VADEMECUM

OF THE ITALIAN POWER EXCHANGE

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Introduction

About GME

"Gestore dei Mercati Energetici S.p.A." (GME) is the company in charge of organising and managing the Electricity Market, the natural Gas Market and the Environmental Markets in Italy under principles of neutrality, transparency, objectivity and competition among or between producers.
GME is wholly owned by the company "Gestore dei Servizi Energetici - GSE S.p.A." (GSE), which is in turn wholly owned by the Ministry of Economy and Finance. GSE has also full control of the companies "Acquirente Unico S.p.A." (AU) and "Ricerca sul Sistema Energetico S.p.A. (RSE).

GME was established in the wider context of the electricity sector liberalisation process, started in 1999. Its mission is to favour the development of a competitive national power system.

GME has so far been one of the main reference entities of the energy sector, acting in support of the relevant institutions (Ministry of Economic Development, Ministry of Economy and Finance, "Autorità per l'Energia Elettrica e il Gas" - AEEG, the electricity & gas regulator -, etc.).

The Power Exchange - a fundamental instrument for developing a competitive electricity market in Italy - favours the setting of efficient clearing prices, which enable participants, producers and wholesalers, to sell and buy electricity in the most transparent, secure and cost-effective ways. Indeed, GME fulfils its responsibilities under principles of neutrality, transparency, objectivity and competition among or between producers, in accordance with the Decree establishing it.
GME manages the "**Mercati dell'energia elettrica**" (Electricity Markets), which consist of: "**Mercato a Pronti dell'Energia**" (Spot Electricity Market - MPE), including "Mercato del Giorno Prima" (Day-Ahead Market - MGP), "Mercato Infragiornaliero" (Intra-Day Market - MI) and "Mercato per il Servizio di Dispacciamento" (Ancillary Services Market - MSD); "**Mercato a Termine dell'Energia con obbligo di consegna fisica dell'energia"** (Forward Electricity Market with physical delivery obligation - MTE); and "**Piattaforma per la consegna fisica dei contratti finanziari conclusi sull'IDEX**" (Platform for physical delivery of financial contracts concluded on IDEX – CDE).
Since 2007, GME has also run the "**Piattaforma dei Conti Energia a Termine"** (OTC Registration Platform - PCE). On this platform, parties trading electricity bilaterally off the MPE and, in particular, in the MTE or over the counter (OTC) register their commercial obligations and nominate the related injection and withdrawal schedules.

GME also participates in the implementation of environmental policies, by managing the "**Mercati per l'ambiente"** (Environmental Markets): "Mercato dei Certificati Verdi" (Green Certificates Market - MCV); "Mercato dei Titoli di Efficienza Energetica" (Energy Efficiency Certificates Market – MTEE); "Mercato delle Unità di Emissione"[1] (Emissions Trading Market – MUE); "Mercato delle certificazioni CO-FER" (RECO Market); RECOs (renewable-energy certificates of origin) give proof of the percentage of electricity generated from renewables in the commercial offerings of electricity selling companies.

1 On 1 December 2010, GME's Board of Directors decided to suspend trading in the Emissions Trading Market with immediate effect and until further notice, considering the abnormal trend of trades identified in the last sessions of the market and, in particular, of presumably irregular or unlawful behaviours that GME promptly reported to the relevant institutions - Ministry of Economic development, Ministry of Economy and Finance - and to regulatory authorities.

Moreover, Law no. 99 of 23 July 2009 vests GME with the economic management of the "**Mercato del Gas Naturale**" (Gas Market) - under art. 30, para. 1 - and with the management of the services associated with gas sales/purchases – under art. 30, para. 2.
Since 10 May 2010, GME has run the "Piattaforma per la negoziazione del gas naturale" (Platform for the trading of natural gas bids/offers - P-GAS), as subsequently changed and integrated. The P-GAS consists of three segments:

- the *Imports' Segment*, where importers of gas produced by countries not belonging to the European Union may comply with their obligation to bid quotas of imported gas;
- the *Royalties' Segment*, where holders of leases for exploitation of gas fields sell royalties owed to the State;
- the *Segment as per Legislative Decree 130/10,* on which investors participating in the *Virtual Storage* system may comply with the obligation to bid the gas quantities that their associated virtual storage operators make available to them in the winter period.

Since 10 December 2010, GME has also organised and managed the "Mercato del gas natural a pronti" (Spot Gas Market - MGAS), where parties authorised to carry out transactions at the "Punto di Scambio Virtuale" (PSV – virtual trading point) may buy and sell quantities of natural gas.
As part of Gas Markets, AEEG's Decision 45/11 of 14 April 2011 (rules on merit-order balancing of natural gas) entrusted GME with the organisation and management of the "Piattaforma per il bilanciamento del gas naturale" (Gas Balancing Platform - PB-GAS) on behalf of Snam Rete Gas S.p.A.; the platform took off on 1 December 2011.

Additionally, art. 32 of Legislative Decree no. 93 of 1 July 2011 established that GME would take over the management of physical forward gas markets.

About the Electricity Market

The Electricity Market was created in Italy as a result of the approval of Legislative Decree 79/99. This decree, which marked the beginning of the structural reform of the Italian electricity sector, responded to the following needs:

- promoting competition in the activities of electricity generation and wholesale through the creation of a "marketplace";
- maximising transparency and efficiency in the naturally monopolistic activity of dispatching.

The Electricity Market is an electronic venue for the trading of wholesale electricity, where the electricity price corresponds to the clearing price resulting from the intersection between the volumes of electricity demanded and offered by its participants.
It is a real physical market, where the schedules of injection[2] and withdrawal[3] of electricity into and from the grid are defined under the economic merit-order criterion[4]. The Italian Power Exchange (Ipex) is a voluntary market: purchase and sale contracts may also be concluded off the exchange platform, i.e. bilaterally or over the counter (OTC).

2 The hourly injection schedule is the hourly diagram which defines - for an offer point and for each applicable period - the volumes of electricity to which the dispatching rules apply.
3 The hourly withdrawal schedule is the hourly diagram which defines - for an offer point and for each applicable period - the volumes of electricity to which the dispatching rules apply.
4 Under the economic merit-order criterion, supply offers are ranked in increasing price order and demand bids are ranked in decreasing price order.

Regulatory framework

The Electricity Market arose in Italy from Legislative Decree no. 79/99 of 16 March 1999 (Legislative Decree 79/99) as part of the process of transposition of Directive 96/92/EC concerning common rules for the internal market in electricity.

Trading on Ipex (first stage of the market) began on 1 April 2004. On 1 January 2005, the market was opened to full demand-side participation: all interested parties may purchase the electricity that they need directly on Ipex, subject to the obligation of scheduling their withdrawal profile on an hourly basis.

On 1 November 2009, GME launched its "**Mercato a Termine dell'energia Elettrica"** (Forward Electricity Market - MTE) to allow the trading of electricity over longer timescales than the daily ones offered by the traditional market.

As part of the Electricity Market, GME has also run the "Piattaforma Consegna Derivati Energia" (Platform for delivery of electricity derivatives - CDE) since 26 November 2009. On this platform, Electricity Market participants may physically deliver contracts concluded on IDEX (the electricity derivatives market organised and managed by "Borsa Italiana S.p.A.") by registering them on the PCE.

Under art. 17 of Annex A to AEEG's Decision 111/06, GME also manages the "**Piattaforma dei Conti Energia a Termine"** (OTC Registration Platform - PCE) for registering forward electricity sale and purchase contracts that have been concluded off the exchange, as well the related injection and withdrawal schedules implementing such contracts.

The Italian Electricity Market is governed by the following Community and national legislation and regulations:

- **Law no. 481 of 14 November 1995** establishing the "Autorità per l'energia elettrica e il gas" (AEEG, the electricity & gas regulator), which has the mission of regulating and monitoring the electricity and gas sectors.
- **Directive 96/92/EC of 19 December 1996** concerning common rules for the internal market in electricity (repealed by Directive 2003/54/EC).
- **Legislative Decree no. 79/99 of 16 March 1999** implementing Directive 96/92/EC concerning common rules for the internal market in electricity: in particular, art. 5 of the decree entrusts "Gestore dei Mercati Energetici" (GME) with the economic management and organisation of the Electricity Market under principles of neutrality, transparency, objectivity and competition among or between producers.
- **Directive 2003/54/EC of 26 June 2003** concerning common rules for the internal market in electricity and repealing Directive 96/92/EC. This directive establishes common rules for electricity generation, transmission, distribution and supply, as well as rules on organisation and functioning of the electricity sector, access to the market, criteria and procedures applicable to calls for tenders, granting of authorisations and operation of systems. The directive was repealed by Directive 2009/72/EC.
- **Directive 2009/72/EC of 13 July 2009** concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC.
- **Regulation (EC) No 714/2009** of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation

(EC) No 1228/2003. The regulation is aimed at setting fair rules for cross-border exchanges in electricity, thus enhancing competition within the internal market in electricity.

- **"Testo Integrato della Disciplina del Mercato Elettrico"** (Integrated Text of the Electricity Market Rules) laying down rules governing the operation of the Electricity Market (under art. 5 of Legislative Decree no. 79 of 16 March 1999), and of the Green Certificates Market (referred to in art. 6 of the Decree of the Minister of Industry, Trade and Handicraft of 11 November 1999, repealed and superseded by the Decree of the Minister of Economic Development of 24 October 2005, in turn repealed and superseded by the Decree of the Minister of Economic Development of 18 December 2008, adopted in concert with the Minister of Environment, Land and Sea Protection).

- Decree of the Minister of Productive Activities of 19 December 2003, approving the Integrated Text of the Electricity Market Rules (GME's takeover of responsibilities for the Electricity Market), as subsequently amended and supplemented.

- **"Disposizioni Tecniche di Funzionamento"** (DTF – Technical Rules), the implementing and procedural provisions of the Integrated Text of the Electricity Market Rules, posted on GME's website (www.mercatoelettrico.org).

- Law no. 239/2004 of 23 August 2004 reorganising the energy sector and enabling the Government to revise the applicable legislation on energy matters; this law reorganises the energy sector as a whole and defines, among others, general energy policy objectives, e.g. guarantee of security, flexibility and continuity of energy supplies and promotion of the unitary operation of energy markets.

- **AEEG's Decision 111/06** (as subsequently amended and supplemented), establishing - with effect from 1 April 2007 - a procedure for registering forward electricity purchase/sale contracts, based on a "sistema per conti di energia" (electricity account system), i.e. the OTC Registration Platform (PCE).

- **Law-Decree no. 73 of 18 June 2007** (converted into Law no. 125 of 3 August 2007) concerning urgent measures for implementing Community legislation on liberalisation of energy markets and, in particular, art. 1, paras. 2 and 4 on the "servizio di tutela" (standard-offer service) and the "servizio di salvaguardia" (last-resort service).

- **AEEG's Decision ARG/elt 115/08 of 5 August 2008,** as subsequently amended and supplemented: consolidated text of rules on the monitoring of the wholesale Electricity Market and of the Ancillary Services Market ("TIMM"). With this decision, AEEG introduced a new procedure for the activities to be conducted by Terna, GME and GSE in support of its own monitoring activities.

- AEEG's Decision ARG/elt 203/08 laying down provisions on GME's markets (with effect from 1 January 2009). These provisions include, among others, the option - also for consuming units - to participate in the Adjustment Market (now Intra-Day Market) and the concurrent abolition of the "Piattaforma di Aggiustamento Bilaterale per la Domanda" (Demand-Side Bilaterals Adjustment Platform - PAB).

