

FORWARD ELECTRICITY ACCOUNT TRADING PLATFORM ("PCE"):

Guarantee and Settlement-of-Payment System

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Guarantee system

Guarantee system

GME's Draft Rules (art. 55) Governing the Forward Electricity Account Trading Platform provide for a guarantee system that is similar to the one adopted for IPEX. Participants are thus required to post guarantees having the following characteristics:

- ✓ they are **first-demand bank guarantees**
- ✓ they should have the same format as the one enclosed to the Rules
- ✓ they should be issued by banking institutions which are members of the professional association referred to in article 13 of Legislative Decree no. 385 of 1 September 1993;
- ✓ they should be issued by banking institutions having a long-term rating that is at least equal to:
 - A- on Standard & Poor's or Fitch's scales
 - A3 on the scale of Moody's Investor Service
 - or
 - issued by banks controlled by a banking institution meeting the above requirements and presenting a letter of patronage

Guarantee system

The bank guarantee should be submitted to the bank in charge of GME's treasury services - San Paolo IMI

Within **one working day following** the day of submission, San Paolo IMI will:

- ✓ check whether the specified requirements are met
- ✓ notify the outcome of such verification to the Participant involved and to GME

Within the **second working day following the day** on which GME has received the above notification from San Paolo IMI and if the verification conducted by San Paolo IMI has been successful, the bank guarantee will be valid and effective for the purposes of adequacy verifications.

Guarantee system

The bank guarantee covers (art. 56 of the Draft Rules):

- The settlement of payments resulting from the recording of transactions and schedules
- The amounts due for penalties (1% of the amounts owed to GME for delayed payment)
- The amounts due for default interest (in case of delayed payment)
- Redemption/cashing fees (under the current agreement between GME and San Paol IMI, they are equal to zero)

The amount of the bank guarantee is freely determined by the Participant based on the transactions and schedules to be recorded on the electricity account.

Guarantee system

At any time, the Participant may increase the guaranteed amount by submitting:

→ A new bank guarantee meeting the previously mentioned requirements

→ A letter updating the bank guarantee:

- ✓ in the same format as the one enclosed to the Rules
- ✓ meeting the same requirements as those for the bank guarantee

The bank guarantee updating letter will be valid from one of the following dates, whichever is later:

- ✓ the working day following the day on which GME has received the notification from the bank in charge of treasury services
- ✓ the date from which the updating letter is valid

Guarantee system

In exceptional and urgent circumstances, the Participant may increase the amount of the guarantees by lodging a deposit at San Paolo IMI in favour of GME; such deposit*:

→ will be a **non-interest-bearing deposit**

→ will be valid from the second working day following the day on which the amount has been credited to GME's bank account;

→ will be refunded at the request of the Participant only if its position has been entirely covered by the bank guarantee.

* The deposit should be made by specifying the following reason: “deposito cauzionale infruttifero con facoltà per il GME di poterne disporre” (non-interest bearing security deposit with GME's option to use it”)

Verifications of financial adequacy towards GME

Verifications of financial adequacy towards GME

- GME will **check whether** the available guarantee covers each request of:
 - recording/confirmation of a **sale** on an electricity injection account (**CE-IMM**) (articles 32 and 35 of the Draft Rules);
 - **implicit demand bid** (art. 42 of the Draft Rules);
 - recording of a **withdrawal schedule** in respect of a **pumping** unit and of an **exporting** unit (art. 43 of the Draft Rules).

- For verifying the coverage of the available guarantee, GME will estimate the value of the transmission capacity fee (CCT) and of the national single price (PUN) (art. 57 of the Draft Rules).

Verifications of financial adequacy towards GME

- A request for **recording/confirmation** of a **sale** on an electricity **injection account** is adequate and thus the verification is successful if:

$$[(|Quantity| \times \text{estimated CCT}) \times (1 + \text{VAT})] \times 1.01 \leq \text{available guarantee}$$

where:

- Quantity = MWh specified in the request
- estimated CCT = estimated transmission capacity fee
- VAT = VAT rate applied to each Participant
- 1% = penalty

Verifications of financial adequacy towards GME

- An **implicit demand bid** is adequate and thus the verification is successful if:

$\{[(|Quantity| \times (\text{estimated PUN} - \text{estimated CCT})) \times (1 + \text{VAT})] \times 1.01 \leq \text{available guarantee}$

where:

- Quantity = algebraic sum of net sale and zero-priced injection schedules
 - estimated PUN = estimated national single price
 - estimated CCT = estimated transmission capacity fee
 - VAT = VAT rate applied to each Participant
 - 1% = penalty
- The verification is made at the end of the Day-Ahead Market (MGP) sitting.

