicated in the Technical Rules – notify the submitting Participant thereof, specifying the reasons for such invalidity.

Article 35, paras. 35.3 and 35.4 and Article 38, paras. 38.3 and 38.5 of the PCE Rules provide that GME shall – with the modalities indicated in the Technical Rules – notify Participants of the results of the technical adequacy verifications of their requests for or confirmation of registering of transactions that have been deemed to be technically adequate.

Article 42, paragraph 42.3 of the Rules provides that if the program registration is not a valid, GME, according to the modalities defined in the Technical Rules, notifies the outcome to the Participant, specifying the reason for invalidity.

Article 60, paragraph 60.3 of the Rules provides that if, the amount of the guarantee, calculated in accordance with this Article, is negative as a result of changes in estimated CCT, GME communicates that fact to the involved Market Participant who must - in the manner and within the terms defined in the Technical Rules - reduce own exposure or integrate the provided guarantee in order to restore a positive coverage.

2. Validation and technical adequacy verification of the transactions registration

GME validates the requests for registering transactions as soon as they are received by the PCE information system. In case of invalid requests GME will notify to the submitting Participant the result of the verification, specifying the reasons for the invalidity.

GME carries out the physical adequacy verifications under Article 35, paragraph 35.1, a), and pursuant to Article 38, paragraph 38.1 a) and financial adequacy under Article 35, paragraph 35.1 b), Article 38, paragraph 38.1b) and Article 45, paragraph 45.1 of the requests for registering that have been validated and immediately notifies the submitting Market Participant of the result of the verifications. In case of technically inadequate requests, GME will specify the reasons for the technical inadequacy.

GME validates the confirmations of registering of transactions as soon as they are received by the PCE information system. Only in case of invalid confirmations will GME notify the submitting Participant of the result of the verifications, specifying the reasons for the invalidity.

GME verifies the technical and financial adequacy of the confirmations of transactions registration that have been validated and immediately notifies the result of the verifications only to the submitting Market Participant (if they are technically inadequate) or to both Participants (if they are technically adequate).

After completing the validation and technical adequacy verifications and regardless of the way in which the Participant has submitted requests for transactions or confirmations of registering of transactions, GME will notify the result of such verifications by making available an XML file (known as "Functional Acknowledgement" – FA) in the "Download" section.

If the validation and technical adequacy verifications are successful (i.e. when the request for registering a transaction or the confirmation of registering of a transaction has been submitted in accordance with the PCE Rules), the FA will contain the "**Accept**" message. If the verifications are not successful, the FA will contain the "**Reject**" message and the reasons for the rejection.

To upload and download multiple XML files automatically, users may rely on the web services made available by GME; these services are described in the "GME's Web Services" document, which is posted at www.mercatoelettrico.org.

3. Checking the validity of requests for programs registration

GME validates the requests for registering programs as soon as they are received by the PCE information system and notifies the submitting Participant of the result of the verification by making available an XML file (known as "Functional Acknowledgement" – FA) in the "Download" section.

If the validation and technical adequacy verifications are successful (i.e. when the request for registering a program has been submitted in accordance with the PCE Rules), the FA will contain the "**Accept**" message. If the verifications are not successful, the FA will contain the "**Reject**" message and the reasons for the rejection.

To upload and download multiple XML files automatically, users may rely on the web services made available by GME; these services are described in the "GME's Web Services" document, which is posted at www.mercatoelettrico.org.

4. Guarantee system on the PCE

4.1 Financial adequacy verifications with respect to the guarantee on the PCE

In line with Article 60, paragraphs 60.1 and 60.2 of the Rules, for the purpose of financial adequacy verifications under Article 35, paragraph 35.1 b), Article 38, paragraph 38.1 b) and Article 45, paragraph 45.1, the amount of the guarantee CG^{PCE} is equal to:

Equation 1

$$CG^{PCE} = G^{PCE} + E^{PCE}$$

Thus, a request for registration or confirmation of a sale transaction on electricity injection accounts and registration of withdrawal schedules related to mixed offer points (pumping unit) and/or a consuming point belonging to foreign virtual zones is adequate compared to the coverage of the financial guarantee to GME if the guarantee available for PCE (G^{PCE} defined in Equation 4) is greater than or equal to the exposure to PCE (E^{PCE} defined in Equation 8).

Equation 2

$$CG^{PCE} \geq 0$$

4.2 Definition of guarantee for adequacy verifications on the PCE

The amount of the guarantee - in accordance with the forms loanable by PA Participants and non-PA Participant[1] - considered for the purposes of the adequacy verifications amounts to:

Equation 3

$$G = \left(\sum_i F_i + \sum_j D_j \right)$$

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[1] In compliance with Article 56, comma 56.1 a) of the Rules, non-PA Participant is required to post financial guarantees in the form of first-demand bank guarantee, issued by banks with an adequate credit standard according to rules expressed in the same article; in exceptional and urgent circumstances, the non-PA participant may increase financial guarantees by lodging a non-interest bearing cash deposit in compliance with Article 57, comma 57.11. While, according to Article 56, comma 56.1 c) PA Participant shall post guarantees exclusively in the form of non-interest bearing cash deposit to be provided on the bank account held by GME with the bank in charge of GME's treasury services.

where

F_i = amount of the i-th guarantee submitted by the Participant;

D_j = amount of the i-th deposit paid by the Participant.