- Law no. 2 of 28 January 2009 amending Law-Decree no. 185 of 29 November 2008 and converting it into law; this law concerns urgent measures for supporting families, work, employment and companies and for redesigning the national strategic framework to combat the crisis. Among the principles stated in this law, those that directly involve the activities of GME, as entity in charge of the economic

management of the Electricity Market under art. 5 of Legislative Decree 79/99, are: i) creation of an Intra-Day Market (MI), replacing the Adjustment Market (MA); ii) reduction of the period during which GME must hold the data about supply offers/demand bids confidential from twelve months to a maximum of seven days; iii) reform of the Ancillary Services Market (MSD); iv) functional integration of the Intra-Day Market (MI) with the Ancillary Services Market (MSD), as well as development of physical and financial forward markets.

- **Decree of the Minister of Economic Development of 29 April 2009** giving guidelines for the reform of the Integrated Text of the Electricity Market Rules, under art. 3, para. 10, Law no. 2 of 28 January 2009 (impetus to the evolution of regulated forward markets and strengthening of Electricity Market monitoring tasks).

- **Law no. 99 of 23 July 2009** concerning provisions on development and internationalisation of companies, as well as on energy matters. Among the principles stated in this law, those that directly involve the activities of GME, as the entity in charge of the economic management of the Electricity Market under art. 5 of Legislative Decree 79/99, provide that: *the guarantees which cover the obligations acquired by participants in the markets organised and managed by GME, in whatever form, shall not be diverted from their intended use or subject to ordinary, interim or precautionary actions by the creditors of the individual participants or of GME, even in case of opening of insolvency procedures. The guaranteed amount shall not be subject to set-off (whether by operation of law, judicial or voluntary). GME shall determine the procedures and time limits for redemption of the posted guarantees, as well as the time upon which the contracts concluded in the markets, the consideration and the consequent payments shall become binding between participants in the markets organised and managed by GME and, in the case of opening of an insolvency procedure against a participant, enforceable vis-à-vis third parties, including the bodies in charge of the same procedure. No actions, including actions for invalidity, shall prejudice the above-mentioned definitivity.*

1. ORGANISATION OF THE POWER SYSTEM

The national power system is an organised grid system. In an open-market context, the typical activities of this system are carried out by separate entities. These activities are: generation, transmission and distribution of electricity.

Electricity generation is a liberalised activity: primary energy sources are converted into electricity by power plants (i.e. generating centres) and then transmitted to consuming zones through a grid system, which consists of lines, substations and transforming stations.

Electricity transmission is a regulated activity: electricity generated by generating zones (or imported from other countries) is transferred to consuming zones. The grid operates as a system of communicating vessels, into which all the injected electricity is withdrawn, without the possibility of determining the plant or installation from which the electricity that is consumed originates.

The last stage of the cycle of the national power system is distribution - also a regulated activity - i.e. the delivery of electricity at medium and low voltage to users.

1.1. ENTITIES OF THE POWER SYSTEM

In addition to Parliament and Government, the main entities which contribute to the functioning of the power system - each with a specific role explicitly defined by the applicable legislation - are: i) the Ministry of Economic Development (MSE), which defines, among others, the strategic and operational guidelines for security and cost-effectiveness of the national power system; ii) the "Autorità per l'energia elettrica ed il gas" (AEEG, the electricity & gas regulator), which guarantees the promotion of competition and efficiency in the sector and has regulating and monitoring tasks; iii) "Terna S.p.A.", which manages the national transmission grid under security conditions, as well as the power flows thereon through its dispatching activity, i.e. by balancing supply and demand of electricity for 365 days a year and 24 hours a day; iv) "Gestore dei Servizi Energetici" (GSE), the public holding company that promotes the development of renewables by managing support schemes and granting the related incentives; v) "Acquirente unico" (AU), which guarantees electricity supply within the framework of the "servizio di maggior tutela e di salvaguardia" (standard-offer and last-resort services), as per Law-Decree no. 73 of 18 June 2007, converted into Law no. 125 of 3 August 2007; and vi) "Gestore dei Mercati Energetici" (GME), which organises and manages the Electricity Market under principles of neutrality, transparency, objectivity and competition among or between producers.

1.2. TECHNICAL CONSTRAINTS OF THE POWER SYSTEM

In the national power grid system, the activities of transmission and dispatching are subject to very strict technical constraints, such as:

- the need for instantaneously and continuously balancing the volumes of electricity injected into the grid and those withdrawn from the grid, taking into account transmission and distribution losses;
- the need for keeping electricity frequency and voltage on the grid within a very narrow range, so as to protect the security of installations;
- the need for ensuring that the power flows on each line do not exceed the maximum admissible transmission capacity (transmission or transit limits) of the same line.

Even minimum deviations from any of the above parameters for more than a few seconds may rapidly trigger critical conditions in the power system. Satisfying these constraints is further complicated by the characteristics of the technologies and procedures through which electricity is generated, transmitted and consumed.

In particular, the difficulties arise from three factors:

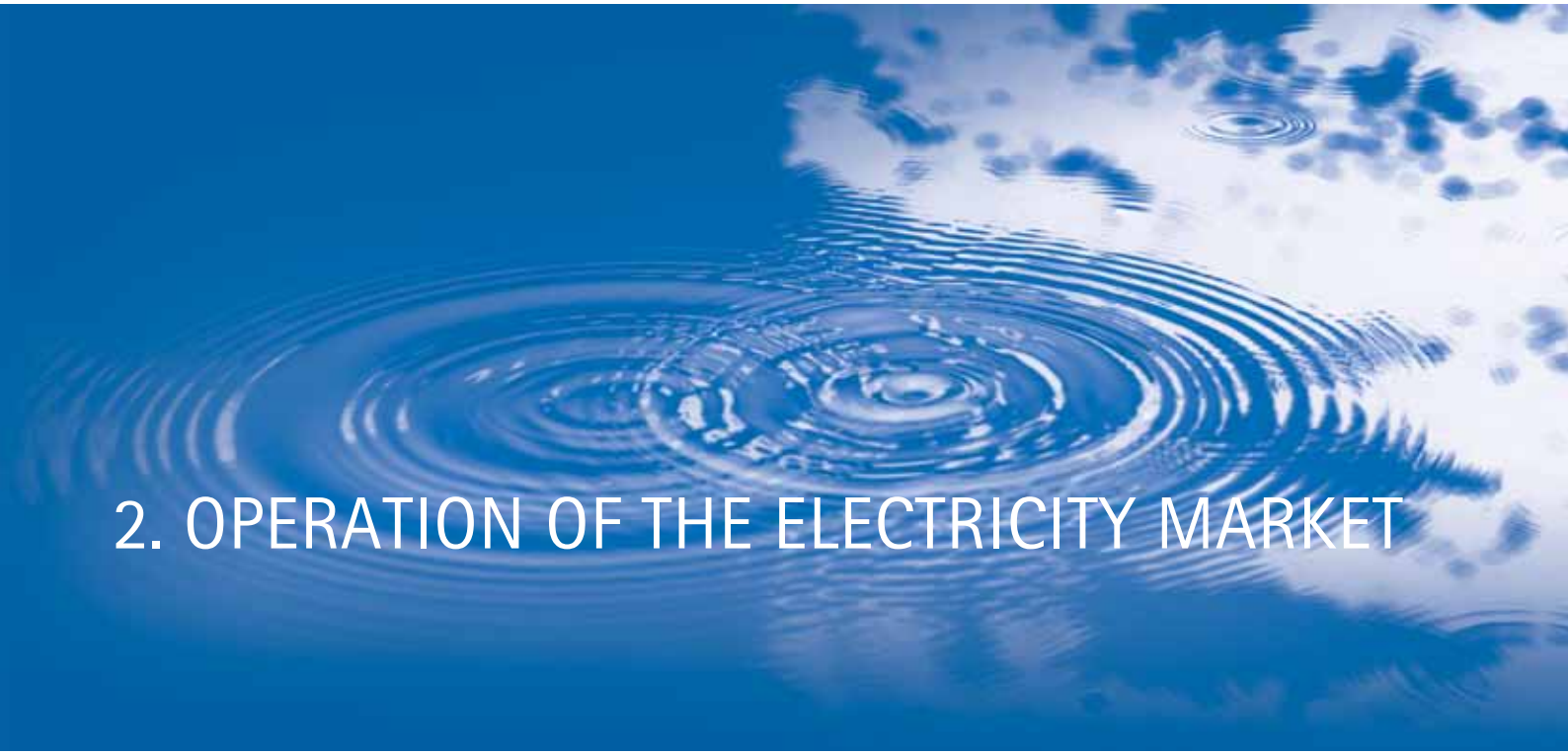
- non-rationable, inelastic and variable demand: demand on the grid has high variability in the short term (on an hourly basis) and in the medium term (on a weekly and seasonal basis);
- no storage of electricity and dynamic constraints on the real-time adjustment of supply: electricity can be stored in significant amounts only indirectly and, in the case of "pondage" hydro power plants, through the amount of water contained in the pondages; moreover, power plants have minimum and maximum generating capacity limits, as well as a minimum switching-on time and a minimum generating capacity adjustment time;
- grid externalities: after being injected into the grid, electricity flows through all the available lines, like in a system of communicating vessels, under complex physical laws that depend on the equilibrium between injections and withdrawals; hence, the path of electricity is not traceable and, if a local imbalance is not promptly redressed, it will propagate to the overall grid inducing voltage and frequency variations.

1.3. MANAGEMENT OF THE POWER SYSTEM

The high complexity of the power system and the co-ordination needed to guarantee its operation make it imperative to identify a central co-ordinating entity, in charge of monitoring and controlling all the installations which make part of the system. This entity, known as dispatching or control centre[5], represents the core of the power system and has the task of guaranteeing the continuity and quality of the service under maximum security conditions. This centre ensures that generation matches consumption at any time and that frequency and voltage do not deviate from optimum values, while satisfying transmission limits on grids and dynamic constraints on power plants.

Therefore, the control centre balances the system in real time (the so-called "balancing"). Automatic systems for controlling generating units (the so-called "primary and secondary reserve") ensure the necessary equilibrium between injections and withdrawals at any time and at any node of the grid, by increasing or decreasing injections into the grid so as to offset any imbalance thereon. The control centre takes direct action - by sending switching-on, generating capacity increase or decrease commands to tertiary-reserve units - only when the operating margins of automatic control systems fall below and must be brought back to security standards.

5 Dispatching is the activity which is aimed at giving instructions for co-ordinated utilisation and operation of power plants, of the transmission grid and of ancillary services.