Verifications of financial adequacy towards GME

- A request for recording a withdrawal schedule on a pumping unit (**UPMP**) and on an exporting unit (**UCV**) is adequate and thus the verification is successful if:

$$[(|Quantity| \times \text{estimated CCT} \times (1 + \text{VAT})) \times 1.01 \leq \text{available guarantee}]$$

where:

- Quantity = MWh specified in the request
 - estimated CCT = estimated transmission capacity fee
 - VAT = VAT rate applied to each Participant
 - 1% = penalty
-
- The verification is made at the end of the MGP sitting.

Sufficiency of financial guarantee towards GME

Sufficiency of financial guarantee towards GME

- For financial adequacy verifications, the **available financial guarantee** of each Participant in the month **m** shall be equal to the algebraic sum of (articles 58 and 59 of the Draft Rules):
 - the bank guarantee increased by the possible deposit made;
 - the economic balance of the Participant's electricity accounts for the month m;
 - the economic balance, if negative, of the Participant's electricity accounts for the months in which payments have not yet been settled.

- If the available financial guarantee proves to be insufficient as a result of variations in the estimated PUN or estimated CCT, the Participant must reduce its exposure or increase its guarantee within 5 working days.

Sufficiency of financial guarantee towards GME

- For each Participant, the **economic balance** pertaining to the applicable periods of the **month m** shall be equal to the algebraic sum of the following amounts, increased by VAT and by the penalty (art..58 of the Draft Rules):

- < 0
- the amount (valued at the estimated CCT) of requests for recording sale transactions, adequate but not confirmed, on an electricity injection account (CE-IMM);
 - the amount (valued at the estimated CCT) of the net sale recorded on a CE-IMM for the days on which the Day-Ahead Market (MGP) has not taken place;
 - the amount (valued on the difference between the estimated PUN and the estimated CCT) of implicit demand bids that are adequate;
 - the amount (valued at the estimated CCT) of withdrawal schedules pertaining to pumping units (UPMP) and exporting units (UCV), adequate but not confirmed;
- < 0
> 0
- the amount (valued at the actual PUN) of the physical balance of the electricity account;
 - the amount (valued at the actual CCT) of injection and withdrawal schedules (pumping units and exporting units) recorded on an electricity account and determined after the MGP.

Sufficiency of financial guarantee towards GME

- The available financial guarantee will be updated:
 - Upon submitting a **request** for recording a **sale transaction** verified to be adequate on an injection account (**CE-IMM**);
 - Upon **accepting** the request for recording a **purchase/sale transaction** on an injection account;
 - Upon the **close of the MGP sitting** (implicit demand bids, withdrawal schedules in respect of pumping units and exporting units);
 - Upon determining the **results** of the **MGP**;
 - Upon **updating** the **estimated CCT** and the **estimated PUN**;
 - Upon the **settlement of payments**.

Examples

example: Participant A

1 Jan. 2007 → bank guarantee: + € 1,000,000

20 Jan. 2007 → economic balance - month of January - equal to : - € 100,000

economic balance - month of February - equal to : - € 50,000

20 Jan. 2007 → Residual guarantee: month of January = + € 850,000

month of February = + € 850,000

10 Mar. 2007 → economic balance - month of January - equal to : - € 100,000

economic balance - month of February - equal to : - € 70,000

economic balance - month of March - equal to : + € 10,000

10 Mar. 2007 → Residual guarantee: month of February = + € 830,000

month of March = + € 840,000

21 Mar. 2007 → Payment of debit pertaining to January: €100,000

21 Mar. 2007 → Residual guarantee: month of February = + € 930,000

month of March = + € 940,000

example: Participant B

1 Jan. 2007 → bank guarantee: + € 1,000,000

20 Jan. 2007 → economic balance month of January - equal to : + € 100,000

economic balance month of February - equal to : - € 50,000

20 Jan. 2007 → Residual guarantee: month of January = + € 1,050,000

month of February = + € 950,000

10 Mar. 2007 → economic balance month of January - equal to : + € 100,000

economic balance month of February - equal to : - € 70,000

economic balance month of March - equal to : + € 10,000

10 Mar. 2007 → Residual guarantee: month of February = + € 930,000

month of March = + € 940,000

21 Mar. 2007 → Payment of credit pertaining to January: €100,000

21 Mar. 2007 → Residual guarantee: month of February = + € 930,000

month of March = + € 940,000

Verifications of financial adequacy towards TERNA

Verifications of financial adequacy towards TERNA

- AEEG's Decision 111/06 stipulates that GME shall check the financial adequacy towards TERNA.

- To this end, Terna will determine and notify to GME:
 - the **maximum** admissible **exposure** of each dispatching user;
 - the **economic balance of the actual deviation account**;
 - the **price** at which the recording of transactions on electricity accounts is to be valued.