Each Participant, in accordance with the guidelines established at the Technical Rule 4 ME, can define the amount of own guarantees to be allocated to the PCE, which will be equal to:

Equation 4

$$G^{PCE} = G * \delta^{PCE} * (1 - MM^{PCE})$$

where

G^{PCE} = guarantee allocated for the PCE;

δ^{PCE} = guarantee share allocated for the PCE (where $0 \leq \delta^{PCE} \leq 1$[2]);

MM^{PCE} = maintenance margin on the PCE, equal to 3%.

The portion of the guarantee allocated to the PCE, in compliance with Article 57, paragraph 57.1, a) and b) of the PCE Rules, is in fact reduced by an amount equal to 2% to cover the default interest for late payment and 1% to cover the penalty.

4.3   Definition of exposure for the purposes of the adequacy verifications on the PCE
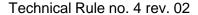
4.3.1 Exposure on the proposals

If a registration on the PCE of a sale transaction on an injection account is submitted or confirmed or if a registration of withdrawal schedules related to mixed offer points (pumping unit) and/or a consuming point belonging to foreign virtual zones is consolidated , the generated exposure is equal to:

Equation 5

$$PF^{PCE}{}_g = -\left\{ \left| \sum Q_{g,i} \right| \times \left[CCT\ stimato_{g,i} \times (1 + iva) \right] \right\}$$

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[2] The sum of the shares of the allocated guarantee between the electricity markets of GME (MPEG, MGP/MI, MTE/CDE and/or PCE) in accordance with the guarantee allocation form submitted must be equal to 1.

where:

PF_g^{PCE} = exposure from transactions on the PCE referring to the day g;

Estimated CCT= estimated CCT value for the day g;

$Q_{g,i}$ = amount expressed in MWh of the i-th registration proposal sales, both on accepted and pending, and registration proposal purchases, once confirmed on an injection and withdrawal programs on to mixed offer points or on withdrawal offer points referring to foreign virtual zones[3];

iva = VAT value associated with the transaction sign.

In case of offers submitted for withdrawal programs on mixed offer points or consuming points related to foreign virtual zones, verification is run in compliance with the hour/merit priority of these offers; while, in case of sale on an injection account, this verification is carried out in real time at the time of submission.

4.3.2   Exposure on the net delivery position

Once known the PUN, the exposure calculation is updated according to the following formula:

Equation 6

$$\forall Q_{g,i}$$

$$PF^{PCE}{}_g = \sum \left[Q_{g,z,i} \times CCT_{gh,i} \times (1 + iva) \right]$$

where:

$$CCT_{gh,i} = \left(Pz_{ih} - PUN_{gh} \right)$$

CCT = CCT value measured as the difference between the zonal price and the PUN;

Pz_{ih} = zonal price for the day g and time h of the i-th program accepted on the MGP;

$Q_{g,z,i}$ = amount accepted in the MGP for the zone z, expressed in MWh of the i-th sales registration on an injection account and of withdrawal programs on mixed offer points or withdrawal offer points referring to foreign virtual zones;

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[3] Observing the signs convention existing on the PCE.

$PUN_{g,h}$ = PUN value for the day g and hour h.

4.3.3 Exposure by *settlement date*

In order to determine the exposure as a function of the weekly settlement, each daily exposure, $PF_{g,h}$, determined as shown in the paragraphs above, is aggregated in function of the *settlement* date S associated with each flow day g.

The Participant exposure to any date of settlement D is equal to:

Equation 7

$$E_S^{PCE} = \sum_{g \in S} PF_g^{PCE} + ACC_S$$

where:

ACC = amount of the down payment paid by the Participant in advance with respect to a given settlement S.

The overall exposure on the PCE is equal to:

Equation 8

$$\forall \, E_S^{PCE} < 0$$

$$E^{PCE} = \sum E_S^{PCE}$$

5.   Adjustment of the guarantee

If the guarantee, after being updated under the procedure described herein on the open positions held, is not sufficient, GME will send by e-mail a request for adjustment to the Participant, specifying the minimum amount to be paid.

By 10.30 am on the 3rd working day following the receipt of the request, the Participant:

- must send to the bank in charge, and with beneficiary currency on the same day, via SEPA Credit Transfer Urgent/Priority, or equivalent procedures, the payment of the required amount, or

- must send a further guarantee (or adjust the validity and/or the amount of the guarantee already paid) with an amount at least equal to the amount necessary to cover its exposure[4].

In case of failure to provide the payment within the given period, the Participant will be suspended.

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[4] This way is not allowed to PA Participants, which shall submit a guarantee exclusively in the form of cash deposit.