2. OPERATION OF THE ELECTRICITY MARKET

2.1. ASPECTS RELEVANT FOR THE POWER SYSTEM

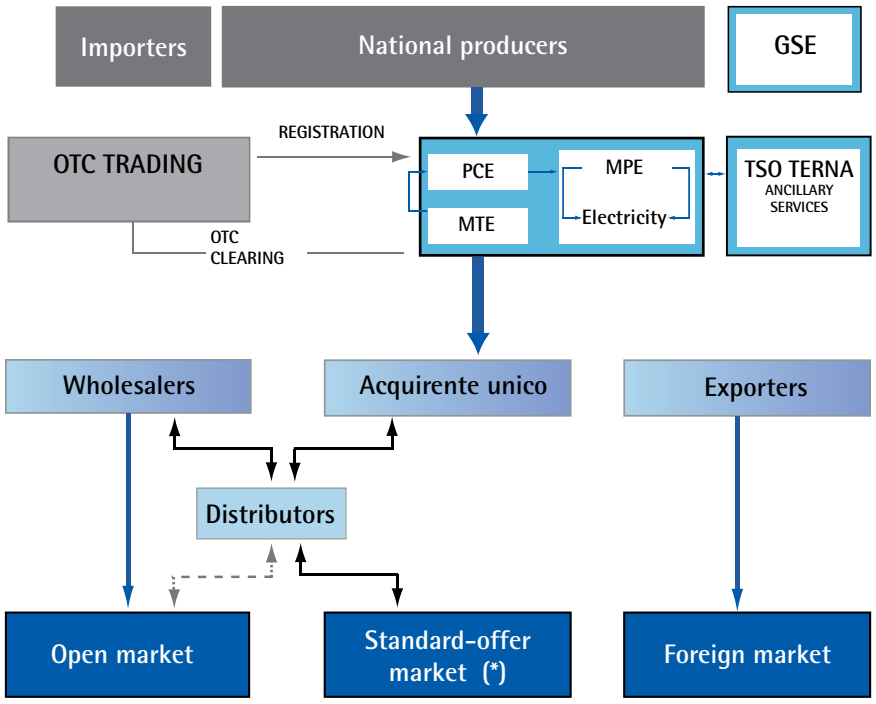
Electricity Markets

GME is responsible for organising and managing the Electricity Market, where electricity trading is aimed at scheduling generating and consuming units. Unlike other European energy markets, GME's market is not a merely financial market, where prices and volumes only are determined, but a real physical market, where physical injection and withdrawal schedules are defined.

Ancillary Services Market

Terna guarantees the availability of an adequate amount of reserve by selecting bids/offers of variation of the schedules submitted by participants into the Ancillary Services Market. On this market, organised by GME, bids/offers are collected and results concerning bid/offer acceptance are notified. The reserve is possibly used by Terna in real time for balancing purposes.

Organisation of the Electricity Market in Italy



(*) all households and companies supplied at LV with less than 50 employees and a volume of sales of up to € 10,000,000

Market zones

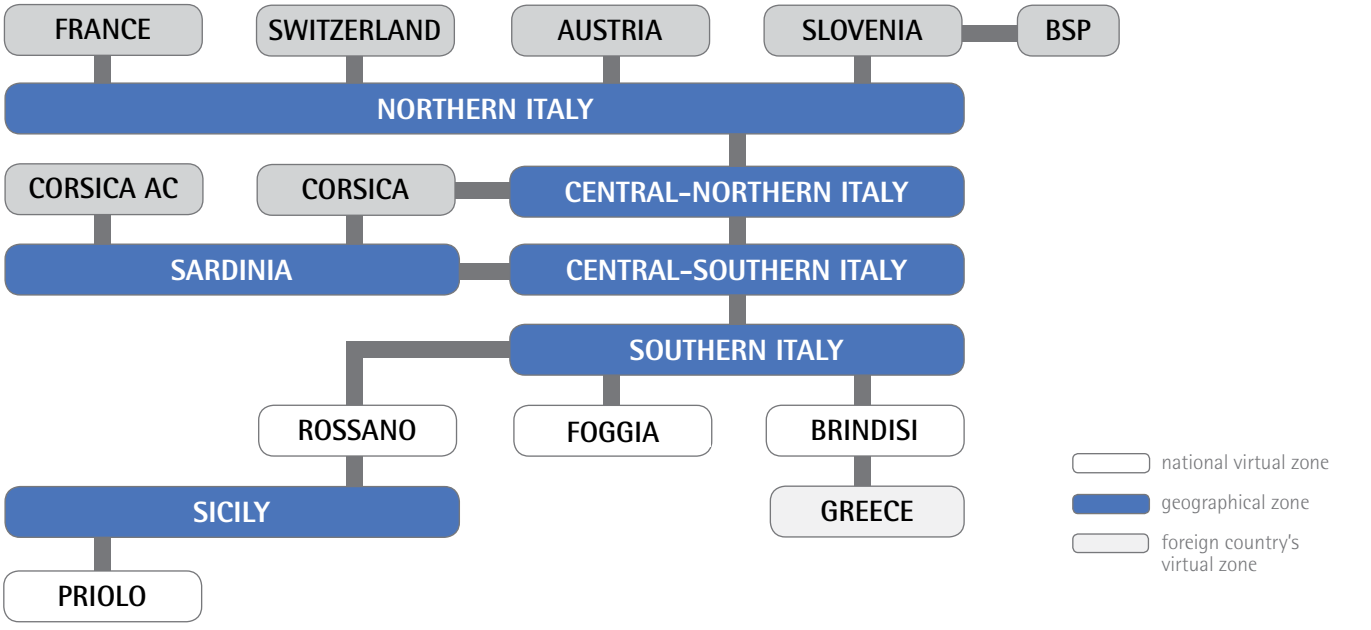
The power system is divided into portions of transmission grids ("zones") where, for purposes of power system security, there are physical limits to transmission of electricity to/from the corresponding neighbouring zones. These transmission limits are determined through a computational model that is based on the balance between electricity generation and consumption. The Italian power system thus consists of market zones, groups of geographical and/or virtual zones, each with a zonal electricity price.

The identification of the zones of the so-called "rete rilevante" (relevant grid) takes into account the three-year National Transmission Grid Development Plan. The zones of the "relevant grid" may correspond to physical geographical areas, to virtual areas (i.e. not directly corresponding to physical areas) and to constrained zones or points of limited production, i.e. virtual zones whose generation is subject to constraints aimed at maintaining the security of the power system.
To identify and remove any congestion which may be caused by injection or withdrawal schedules - whether defined in the market or implementing bilateral contracts - GME uses a simplified map of the grid. The map only shows the most significant transmission limits, i.e. those between national geographical zones, neighbouring countries' or foreign zones and constrained zones.

The national transmission grid is interconnected with neighbouring countries via 22 lines: 4 with France; 12 with Switzerland; 1 with Austria; 2 with Slovenia; 1 direct-current submarine cable with Greece, in addition to the SACOI direct-current cable linking Sardinia to mainland Italy through Corsica, an additional alternating-current cable between Sardinia and Corsica and the SAPEI direct-current link between Sardinia and mainland Italy.
The configuration of these zones depends on how Terna manages the flows along the peninsula. These zones may be summarised as follows:

- 6 geographical zones (central-northern Italy, northern Italy, central-southern Italy, southern Italy, Sicily and Sardinia);
- 8 neighbouring countries' virtual zones (France, Switzerland, Austria, Slovenia, BSP, Corsica, Corsica AC and Greece);
- 4 national virtual zones representing constrained zones, i.e. zones consisting only of generating units, whose interconnection capacity with the grid is lower than their installed capacity.

Virtual and geographical zones of the national transmission grid



Virtual and geographical zones of the national transmission grid

Offer points

Each geographical or virtual zone is a set of offer points.

Offer points are the minimum units of electricity in respect of which hourly injection and withdrawal schedules must be defined, whether to execute bilateral contracts or as a result of the acceptance of demand bids or supply offers in the Electricity Market.

- In the case of **injection** schedules, the injection offer points usually match the individual points of injection (points of the power grid, equipped with one or more metering systems, at which electricity is injected into the grid), i.e. the individual generating units (units converting the energy supplied by any primary source into electricity). This depends on the fact that, as generating units can control their injections instant by instant, they are dispatched by Terna directly and individually, in order to guarantee the balancing of the system, because the different units have different physical and dynamic properties. The injection schedules must be defined for the individual units, so as to permit the selection of units from which resources for the dispatching services may be procured.
- Conversely, in the case of **withdrawal** schedules, the withdrawal offer points may correspond both to individual points of withdrawal, i.e. individual consuming units, and to sets of withdrawal points.

The dispatching user

For each offer point, a "dispatching user" is identified. This user is answerable to Terna both for the implementation of injection and withdrawal schedules and for the execution of balancing commands. These commands may be sent by Terna to offer points in real time in order to maintain the security of the system. Non-compliance with the cumulative schedules involves the payment of deviation charges, i.e. the penalties applied to offer points.

2.2. COMPONENTS OF THE ELECTRICITY MARKET

GME's Electricity Market, which is aimed at scheduling generating and consuming units, consists of the Spot Electricity Market (MPE), of the Forward Electricity Market with delivery-taking/-making obligation (MTE) and of the Platform for physical delivery of financial contracts concluded on IDEX (CDE).

2.2.1. Spot Electricity Market (MPE)

The Spot Electricity Market consists of three submarkets:

- **Day-Ahead Market (MGP)**, where producers, wholesalers and eligible final customers may sell/buy electricity for the next day;
- **Intra-Day Market (MI)**, which replaced the existing Adjustment Market; in this market, producers, wholesalers and eligible final customers may change the injection/withdrawal schedules determined in the MGP; the market is organised into four sessions: the first two are held on day d-1 after the MGP (MI1 and MI2 - operational since 31 October 2009); and the second two intra-day sessions are held on day d (MI3 and MI4 - introduced on 1 January 2011);
- **Ancillary Services Market (MSD)**, where Terna S.p.A procures the ancillary services needed to manage, operate, monitor and control the power system; this market consists of: an ex-ante session, during which services for congestion relief and reserve capacity are bought; and a second intra-day session, during which the same bids/offers are accepted for balancing purposes (MB); in particular, the ex-ante MSD consists of three scheduling substages (MSD1, MSD2 and MSD3) and the MB of 5 sessions.

The markets

The Electricity Market consists of a set of market sessions, i.e. a set of activities of receipt and processing of bids/offers, as well as of determination of market results. In each session, bids/offers must be received within a given time interval: this interval is called sitting.

	MGP	MI1	MI2	MSD1	MB1	MB2	MI3	MSD2	MB3	MI4	MSD3	MB4	MB5
Reference day	D-1				D								
Preliminary information	08:45	12:30	14:40	n.d.	n.d.	n.d.	07:30	n.d.	n.d.	11:45	n.d.	n.d.	n.d.
Opening of sitting	08:00**	10:45	10:45	15:10	°	22:30*	16:00*	°	22:30*	16:00*	°	22:30*	22:30*
Closing of sitting	09:15	12:30	14:40	16:40	°	05:00	07:30	°	11:00	11:45	°	15:00	21:00
General results	10:30°°	12:55	15:05	20:30	##	##	07:55	9:50	##	12:10	14:05	##	##
Individual results	10:45	13:00	15:10	20:40	#	#	08:00	10:00	#	12:15	14:15	#	#

** the hour refers to day D-9
* the hour refers to day D-1
° use is made of bids/offers submitted in the first substage of the MSD
°° provisional results
fifteenth day of month M+2
general results are notified on an hourly basis, 1 hour after the end of each hourly period

Bids/offers

Participants trade in the market by submitting demand bids or supply offers.

Bids/offers consist of pairs of values, i.e. volume and unit price of electricity (MWh; €/MWh). They express the willingness to sell (or buy) a volume of electricity not higher than the one specified in the offer (or bid) at a price not lower (or not higher) than the one specified in the same offer (or bid).

Prices and volumes must not be negative and demand bids may also not specify any purchasing price (except in the MSD); in this case, they express the market participant's willingness to purchase electricity at any price. Bids/offers refer to "offer points" (physical generating and consuming units) and to individual hours: this means that, for each day and each offer point, a maximum of 24 bids/offers may be entered and that each bid/offer is independent of the other ones.

Bids/offers may be:

- **simple**, consisting of a pair of values indicating the volume of electricity offered in the market by a market participant and the related price for a given applicable period;
- **multiple**, consisting of the division of an overall volume offered in the market by the same market participant for the same applicable period, the same generating unit and the same withdrawal point;
- **pre-defined**, consisting of simple or multiple bids/offers which are daily submitted to GME.