Verifications of financial adequacy towards TERNA

- GME will check the financial adequacy towards TERNA upon recording/confirmation of a sale transaction on an electricity injection account (CE-IMM) (articles 32 and 35 of the Draft Rules)
- A request for recording/confirmation of a sale transaction on an electricity injection account is adequate and thus the verification is successful if:

$$[(|Quantity| \times P_s) \leq \text{Available Guarantee of Dispatching User}]$$

where:

Quantity = MWh specified in the request and for which the dispatching user is responsible

P_s = deviation price determined by TERNA

Available Guarantee = guarantee towards TERNA that the dispatching user has available

Verifications of financial adequacy towards TERNA

- Therefore, with a view to verifying the financial adequacy towards TERNA, the **recording/confirmation of a sale transaction on an electricity injection account (CE-IMM)** is attributed to the **dispatching user** of the offer points that are associated with such account, **proportionally to the margins**.

- The share of the sale transaction attributed to a dispatching user is equal to the product between:
 - Quantity of the transaction; and

 - Ratio of the sum of the margins of the offer points falling under the responsibility of the dispatching user to the step-up margin of the account to which the sale refers.

Verifications of financial adequacy towards TERNA

Example

- Participant A holds an electricity injection account (CE-IMM) with a step-up margin of **100 MW**, of which:
 - **80 MW** in respect of an offer point of **Dispatching User 1**
 - **20 MW** in respect of an offer point of **Dispatching User 2**

- Participant A requests the recording of a sale transaction of 160,000 €; the verification of the financial adequacy towards TERNA is successful if:
 - **$160,000 * 0.8 \leq$** Available guarantee **Dispatching User 1**
 - **$160,000 * 0.2 \leq$** Available guarantee **Dispatching User 2**

Sufficiency of guarantee towards TERNA

Sufficiency of guarantee towards TERNA

➤ The available guarantee of each dispatching user towards Terna shall be equal to the algebraic sum of (articles 61 and 62 of the Draft Rules):

- the maximum exposure;
- the economic balance of the actual deviation account;
- the amount (valued at the deviation price-Ps) of requests for recording sales on an injection account, that are adequate but not confirmed*;
- the amount (valued at the Ps) of the net sales pertaining to the days for which the Day-Ahead Market (MGP) has not yet taken place*.

* Just as for adequacy verifications, the amount is attributed to the dispatching user proportionally to the margins.

Sufficiency of guarantee towards TERNA

- GME will update the available guarantee towards TERNA:
 - when a sale transaction is requested to be recorded on an electricity injection account;
 - when accepting the request for recording a sale/purchase transaction on an electricity injection account;
 - when TERNA notifies the data pertaining to maximum exposure

Verifications of financial adequacy: summary

	CE-IMM (injection account)	CE-PRE (withdrawal account)
Recording of sale	<ul style="list-style-type: none"> • $Q \cdot \text{estimated CCT} \leq \text{Guarantee vs GME}$ • $Q \cdot P_s \leq \text{Guarantee vs TERNA}$ 	No financial adequacy verification
Recording of purchase	No financial adequacy verification	No financial adequacy verification
Implicit demand bid	$ Q \cdot (\text{estimated PUN} - \text{estimated CCT}) \leq \text{Guarantee vs GME}$	Cannot be submitted
Declaration of withdrawal schedule	cannot be submitted	<ul style="list-style-type: none"> • $Q \cdot \text{estimated CCT} \leq \text{Guarantee vs GME}$ (if pertaining to pumping units-UPMP or exporting units-UCV) • no verification if pertaining to consuming units-UC

Settlement of payments

Settlement of payments

Billing (articles 48 and 49 of the Draft Rules)

- On a daily basis and for each Participant, GME will determine the hourly value (increased by VAT) of the following amounts:
 - **purchases/sales in the Day-Ahead Market (MGP)**, valued at the PUN and corresponding to the physical balance of the electricity account;
 - **CCT** to be paid/received in respect of withdrawal schedules pertaining to pumping units and exporting units (UPMP and UCV) and of injection schedules resulting from the MGP;
 - **fees** to be paid to GME.
- On a daily basis and for the applicable periods belonging to the following day, GME will notify the value so determined.

Settlement of payments

Invoicing (articles 50 e 51 of the Draft Rules)

- The invoicing period is the calendar month.
- Invoices/notifications will be sent to Participants in respect of the payables/receivables that GME determines daily for the applicable periods belonging to the same invoicing period.
- The invoicing procedures and time periods will be defined in the Technical Rules.

Payments

- For each Participant, GME will determine the net position of debit/credit, excluding fees.
- The net position of debit/credit will be determined on the basis of the clearing of invoices issued/received by GME (art. 63 of the Draft Rules).
- Each debtor Participant is required to pay its debit to GME within the time limits established in the Technical Rules (art. 64 of the Draft Rules).
- GME will make payments to creditor Participants within the time limits and under the procedures established in the Technical Rules (art. 66 of the Draft Rules).

Payments

- In case of delayed payment, the debtor Participant is required to pay GME default interest and a penalty equal to 1%.
- In case of failure to make the payment, GME will use any deposit that has been lodged and redeem the bank guarantee.
- Default interest will be determined at the applicable legal rate.

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