Types of bids/offers

Day-Ahead Market (MGP)	Intra-Day Market (MI)	Ancillary Services Market (MSD)
Purchase (*) Sale (*)	Purchase Sale	Purchase Sale (*)
"electricity volume – electricity price" pairs	"electricity volume – electricity price" pairs	Price by type of service
Multiple Simple Pre-defined (*)	Multiple Simple Balanced	Pre-defined (*)

Legenda
(*) Admitted only in respect of offer points pertaining to consuming units and pumped-storage units.
(*) Admitted only in respect of offer points pertaining to generating units and pumped-storage units.
(*) Active only if no bids/offers have been submitted during the market sitting.
(*) Only of simple type: one purchase + one sale.
(*) Bids/offers of secondary reserve and multiple bids/offers of other services are admitted.

Bids/offers in the MPE should contain at least the following data:

- the identification code of the market participant submitting the bid/offer;
- the identification code of the market and of the market sitting where the bid/offer is entered;
- the identification code of the offer point to which the bid/offer refers;
- the applicable period to which the bid/offer refers;
- the type of bid/offer (purchase/sale);
- where applicable, the specification of pre-defined bid/offer;
- the offered volume;
- the unit price for the offered volume.

The units of measurement used in the market are as follows:

- for electricity, the unit of measurement is the MWh, specified with three decimals;
- for monetary quantities, the unit of measurement is the Euro, specified with two decimals;
- for the unit prices of electricity, the unit of measurement is the Euro/MWh, specified with two decimals.

Parties with adequate experience and competence in the use of ICT systems and related security systems may participate in the market after successfully completing the admission procedure with GME.

The summary diagram of the MPE is as follows:

Organisational diagram of the MPE

	MGP	MI	MSD	
Traded Resource	Electricity	Electricity	Electricity for congestion relief	Electricity for real-time balancing
Admitted units	All injection and withdrawal points		All injection and withdrawal points authorised to supply ancillary services	
Admitted parties	Market Participants	Market Participants	Dispatching users	Dispatching users
Price	Clearing Price	Clearing Price	Offered Price	Offered Price

DAY-AHEAD MARKET (MGP)

The Market

The Day-Ahead Market (MGP) is a wholesale electricity market, where hourly blocks of electricity are negotiated for the next day and where not only prices and volumes but also injection and withdrawal schedules are defined for the next day.
The MGP, which is based on an implicit-auction model, hosts most of the transactions of purchase and sale of electricity.
The sitting of the MGP opens at 08:00 of the ninth day before the day of delivery and closes at 09:15 of the day before the day of delivery.
GME publishes preliminary information about the MGP on its website by 8:45 of the day of closing of the sitting and, anyway, at least half an hour before the closing of the same sitting.

GME publishes the provisional market results, notifies the individual market results to participants and the cumulated schedules to dispatching users and to Terna by 10:45 of the day of closing of the sitting.

All parties that have acquired the status of "Electricity Market participants" may trade in the MGP.
GME acts a central counterparty to purchase and sale transactions in the MGP.

Bid/offer types and constraints

When the sitting of the MGP is open, participants may submit bids/offers where they specify the volume and the maximum/minimum price at which they are willing to purchase/sell.
Supply offers and demand bids must be consistent with the injection or withdrawal capabilities of the offer points to which they refer and, above all, they must correspond to the real willingness to inject or withdraw the related volumes of electricity.

In particular:

- supply offers express the willingness to sell a volume of electricity not higher than the one specified therein and at a unit price not lower than the one specified therein. Participants may refer supply offers only to injection or mixed points. The acceptance of an offer involves the market participant's commitment to inject the volumes of electricity specified in the offer into the grid in a given applicable period or, in case of partial acceptance of the offer, the corresponding share;
- demand bids express the willingness to purchase a volume of electricity not higher than the one specified therein and at a unit price not higher than the one specified therein. Participants may refer demand bids only to withdrawal or mixed points.

Multiple bids/offers may include both supply offers and demand bids.

Bids/offers are accepted after the closing of the market sitting under the economic merit-order criterion and subject to transmission limits between zones. In particular:

- all accepted supply offers and all accepted demand bids pertaining to mixed points and to withdrawal points belonging to virtual zones are valued at the clearing price of the zone to which they belong. This price is determined, for each hour, by the intersection between the demand curve and the supply curve and is different from one zone to the other when transmission limits are saturated;
- accepted demand bids pertaining to withdrawal points belonging to geographical zones are valued at the "Prezzo Unico Nazionale" (PUN – national single price), which is equal to the average of zonal prices weighted for zonal consumption.

Preliminary information

Before the sitting of the MGP, GME provides market participants with information about the expected electricity requirements for each hour and each zone and the maximum admissible transmission limits between neighbouring zones for each hour and each pair of zones. For each hour and each zone, GME also specifies the conventional reference price, i.e. the price that GME conventionally applies to demand bids without a price limit in order to assess their adequacy with respect to the available amount of the market participant's financial guarantees.

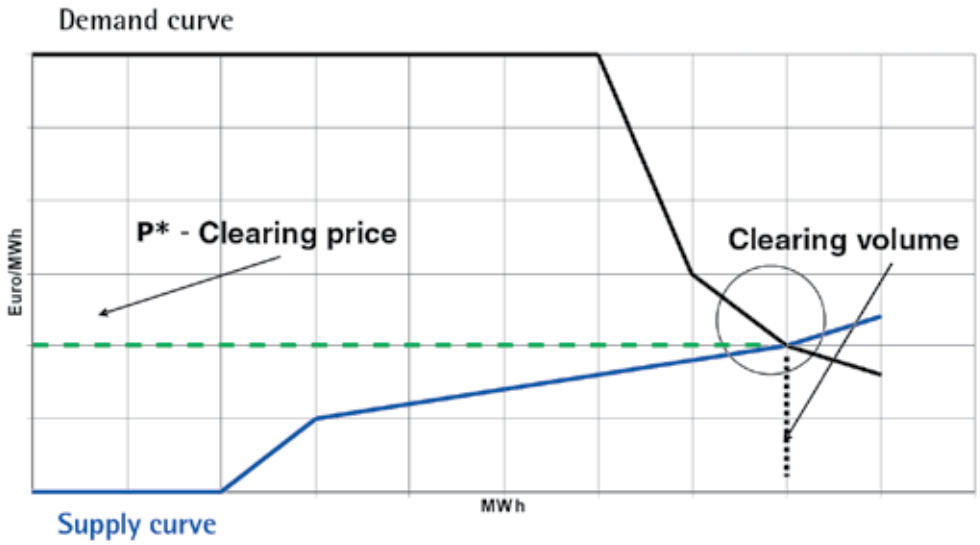
Bid/offer acceptance

At the end of the bid/offer submission sitting, GME activates the market resolution process. For each hour of the following day, the market algorithm will accept bids/offers in such a way as to maximise the value of transactions, while satisfying maximum transmission limits between zones.

The acceptance process may be summarised as follows:

- all valid and adequate supply offers that have been received are ranked in increasing price order on an aggregate supply curve and all valid and adequate demand bids that have been received are ranked in decreasing price order on an aggregate demand curve. The intersection of the two curves gives: the overall traded volume, the clearing price, the accepted bids/offers and the injection and withdrawal schedules obtained as the sum of the accepted bids/offers pertaining to the same hour and to the same offer point.

Determination of the clearing price



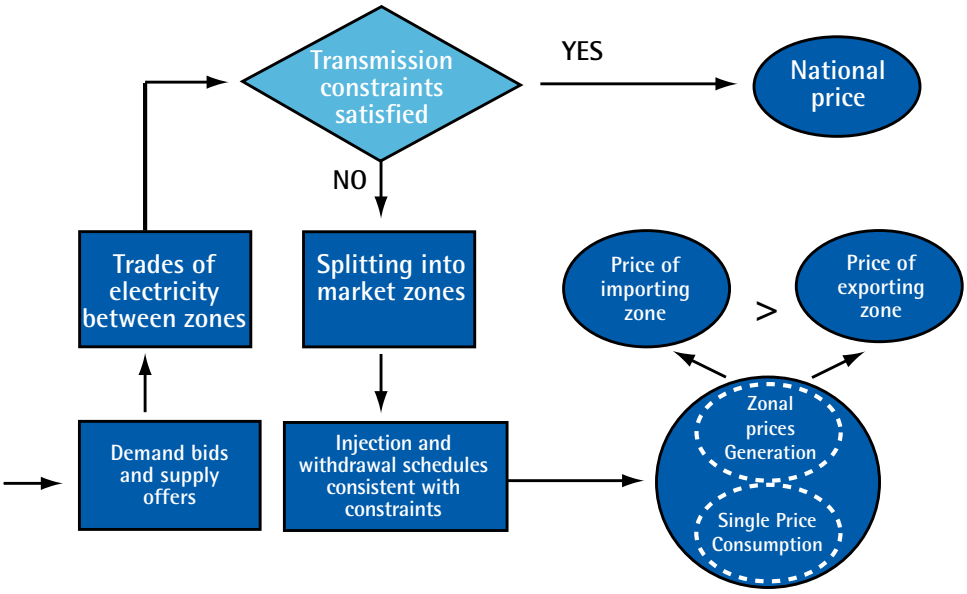
- If the flows on the grid resulting from the schedules do not violate any transmission limit, the clearing price is a single one in all the zones and equal to **P***. Accepted bids/offers are those having a selling price not higher than P* and a purchasing price not lower than P*.
- If at least one limit is violated, the algorithm "splits" the market in two market zones - one exporting zone, including all the zones upstream of the constraint, and one importing zone, including all the zones downstream of the constraint. In each zone, the algorithm repeats the above-mentioned intersection process and, for each market zone, it builds a supply curve (including all the supply offers submitted in the same zone, as well as the maximum imported volume) and a demand curve (including all the demand bids submitted in the same zone, as well as a volume equal to the maximum exported volume). The result is a zonal clearing price (Pz), which is different in the two market zones. In particular, **Pz** is higher in the importing market zone and lower in the exporting one. If, as a result of this solution, additional transmission limits within each market zone are violated, the market splitting process is repeated also within this zone until obtaining a result which is consistent with grid constraints.
- With regard to the price of electricity allocated for consumption in Italy, GME implemented an appropriate algorithm. In case of prices differentiated by zone, the algorithm applies a national single purchasing price (PUN), which is equal to the average of zonal selling prices weighted for zonal consumption. The PUN is only applied to withdrawal points belonging to national geographical zones, whereas both the selling and purchasing Pz are applied to all injection points, mixed points and withdrawal points belonging to neighbouring countries' virtual zones..

The above-described market splitting mechanism represents a non- discriminatory implicit auction for the assignment of transmission rights.

Over-The-Counter (OTC) contracts

The electricity traded through bilateral transactions that are registered onto the PCE participates in the above-described process, since it contributes both to: i) committing a share of the transmission capacity available for flows; and ii) determining the volumes to be weighted for the national single price (PUN). The schedules registered onto the PCE are submitted into the MGP in the form of bids/offers and contribute to determining the results of the MGP.

Zonal price algorithm with single price for consumers



INTRA-DAY MARKET (MI)

The Market

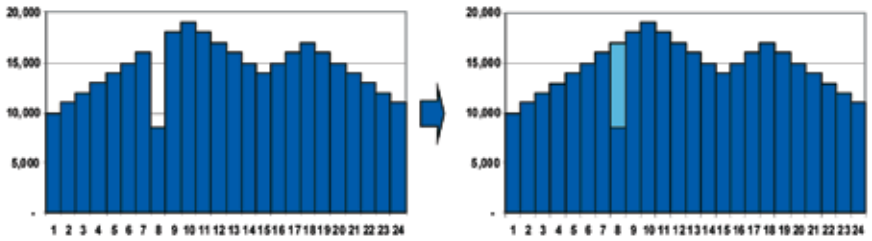
The Intra-Day Market (MI) was introduced by Law 2/09 with a view to enabling participants to update their demand bids and supply offers, as well as their commercial positions, with a frequency similar to the one of continuous trading, taking into account variations of information about the status of power plants and consumption requirements.
Continuous trading is a mechanism of trading based on automatic matching of demand bids and supply offers and continuous entry of new bids/offers during the trading sessions.

The **Intra-Day Market (MI)** allows participants to change the schedules defined in the MGP through additional demand bids or supply offers. The MI consists of four sessions: MI1, MI2, MI3 and MI4.
The sessions are organised in the form of implicit auctions of electricity, with different closing time and in sequence. Through these auctions, participants may better check the status of power plants and update the withdrawal schedules of consuming units, taking into account more up-to-date information about the status of their own power plants, the electricity requirements for the next day and market conditions.

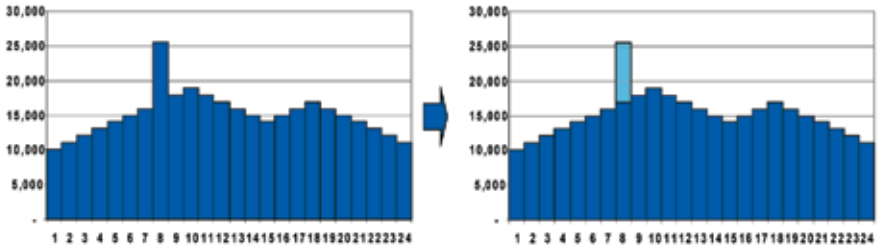
The sessions of the MI are based on price-setting rules that are consistent with those of the MGP. Nevertheless, unlike in the MGP, the PUN is not calculated and all purchases and sales are valued at the zonal price.
Upon the closing of each session of the MI, GME (as done at the end of the MGP) notifies Terna of the results that are relevant for dispatching: flows and updated injection and withdrawal schedules. If there are other market sessions after the one to which GME's results refer, these results are required by Terna to determine preliminary information about residual transmission capacities between zones for subsequent market sessions.
The sitting of the MI1 takes place after the closing of the MGP; it opens at 10:45 of the day before the day of delivery and closes at 12:30 of the same day. The results of the MI1 are notified to participants and published by 13:00 of the day before the day of delivery.
The sitting of the MI2 opens at 10:45 of the day before the day of delivery and closes at 14:40 of the same day. The results of the MI2 are notified to participants and published by 15:10 of the day before the day of delivery.
The sitting of the MI3 opens at 16:00 of the day before the day of delivery and closes at 07:30 of the day of delivery. The results of the MI3 are notified to participants and published by 8:00 of the day of closing of the sitting.
The sitting of the MI4 opens at 16:00 of the day before the day of delivery and closes at 11:45 of the day of delivery. The results of the MI4 are notified to participants and published by 12:15 of the day of closing of the sitting.

Balanced Bids/Offers

Preliminary Hourly Schedule of Unit X (MWh)



Preliminary Hourly Schedule of Unit Y (MWh)



In the MI, to replicate the effect of the application of the PUN to withdrawal points belonging to geographical zones, GME applies a non-arbitrage fee to all accepted bids/offers pertaining to such points.

In particular, for each **purchase transaction** concluded in the MI and pertaining to a withdrawal point belonging to a geographical zone: if the PUN in the previous MGP has been higher (lower) than the related zonal price, the market participant will pay (receive) a non-arbitrage fee. This fee is equal to the difference between the PUN and the zonal price, applied to each MWh covered by the purchase transaction.

Vice versa, for each **sale transaction** concluded in the MI and pertaining to a withdrawal point belonging to a geographical zone: if the PUN in the previous MGP has been lower (higher) than the related zonal price, the market participant will pay (receive) a non-arbitrage fee. This fee is equal to the difference between the zonal price and the PUN, applied to each MWh covered by the sale transaction.

ANCILLARY SERVICES MARKET (MSD)

The Market

The **Ancillary Services Market (MSD)** is the market where Terna - as Transmission System Operator - procures the resources needed to manage, operate, monitor and control the power system (relief of intra-zonal congestions, creation of energy reserve, real-time balancing). In the MSD, Terna enters into purchase and sale contracts with a view to obtaining resources for its dispatching service and acts as central counterparty to the transactions. Bids/offers must refer to offer points authorised to provide ancillary services in the MSD and be submitted by the respective dispatching users directly (without agents acting on their behalf). For each demand bid accepted in the MSD and pertaining to withdrawal points, GME determines the non-arbitrage fee that the participant is held to pay, if negative, or receives, if positive. All accepted bids/offers are remunerated at the offered price (pay-as-bid methodology).

The MSD consists of a scheduling stage (ex-ante MSD) and of the Balancing Market (MB).

In the **ex-ante MSD**, demand bids and supply offers, pertaining to the applicable periods of the calendar days after the one on which the sitting ends, are selected. In the ex-ante MSD, Terna accepts energy demand bids and supply offers in order to relieve residual congestions and create reserve margins. In particular, the ex-ante MSD consists of three scheduling substages: MSD1, MSD2 and MSD3. The ex-ante MSD takes place in a single sitting on the day before the day of delivery. The sitting of the ex-ante MSD for bid/offer submission opens at 15:10 of the day before the day of delivery and closes at 16:40 of the same day. The individual results of the ex-ante MSD are made known by 20:40 of the day before the day of delivery.

In accordance with the dispatching rules, GME provides participants with the individual results (bids/offers accepted by Terna) of the session of the MSD2 by 10:00 of the day of delivery and with those of the session of the MSD3 by 14:15 of the day of delivery.

Moreover, GME publishes the general market results and notifies participants of the individual results, concerning each bid/offer that Terna has accepted for balancing purposes, within the fifteenth day of the month M+2[6].

The **Balancing Market (MB)** is the venue where demand bids and supply offers, pertaining to the periods of the calendar day on which the MB sessions take place, are selected. The MB takes place in multiple sessions, as established in the dispatching rules.
The MB consists of different sessions, during which Terna selects bids/offers pertaining to groups of hours of the same day as the one on which the related MB session takes place. At present, the MB consists of 5 sessions. The first session of the MB takes into consideration the bids/offers that participants have entered in the previous ex-ante MSD session. For the other sessions of the MB, all the sittings for bid/offer submission open at 22:30 of the day before the day of delivery (and anyway not before the results of the previous session of the ex-ante MSD are made known) and close 1 hour before the first hour which may be negotiated in the related sitting. In the MB, Terna accepts energy demand bids and supply offers in order to provide its service of secondary control and to balance energy injections and withdrawals into/from the grid in real time. For each of the 5 sessions of the MB, GME notifies participants of the individual and general results determined by Terna and containing the information specified in the dispatching rules.

6 AEEG's Decision 111/06, art. 72.

2.2.2. Forward Electricity Market (MTE)

The **Forward Electricity Market (MTE)** is the venue where forward electricity contracts with delivery and withdrawal obligation are negotiated. All Electricity Market participants are admitted to this market.

In the MTE, GME acts as a central counterparty. Moreover, as GME has the status of qualified market participant[7], it holds an electricity account on the PCE. Therefore, at the end of or during the trading period and at the request of the market participant, GME registers on the PCE the net delivery position corresponding to the purchase and sale transactions concluded by the same participant in the MTE.

Trading in the MTE is continuous and the sessions are held from 9:00 to 17:30 of market days, except for the next-to-the-last day of open market of each month, when the time of closing of the session is advanced to 14.00.

Two types of contracts may be traded in the MTE. The underlying electricity volume is set by GME equal to 1 MW and multiplied by the applicable periods covered by the contract. The types of contracts are as follows:

- ***Base-load,*** whose underlying is the electricity to be delivered in all the applicable periods of the days belonging to the delivery period;
- ***Peak-load,*** whose underlying is the electricity to be delivered in all the applicable periods from the ninth to the twentieth day of the days belonging to the delivery period, excluding Saturdays and Sundays.

These types of contracts are tradable with the following delivery periods: monthly, quarterly and yearly.

Participants enter bids/offers where they specify the type and delivery period of the contracts, the number of contracts and the price at which they are willing to purchase/sell.

GME organises an order book for each type of contract and each delivery period. On this book, bids/offers are ranked by price: in decreasing order for demand bids and in increasing order for supply offers. If the price is equal, bids/offers are ranked by time of entry. Bids/offers without a price limit have the maximum price priority.

Trading

Transactions in the market take place through continuous trading, during which contracts are concluded via automatic matching of bids/offers of opposite sign entered into the order book and ranked under priority criteria.

In particular, the entry of

- a demand bid with a price limit determines the matching of the bid (until it is exhausted) with one or more supply offers with a price lower than or equal to the one of the bid;
- a supply offer with a price limit determines the matching of the offer (until it is exhausted) with one or more demand bids having a price higher than or equal to the one of the offer;
- a bid/offer without a price limit determines the matching of the same (until it is exhausted) with one or more bids/offers of opposite sign that are present in the order book upon entry of such bid/offer.

7 Under Annex A to AEEG's Decision 111/06.

A cascading mechanism is applied to forward contracts with a maturity of more than one month, at the end of their trading period (thus, except for monthly contracts).
Under the cascading mechanism, at the end of the session of the last day of trading, the positions on the yearly contract are split into equivalent positions on contracts with shorter maturity (monthly and quarterly). Likewise, a position on a quarterly contract is split into equivalent positions on corresponding monthly contracts. This mechanism is applied separately to base-load and peak-load contracts.
For these contracts, at the end of the last session of trading of monthly contracts, GME - after carrying out adequacy verifications - determines the net delivery position of each participant; this position will result from the sum of the purchase and sale transactions concluded in the MTE, for all the hours of the month included in the delivery period of the contracts. Then, the net position is registered on the electricity accounts that the participant holds on the PCE.
Moreover, during the trading period, a participant having an open position in the MTE may ask GME to advance the delivery of such position on the OTC Registration Platform (PCE), by sending a specific request signed by his/her/its legal representative. In this case, within the second working day from receipt of the request, GME will determine the requesting participant's total net delivery position for each hour of the following month in which delivery has to be made (advanced delivery procedure - MTE).

Results

For each trading session and each contract, GME publishes the following data:

- minimum and maximum prices;
- reference price of the session;
- check price;
- volume traded in the session;
- open interest.

2.2.3. Platform for physical delivery of financial contracts concluded on IDEX (CDE)

On 29 April 2009, the Ministry of Economic Development published a Decree implementing Law 2/09. The decree, which started the process of reform of the Electricity Market, gave guidelines on the evolution of GME's regulated forward markets. In particular, art. 10, para. 6, provided that GME should seek forms of *co-operation with the company managing the regulated market of electricity derivatives.*
Therefore, in compliance with the Decree, GME entered into a co-operation agreement with Borsa Italiana S.p.A.[8], which manages the energy derivatives market (IDEX). Thanks to the agreement, participants in both markets may settle the financial electricity derivatives contracts that they have concluded on IDEX through physical delivery in the Electricity Market.
The agreement signed between GME and Borsa Italiana on integration between the derivatives market managed by Borsa Italiana and the Electricity Market managed by GME stipulates that participants having an open position on IDEX may exercise a physical delivery option thereon, requesting that their position be settled through physical delivery in GME's market.
With regard to the position that the participant has acquired on IDEX for the following month, the physical delivery option may be exercised on the third day of open exchange before the beginning of the related month of delivery.
By exercising the physical delivery option, the participant transfers his/her/its position to GME and, on the Platform for physical delivery of electricity derivatives (CDE) of the Electricity Market, he/she/it concludes a transaction of purchase/sale of the electricity underlying the delivered position, having GME as counterparty. This transaction is valued at the settlement price on the fourth day of open exchange before the month of delivery, increased by VAT (where applicable). Additionally, after receiving the request for the delivery

8 Borsa Italiana S.p.A. is the company which manages regulated markets and is authorised by "Consob" (authority responsible for regulating the Italian securities market) to operate the financial instruments exchange market (as per art. 1, para. 2f, Legislative Decree no. 58 of 24 February 1998)

option, GME registers a purchase/sale transaction on the electricity accounts that the participant exercising the option holds on the PCE. Therefore, these requests are forwarded to GME, which verifies their admissibility. In particular, GME will ensure that:

- the request has been made by a party admitted to the electricity market and having at least one electricity account on the PCE;
- the Participant has sufficient financial guarantees on the CDE in case of delivery of buying positions;
- the financial and technical adequacy requirements for registration of the transaction on the PCE electricity accounts are satisfied.

After these verifications, the transaction is registered.
For transactions registered on the CDE as a result of the exercise of the physical delivery option, GME charges a fee of 0.045 €/MWh delivered, as well as a fee of 0.02 €/MWh for registration of the corresponding transaction on the PCE.
The financial adequacy verifications concerning requests of exercise of the delivery option for purchase contracts will be made with respect the share of the amount of the guarantees that each participant has allocated to trading in the MTE/CDE.

2.2.4. OTC Registration Platform (PCE)

Producers and eligible customers may sell and purchase electricity not only in GME's regulated market, but also by entering into purchase and sale contracts off the exchange (the so-called bilateral or OTC contracts). In the latter case, the supplies – i.e. the injection and withdrawal schedules – as well as the price at which electricity is valued are freely determined by the parties.
Also OTC contracts are verified to ensure their compatibility with transmission constraints.
The procedure for registering the contracts admitted to the market and concerning the trading of future supplies of electricity (i.e. forward electricity purchase and sale contracts) was modified by AEEG's Decision 111/06, as subsequently amended and supplemented through the introduction of a "sistema per conti di energia" (electricity account system), i.e. the OTC Registration Platform - PCE. AEEG's Decision 111/06 identifies GME - with effect from 1 April 2007 - as the entity in charge of managing the PCE and of playing the role of counterparty to the financial obligations falling on participants that register transactions thereon.
All the parties referred to in article 18, para. 18.1 of Annex A to AEEG's Decision 111/06 are admitted to the PCE, provided that they are proficient and competent in the use of ICT systems and related security systems or that they have ICT- proficient and competent employees or assistants.

To participate in the PCE, these parties must:

- submit a Participation Application in the format annexed to the Rules Governing the OTC Registration Platform (PCE Rules);
- submit a Participation Agreement (in two originals) in the format annexed to the PCE Rules, signed and initialled on each page by the legal representative; in the Agreement, the contracting party must state that he/she is aware of and accepts the PCE Rules without any condition or reservation and undertakes, among others, to pay the fees for participating in the PCE;
- if the applicant is a legal entity, the Participation Application, signed by the legal representative or other duly authorised person, must be accompanied by a declaration (as per Decree no. 445 of the President of the Republic of 28 December 2000) certifying his/her powers of representation.

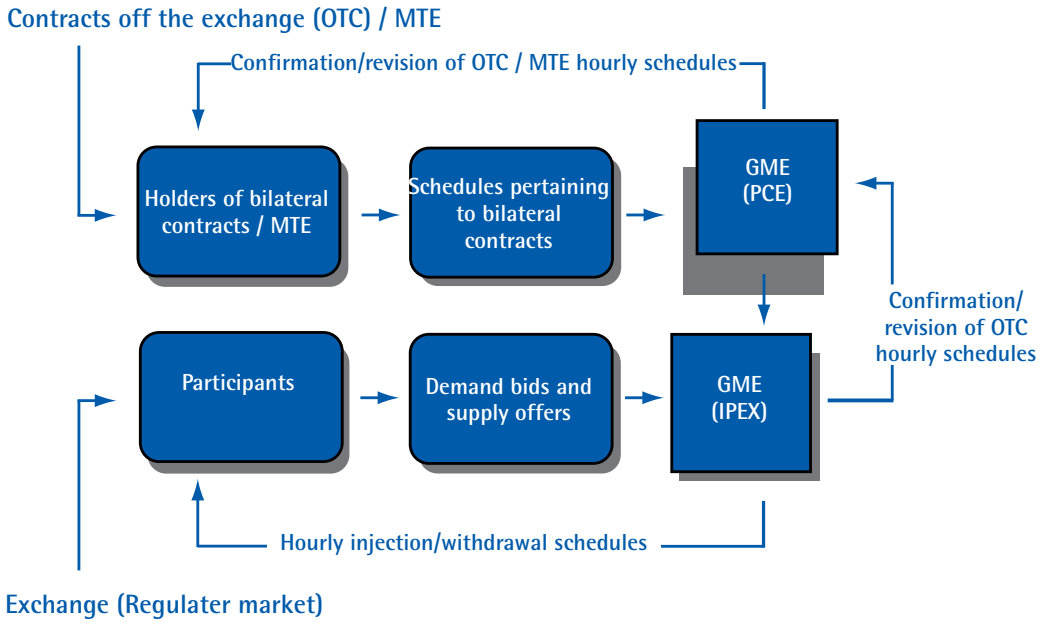
Upon admission, the applicant acquires the status of participant. PCE participants are entered into an appropriate "**List of PCE Participants**", which is held and administered by GME in accordance with personal data privacy legislation.

The PCE is managed through an information system to which participants have access through the Internet. Access to the PCE information system is based on personal identification of users-participants (user id and password assigned by GME). The exchange of

information between participants, GME and Terna (including submission of registrations, notification of results and schedules defined by GME on the PCE) takes place by exchanging XML files through the Internet or by filling in appropriate forms available on GME's website (web forms).

The PCE information system is controlled from the trading room, which is equipped with hardware and software components permitting to collect and process the transactions and schedules registered on the PCE. The trading room personnel members ensure the continuous operation of the system under maximum security conditions and provide support to participants.
The sessions for registering transactions are open every day from 15:00 to 20:00. In each session, transactions may be registered in respect of the period going from the second day of flow to the sixtieth day of flow after the one on which the session takes place. The requests for registering schedules may be entered every day by 8:30 of the day before the day of flow covered by the schedule.

Registration of contracts



For details, see
"Vademecum Piattaforma Conti Energia"

3. ADMISSION AND PARTICIPATION IN THE ELECTRICITY MARKET

GME's Electricity Market is open to all parties that

- have adequate experience and competence in the use of ICT systems and related security systems;
- have not been convicted, with a final judgement or with a judgement applying the penalty at the request of the parties, for agiotage, for one of the violations of the privacy of ICT communications, for computer fraud or fraud to the damage of the State or other public entity, as well as for income tax and value added tax crimes;
- have not been previously excluded from the Electricity Market (except if they have been excluded on request).

If the party applying for market admission is a legal entity, the requirements of competence and no conviction refer to the owner, legal representative or duly authorised person.

3.1. ADMISSION TO THE ELECTRICITY MARKET

To be admitted to the Electricity Market, the applicant must have successfully completed a specific admission procedure. In particular, the applicant must submit to GME:

- a Market Participation Application (in the format annexed to the Integrated Text of the Electricity Market Rules – hereafter "Electricity Market Rules"), together with documents certifying that he/she meets the above-mentioned requirements (no conviction and, if the application is submitted by a legal entity, powers of representation);
- two signed copies of the Market Participation Agreement (in the format annexed to the Electricity Market Rules), where the contracting party certifies that he/she is aware of and accepts, without any condition or reservation, the Electricity Market Rules and undertakes, among others, to pay an access fee, a yearly fixed fee and a fee for each MWh traded/registered.

Within fifteen calendar days from receipt of the above documents, after verifying the fulfilment of the requirements and the validity of the submitted documents, GME will notify the applicant of his/her admission or of the rejection of his/her application. Before rejecting the application, if the submitted documents are irregular or incomplete, GME will notify the applicant of the steps necessary to complete and/or regularise them, as well as of the date by which he/she must do so. This notification will suspend the initial time limit of 15 days, which will run again from the date upon which GME receives the completed and/or regularised documents.
Upon admission, the applicant will acquire the status of market participant. Market participants are entered into an appropriate "Register of Market Participants", which is held and administered by GME in compliance with personal data privacy legislation.

3.2. MARKET PARTICIPATION APPLICATION

To participate in the market, the applicant must complete the Market Participation Application and Market Participation Agreement forms, which are available in Word format on GME's website – in the "Electricity Market/How to Participate/Forms" section. In the same section, the applicant will find the documents to be enclosed to the Application and to the Agreement.
The forms must be completed (by filling in the blanks in the section reserved for the market participant) and signed by the applicant (if she/he is a natural person) or by the owner, legal representative or duly authorised person (if the applicant is a legal entity).

In the Market Participation Application, the applicant will have to complete the fields reserved for the market participant's data and specify:

- for which markets (Electricity Market or Green Certificates Market) he/she is applying (by ticking the appropriate box or both boxes);
- name, surname and contact data (both telephone number and e-mail address) of the contact person for possible communications;
- name, surname, date and place of birth, taxpayers' code, address and contact data (both telephone number and e-mail address) of the party/parties that are authorised to access GME's information system on behalf of the applicant under a strong authentication and smart card/digital signature procedure;
- the identification code assigned by Terna (for admission to the Electricity Market) and/or by GSE (for admission to the Green Certificates Market).

Additionally, with regard to the Market Participation Agreement, the applicant must:

- complete and sign two originals of the Agreement;
- initial each page of the Agreement;
- specifically approve the contractual clauses as per articles 1341 and 1342 of the Italian Civil Code, by affixing a second signature after their listing.

The Market Participation Application and the Market Participation Agreement, together with the required documents, must be delivered or sent to GME's headquarters.

3.3. STATUS OF MARKET PARTICIPANT

After receiving the documents required for admission to the market and after ensuring that they are valid and that the applicant fulfils the requirements, GME will - within 15 days - notify the applicant of the acceptance or rejection of his/her application by registered letter with acknowledgement of receipt, preceded by a fax.
The 15-day time limit might be suspended, for the period indicated in the suspension notification, to allow the applicant to complete or regularise the initially submitted documents.
Upon admission, the applicant acquires the status of market participant and, as such, is entered into the Register of Market Participants posted on GME's website.
The market participant is required to notify GME - within 3 working days - of the occurrence of any change in circumstances that may involve the change of any of his/her data and information.

3.3.1. Exclusion from the Electricity Market

Market participants may be excluded from the Electricity Market, if they have filed a written request for exclusion with GME. However, the exclusion will not exempt the market participant from fulfilling obligations acquired in the Electricity Market prior to the request for exclusion or when, after verifying violations of the Electricity Market Rules or of the Technical Rules, GME has excluded the market participant from the Electricity Market.

3.4. ACCESS TO GME'S INFORMATION SYSTEM

The Electricity Market is managed through an information system, called "Sistema Informativo del Mercato Elettrico" (SIME). Market Participants access the information system only through the Internet, by connecting to GME's website (www.mercatoelettrico.org). Access to the information system is based on the personal identification of users-market participants and on the authentication of their transactions through a smart card that users must obtain. After the applicant has been admitted to the Electricity Market, his/her users are entered into the information system. Users may access all the features of the information system (e.g. submission of bids/offers, notification of market results, etc.) by exchanging XML files.

To ensure the identification of market participants and the authentication of their transactions, access is by user name and via a digital signature authentication procedure based on a digital certificate (personal smart card issued by a company authorised to issue digital certificates under the Digit PA standard, which is compatible with the Electricity Market information system).

4. ACCOUNTING IN THE ELECTRICITY MARKET, VAT TREATMENT AND SETTLEMENT OF PAYABLES/RECEIVABLES

4.1. BILLING

Every day, to facilitate the checking of transactions concluded in the Electricity Market and of payables/receivables resulting therefrom, GME makes available the following data for each market participant:

- the values of accepted bids/offers in respect of purchases and sales in the MGP and MI;
- the values of purchases and sales concluded in the MTE and of those in respect of forward contracts concluded off the market and registered in the MTE;
- the values of fees owed to GME for each MWh covered by demand bids and supply offers accepted in the Electricity Market;
- the values of accepted bids/offers in respect of purchases and sales in the MSD;
- the values of purchase and sale transactions registered as a result of the exercise of the option of physical delivery of financial electricity derivatives (CDE).

4.2. INVOICING

For all transactions concluded in the ME, GME issues invoices for sales made in favour of market participants and provides each selling participant with a notification of the sales made by the same, with all the data required for issuing an invoice to GME.

For transactions in the MSD, as soon as Terna reports the final results of the MSD to GME, GME provides market participants with the data required for issuing their respective invoices.
GME also issues separate invoices to both purchasing and selling participants for fees owed for the services provided by GME for each MWh traded.

The invoice and invoice notifications are organised into fields and sets of fields and show the details of all the transactions made in the Electricity Market. The exchange of invoices between GME/Terna S.p.A and market participants takes place through the posting of the same invoices/invoice notifications on the "MeSettlement" electronic platform.

4.3. VAT TREATMENT

In compliance with the applicable legislation and given the "physical" nature of the market, purchases and sales of electricity are VAT-relevant transactions and the chargeability of VAT thereon depends on the place where the purchasing customer (market participant) has established his/her/its business.
For sales to Italian customers, GME always issues invoices with VAT at the 21% rate, or at the 10% rate if the customer qualifies as "wholesale customer" ("cliente grossista").
Conversely, for purchases, GME receives invoices with VAT at the reduced rate of 10%, as GME qualifies as "wholesale customer" ("cliente grossista").
Also the other transactions that are carried out between GME and other parties and that qualify as supplies of services are VAT-relevant and obey the territoriality rules established for "general services".
For sales/purchases of goods and services to/from foreign customers, GME issues invoices without VAT and receives invoices without VAT, respectively and, in the latter case, it will apply the Italian VAT with the reverse charge procedure in accordance with the applicable legislation.

All the fees for the management of the Electricity Market that are invoiced by GME are VAT-relevant and the chargeability of VAT thereon depends on the place where the market participant has established his/her/its business.
Therefore, GME will issue an invoice with VAT at the standard rate of 21%, if the customer has his/her/its place of business in Italy.
By contrast, if the customer has established his/her/its place of business in one of the countries of the European Union (EU) and is a taxable person in his/her/its own country, GME will issue invoices without applying VAT. In this case, the customer will apply VAT with the reverse charge procedure.
If the customer has established his/her/its place of business in a non-EU country, GME will issue invoices without VAT.

4.4. SETTLEMENT OF PAYMENTS

For each market participant, GME determines the net debit or credit position towards GME itself (net balance to be settled) on the basis of the amounts (including VAT, where applicable) pertaining to the invoices issued and received by GME in respect of the same invoicing period.
The amounts of the invoices issued by GME and of the invoices received by GME within the 6th working day of the month will be offset in order to determine the net balance to be settled.
Payments must be made through the "Bonifici di Importo Rilevante" (BIR) bank transfer procedure. The bank transfer is to be made to the bank in charge of GME's treasury services, which receives and makes payments.

GME's website shows the bank details of the account into which participants must pay the amounts due for transactions in the Electricity Market and registrations on the PCE.

If GME defaults on payments within the established time limits, it will pay interest to creditor market participants; the interest rate will be equal to the monthly average of the 1 (one) month Euribor (ACT/365), reduced by 0.10% (ten hundredths of percentage point).

4.5. FEES

The fees represent the consideration owed to GME for the services provided to market participants. The fees are as follows:

- access fee: GME invoices this fee within 5 days from admission of the applicant to the Electricity Market;
- yearly fixed fee: GME invoices this fee, for the first 12 months, as a single payment within the third working day of the month following admission of the applicant to the Electricity Market and, subsequently, every 12 months;
- fee per MWh covered by purchase and sale transactions; this fee is applied separately to each bid/offer accepted during the invoicing period.

4.5.1. Payment of fees

After admission to the market, GME will issue an invoice to the market participant for the amounts of the access fee and the yearly fixed fee. The latter fee pertains to the services provided by GME in the Electricity Market for the twelve-month period beginning on the date of admission to the market. With regard to the fees owed for each MWh covered by purchase and sale transactions, GME will issue an invoice within the sixth day of the second month following the end of the respective invoicing period.
Each participant must pay the amounts due for fees within the following time limits:

- the access fee within thirty calendar days from the date of issuing of the invoice and with value date on the same day;
- the yearly fixed fee within the last working day of the month in which the invoice has been issued and with value date on the same day;

- the fee for each MWh covered by purchase and sale transactions within the sixteenth working day of the month in which GME has made available the related invoice and with value date on the same day.

On a yearly basis, GME determines the extent of the fees - with effect from 1 January of the following year - in such a way as to ensure its own economic and financial equilibrium. The fees are posted on GME's website together with the parameters for their determination.

4.6. GUARANTEE SYSTEMS

Market participants must post financial guarantees (which may be cumulated with one another) to cover obligations arising in the energy markets or on the PCE. The guarantees may be posted in the form of a first-demand bank guarantee or of a non-interest bearing cash deposit. The guarantees must meet the requirements specified in the Electricity Market Rules and, if they are posted in the form of bank guarantees, they must conform to the various formats annexed thereto (art. 79) and may be updated by submitting an updating letter in the various formats annexed to the Electricity Market Rules (art. 80).

Article 79, para. 79.1 of the Electricity Market Rules provides that:

- market participants wishing to trade in the energy markets (MGP, MI, MTE and CDE) or on the PCE shall post financial guarantees in the form of bank guarantees in the format of Annex 3 to the Electricity Market Rules;
- for the purpose of submitting adequate bids/offers only into the MPE, market participants shall post financial guarantees in the form of bank guarantees in the format of Annex 5 and/or in the format of Annex 3 to the Electricity Market Rules;
- for the purpose of submitting adequate bids/offers only into the MPE or requests for registration on the PCE, market participants shall post financial guarantees in the form of bank guarantees in the format of Annex 7 and/or in the format of Annex 3 to the Electricity Market Rules.

The bank guarantee posted in the format of Annex 3 to the Electricity Market Rules covers all prior and future obligations of the market participant towards GME for his/her participation in the energy markets (MGP, MI, MTE and CDE) and on the PCE, of whatever nature, including those of an accessory nature and excluding those arising from non-payment of fees.

The bank guarantee posted in the formats of Annexes 5 or 7 to the Electricity Market Rules covers all obligations of the market participant towards GME for his/her participation in the energy markets (MGP and MI) for Annex 5 and in the energy markets (MGP and MI) and on the PCE for Annex 7, of whatever nature, including those of an accessory nature and excluding those arising from non-payment of fees.

The bank guarantees or their updating letters must be delivered or sent, by registered letter with acknowledgement of receipt, to the bank in charge of GME's treasury services. The bank will place a stamp on the document with the time/date of receipt, which will become the "date of submission".

5. INTERNATIONAL PROJECTS

GME is also active at European level, by promoting projects aimed at integrating European electricity markets.

5.1 COUPLING BETWEEN ITALY AND SLOVENIA

On 31 December 2010 (day of flow: 1 January 2011), the market coupling mechanism was activated on the Italian-Slovenian border. Under this mechanism, daily physical rights of cross-border interconnection between the two countries are allocated in an implicit way, i.e. through the resolution of the respective day-ahead markets managed by GME and BSP (the Slovenian power exchange).

The initiative, launched in 2008 by GME, Borzen (the Slovenian Market Operator) and BSP received institutional support from the Italian Ministry of Economic Development and the Slovenian Ministry of Economy, as well as from the respective national regulators (AEEG and AGEN-RS).

Considering the applicable European legislation, the project complies with Regulation (EC) No 714/2009, namely art. 12, under which Member States shall promote *"... the co-ordinated allocation of cross-border capacity through non-discriminatory market-based solutions, paying due attention to the specific merits of implicit auctions for short-term allocations..."*).

In particular, by integrating the procedures of allocation of interconnection capacity with the execution of energy markets, implicit auctions guarantee an always efficient utilisation of the same capacity. In effect, they define a transit flow which is always consistent with the economic signals expressed by the markets, i.e. an import/export flow which always goes from the market zone at the lowest price to the market zone at the highest price.

The coupling model adopted on the Italian-Slovenian border is decentralised price coupling. In this regard, GME and BSP adopted a common matching algorithm, which replicates the matching rules of the respective markets and takes into account the grid model representing the structure of both the Italian and Slovenian power grids. The algorithm is run in parallel and decentralised mode by each of the two market operators. The latter receive bids/offers from their participants and before executing their own market, they exchange relevant data about the demand and supply curves resulting from the received bids/offers and the grid constraints applicable to the respective market zones. After sharing these data, GME and BSP simultaneously calculate the results of their own markets, taking into account the market and grid conditions of the other country, and simultaneously determine the energy flow on the interconnection between Italy and Slovenia (simultaneously allocating capacity on such interconnection) based on the prices arising in the respective energy markets.

Thanks, among others, to the use of a common algorithm, the decentralised price coupling model implements the matching rules of the coupled markets in a single system. Additionally, by managing procedures in a decentralised way and sharing relevant data, the model ensures co-ordination between the markets, without requiring changes to the roles and responsibilities already fulfilled by GME and BSP at national level.

5.2 PRICE COUPLING OF REGIONS

The Price Coupling of Regions (PCR) is the project supported by EUROPEX for integrating European regional and national markets in view of the European single market, based on a continental-scale price coupling model and on a decentralised operational approach. The project, launched by the six major European power exchanges - EPEX, OMIE, Nord Pool Spot, GME, APX-Endex and Belpex - has already attracted the interest of some East-European exchanges.

The goal of the project is to help create a European single market, going beyond the regional scale of the coupling initiatives implemented until now within the EU. The philosophy of the project is to achieve this goal by co-ordinating - and not replacing - the various regional initiatives, while respecting national/regional specificities and leaving each region free to join the project independently and within timescales corresponding to the status of development reached by its national markets.

The governance of the PCR is based on decentralisation, which will allow each country to keep its institutional setting, depending in turn on its national laws and regulations or on contractual agreements with its own transmission system operator; however, these differences will not affect its operational procedures and coupling responsibilities and the tasks of its national regulator.
The decentralised approach of the PCR rests on three pillars:

- a single algorithm for market resolution, shared by all the participating exchanges and incorporating all the properties of the algorithms that they currently use;
- decentralised operational management, from collection of bids/offers to publication of results;
- decentralised governance, in line with the European governance principles established by AHAG[9].

9 Ad-Hoc Advisory Group of Stakeholders, including representatives from the European Commission, the European Regulators' Group for Electricity and Gas (ERGEG) and the main sector-specific stakeholders' associations.

LEGISLATION AND MANUALS

Legislation

- Integrated Text of Electricity Market Rules approved by the Ministerial Decree of 19 December 2003, as subsequently amended and supplemented.
- Technical Rules posted on GME's website under Article 4, para. 4.2 of the Integrated Text of Electricity Market Rules.

Manuals

Downloadable from *www.mercatoelettrico.org*

- Electricity Market Guide
- Market Participant's User Guide
- Market Participant's User Guide for the Me-Settlement Electronic Platform
- PCE Guide

GLOSSARY

Acquirente Unico (AU - Single Buyer)

company ("società per azioni") created by "Gestore della Rete di Trasmissione Nazionale" (now "Gestore dei Servizi Energetici - GSE"). AU has the mission of procuring electricity in the market on the most favourable terms and of selling it to distributors or standard-offer retailers for supply to small customers who do not purchase in the open market. To this end, AU may buy electricity on the power exchange or on OTC basis.

Ancillary Services Market (MSD)

venue where supply offers and demand bids of ancillary services are traded. Terna S.p.A. uses these bids/offers to relieve intra-zonal congestions, procure reserve and balance injections and withdrawals in real time. Participation in the MSD is restricted to units authorised to supply ancillary services and bids/offers may only be submitted by their dispatching users.

Autorità per l'Energia Elettrica e il Gas (AEEG - Electricity & Gas Regulator)

independent regulator established by Law no. 481 of 14 November 1995 with the task of guaranteeing the promotion of competition and efficiency in the electricity and gas sectors. With regard to GME's activity, AEEG is responsible, among others, for defining rules for merit-order dispatch and market power control mechanisms.

Bilateral or OTC Contract

contract of supply of electricity concluded off the power exchange between a producer/wholesaler and an eligible customer. The price for the supply as well as the injection and withdrawal profiles are freely determined by the parties. However, the hourly injections and withdrawals must be reported to Terna S.p.A., which will verify their compatibility with transmission constraints on the national transmission grid.

CDE

platform where financial electricity derivatives contracts concluded on IDEX (and for which the participant has requested to exercise the option of physical delivery in the Electricity Market) are executed.

Constrained Zone or Point of Limited Production

set of generating units connected to one portion of the national transmission grid without withdrawal points and whose maximum exportable generation is lower than the maximum possible generation owing to insufficient transmission capacity. In the Italian market, this zone defined as national virtual zone.

Day-Ahead Market (MGP)

venue where electricity supply offers and demand bids for each hour of the next day are traded. All electricity operators may participate in the MGP. In this market, supply offers may only refer to injection and/or mixed points and demand bids may only refer to withdrawal and/or mixed points. GME accepts bids/offers under the merit-order criterion, satisfying the transmission limits notified by Terna S.p.A. Accepted supply offers are remunerated at the zonal clearing price. Accepted demand bids are remunerated at the national

single price (PUN). Accepted bids/offers determine the preliminary injection and withdrawal schedules of each offer point for the next day. Participation in this market is voluntary.

Emission Allowance (or Unit)

The emission allowance or unit is a certificate representing 1 tonne of CO_2 emissions. This tradable certificate may be used to demonstrate compliance with the obligation to reduce greenhouse gas emissions, as defined by the EU Emission Trading Scheme.

Energy Efficiency Certificates (TEE or White Certificates)

Energy Efficiency Certificates were established by the Decrees issued by the Ministry of Productive Activities, in concert with the Ministry of Environment and Land Protection, on 20 July 2004 (Ministerial Decrees of 20 Jul. 2004), as subsequently amended and supplemented. These certificates give evidence of the energy savings that electricity and gas distributors with over 50,000 customers are required to achieve.

Fee for Assignment of Rights of Use of Transmission Capacity (CCT)

hourly fee, as defined in art. 43 of AEEG's Decision 111/06 (as subsequently amended and supplemented). For injection schedules and withdrawal schedules (only if the latter refer to mixed points or withdrawal points belonging to neighbouring countries' virtual zones) registered in accordance with the PCE Rules, this fee is equal, for each hour, to the product between: 1) the difference between the national single price and the zonal price of the zone where the dispatching points are located; 2) the forward electricity account schedule resulting from the Day-Ahead Market (MGP). Both in the MGP and in the MI, the fee for GME in each hour is equal to the difference between the values of purchases and sales of the hourly volumes accepted on the power exchange.

Gestore dei Mercati Energetici (GME)

company ("società per azioni") established by Gestore dei Servizi Energetici - GSE with the task of organising and managing - under principles of neutrality, transparency, objectivity and competition - the Electricity Market, the Environmental Markets and the natural Gas Market in Italy.

Gestore dei Servizi Energetici (GSE)

publicly-owned company ("società per azioni") playing a central role in promotion, development and support of renewable sources in Italy. GSE's sole shareholder is the Ministry of Economy and Finance, exercising its shareholder's rights jointly with the Ministry of Economic Development. GSE controls the following companies: "Acquirente Unico" (AU S.p.A.), "Gestore dei mercati energetici" (GME S.p.A.) and "Ricerca sul Sistema Energetico" (RSE S.p.A.).

Green Certificates (GCs)

certificates referred to in the Ministerial Decree of 18 December 2008. GCs give proof of electricity generation from renewables (RES-E): producers and importers of electricity from non-renewable sources exceeding 100 GWh/year are held to inject a given quota of RES-E into the power grid (renewable quota obligation) or to surrender an equivalent amount of GCs. Each GC is worth 1 MWh. GCs may be sold or purchased in the Green Certificates Market (MCV) by participants admitted to trade therein or traded bilaterally, with mandatory registration on the Green Certificates Bilaterals Registration Platform (PBCV).

Intra-Day Market (MI)

venue where electricity supply offers and demand bids, in respect of each hour of the next day, are traded for the purpose of modifying the injection and withdrawal schedules resulting from the MGP. GME accepts bids/offers submitted into the MI under the merit-order criterion, taking into account the transmission limits remaining after the MGP. Accepted bids/offers are remunerated at the zonal clearing price. Accepted bids/offers modify the preliminary schedules and determine the updated injection and withdrawal schedules of each offer point for the next day. Participation in the MI is voluntary.

Ipex

name used abroad for the Italian power exchange.

Italian Derivatives Exchange (IDEX)

segment of the financial derivatives market managed by Borsa Italiana S.p.A., where financial electricity derivatives are traded.

Italian Power Exchange (Ipex)

virtual venue where wholesale electricity supply and demand meet. The economic management of Ipex is vested in GME as per art. 5, Legislative Decree 79/99.

Liquidity

ratio of volumes traded on the exchange (in the MGP) to the overall volumes (including OTC contracts) traded in the "Sistema Italia".

Macro-Zone

group of geographical and/or virtual zones conventionally defined for the production of statistical market indexes. A macro-zone has a low frequency of market splitting and a homogeneous trend of selling prices.

Market Clearing Price

generally, it identifies the electricity price which is set in the MGP and MI in each hour at the intersection of demand and supply curves, so as to equalise them. In the case of market splitting in 2 or more zones both in the MGP and in the MI, the clearing price may be different in each market zone (see zonal price). In the MGP, the zonal clearing price may be applied to all supply offers, to demand bids pertaining to mixed units and to demand bids pertaining to consuming units that belong to virtual zones. Demand bids pertaining to consuming units that belong to geographical zones are valued, in any case, at the national single price (PUN). In the MI, in the case of market splitting into 2 or more zones, the zonal clearing price is applied to all supply offers and demand bids.

Market Coupling

mechanism of co-ordination of regulated electricity markets in different national States, which is aimed at managing congestions on interconnected grids (cross-border trade). The objective of market coupling is to maximise the use of interconnection capacity under cost-effectiveness criteria (guarantee that energy flows are directed from markets with lower prices towards markets with relatively higher prices).

Market Splitting

mechanism aimed at managing grid congestions and similar to market coupling. The difference lies in the fact that the market zones involved are managed by a single entity. This is the case of the Italian market managed by GME and having a zonal configuration.

Merit-Order Dispatch (or Economic Dispatch)

activity that GME carries out on behalf of Terna S.p.A. It consists in determining the hourly injection and withdrawal schedules of the units associated with offer points on the basis of the offer price and, if this price is equal, on the basis of the priorities specifically assigned to the different types of unit by Terna S.p.A. In particular, supply offers are accepted - and thus injection schedules are determined - in increasing offer price order, whereas demand bids are accepted - and thus withdrawal schedules are determined - in decreasing offer price order. Furthermore, bids/offers are accepted consistently with the transmission limits between pairs of zones that are daily defined by Terna S.p.A. The following electricity volumes participate in merit-order dispatch: volumes directly offered in the market; volumes generated by plants with a capacity of less than 10 MVA, by CIP-6 plants and by plants selling electricity under OTC contracts; and imported electricity volumes.

National Single Price (PUN)

average of zonal prices in the MGP, weighted for total purchases and net of purchases by pumped-storage units and by neighbouring countries' zones.

National Transmission Grid (RTN)

set of lines which, in Italy, make part of the grid used to carry electricity from generation centres to distribution and consumption areas.

Over-the-Counter (OTC) Markets

non-regulated markets, i.e. all those markets where financial assets are traded off the official stock exchanges. Usually, the trades are not standardised and "atypical" contracts may be concluded. The contracts negotiated on these markets generally have a level of liquidity lower than the one of regulated markets.

OTC Registration Platform (PCE)

platform for registering forward electricity contracts - concluded off the MPE and, in particular, in the MTE or on an OTC basis - and the related injection and withdrawal schedules. The platform, whose organisation and management was entrusted to GME under AEEG's Decision 111/06 (as subsequently amended and supplemented), took off on 1 April 2007.

Pay-as-Bid

market model under which each bid/offer is valued at the price specified therein. This rule is currently used in the MSD.

PCR

Price Coupling of Regions

RECO

certificate of origin for renewable-energy power plants. Each certificate, which is worth 1 MWh (rounded under the commercial criterion), is issued by GSE in respect of the electricity injected into the grid by plants qualified to obtain RECOs ("ICO-FER").

Renewable Energy Sources (RES - renewables)

This category includes solar, wind, hydro, geothermal, tidal and wave energy and the conversion of vegetal products or organic and inorganic waste into electricity.

Terna - Rete Elettrica Nazionale S.p.A.

company ("società per azioni") in charge of electricity transmission and dispatching over the high-voltage and extra-high voltage grid throughout Italy. Terna is a listed company. Its shares were first traded on the Stock Exchange in June 2004. Currently, its relative majority shareholder is the "Cassa Depositi e Prestiti", having a stake of 29.85%.

Transmission (or Transit) Limits

maximum electricity transmission capacity between a pair of zones; it is expressed in MWh. The transmission limits are part of the preliminary information that Terna S.p.A. daily notifies to GME and that GME posts on its own website. GME uses these limits in the procedure leading to the identification of clearing prices in the MGP and MI.

Transmission System Operator (TSO)

entity in charge of managing and operating the power transmission grid.

White Certificates

see Energy Efficiency Certificates.

Zonal Price (Pz)

clearing price characterising each geographical and virtual zone in the MGP.

Zone

portion of the power grid where, for system security purposes, there are physical limits to transfers of electricity to/from other geographical zones. The Italian market has three types of zones: geographical zone (representing one part of the national grid), national virtual zone (consisting of a constrained zone); neighbouring country's or foreign virtual zone (representing one point of interconnection with neighbouring countries).