



Consultation Document no. 02/2020

**Integration of the Italian electricity market with
the Single Intra-Day Coupling (SIDC)**

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1 INTRODUCTION

By Resolution 350/2019/R/EEL of 30 July 2019, the Regulatory Authority for Energy, Networks and Environment (hereinafter: ARERA or Authority) has provided, inter alia, that GME shall implement, as far as under its responsibility, all the activities functional to the start of the Cross Border Intraday (XBID) project on Italian borders, implementing, inter alia, the necessary amendments to the Integrated Text of the Electricity Market Rules (ME Rules) and to the related Technical Rules (DTF).

As is known, article 3, paragraph 3.4 of the ME Rules provides that "*GME may propose amendments to these Market Rules and notify them to all parties concerned by posting them on its website or by other suitable means, allowing at least fifteen days for the submission of comments, if any. Taking into account the comments received, GME shall then submit the proposed amendments (and their rationale) to the approval of the Minister of Economic Development, who shall decide after hearing the opinion of Authority.*".

In order to implement the above provisions, GME shall publish this consultation document, in order to illustrate the proposal to amend the configuration of the Italian electricity market and the related ME Rules, necessary to integrate - in accordance with the applicable regulatory framework - the XBID project within the national electricity market.

In order to facilitate a complete overview of the amendments, this document is structured as follows:

- Description of the reference regulatory framework
- Trading model and number of implicit auctions for the integration of XBID and CRIDA in the Italian market
- Introduction of continuous trading on the Italian electricity market
- Management of economic payables and receivables arising in MI-XBID
- Further aspects relating to the integration of the Italian electricity market with Single Intraday Coupling (SIDC)
- Future activities

It remains understood that, for the operational implementation of the XBID project on the Italian borders, in addition to the amendment of the ME Rules, it will be necessary to complete in advance all the further operational and procedural activities envisaged by the European XBID project, by the related regional *Local Implementation Project* on the Italian borders, called "LIP 14", as well as under the responsibility of TERNA S.p.A to amend the provisions of the Network Code, functional to allow the new MI configuration to fully provide the related functions.

All interested parties can therefore provide their own comments with reference to what is described in this document.

These comments must be sent to GME - **Governance** in writing, no later than **April 30th 2020**, the deadline for closing this consultation, in one of the following ways:

- e-mail: **info@mercatoelettrico.org**
- fax: **06.8012-4524**
- post: **Gestore dei mercati energetici S.p.A.**
Viale Maresciallo Pilsudski, 122 - 124
00197 – Roma

Parties wishing to safeguard the full/partial confidentiality or secrecy of the documentation submitted are required to indicate which parts of their documentation are to be considered confidential.

2 REFERENCE REGULATORY FRAMEWORK

2.1 The European context

The Regulation (EU) 2015/1222 of the Commission dated 24 July 2015, providing "guidelines on capacity allocation and congestion management" (hereinafter: CACM Regulation), with reference to the definition of *single intraday coupling*, in article 51, provides that the trading of energy on intraday markets shall take place according to continuous trading methods, with the closing of trading at least one hour before the corresponding delivery period (so-called h-1).

Indeed, in setting the provisions on this topic, the CACM Regulation has also provided for, in article 55, the introduction of a mechanism aimed at valuing the intra-day transmission capacity in case of scarcity.

In addition to the continuous trading method and the aforementioned pricing mechanism for intraday capacity, the CACM Regulation also provides for the possibility of introducing complementary regional implicit auctions on each border between bidding zones. Specifically, article 63 of the CACM Regulation governs the right for interested countries "*on bidding zone borders, (...) to submit a common proposal for the design and implementation of complementary regional intraday auctions*" in addition to continuous trading, specifying that "*continuous trading within and between relevant bidding zones may be stopped for a limited period of time*".

As is known, the introduction of the Single Intra-Day Coupling based on continuous trading in the EU has been implemented within the Cross Border Intraday (XBID) project, which began operating in central Europe in 2018, in which both market and network operators participate, through the management of a common platform that provides for the simultaneous allocation of the cross-zonal capacity, according to a *first come first served* principle.

In the context of the proposals for implementing the provisions referred to in Article 55 of the CACM, the identification of a mechanism for the pricing of the infra-day capacity pushed ENTSO-E to prepare a proposal for the introduction of European auctions (called **IDA**¹) which was approved by ACER with its Decision 01/2019 on "*ESTABLISHING A SINGLE METHODOLOGY FOR PRICING INTRADAY CROSSZONAL CAPACITY*". Specifically, this pricing mechanism provides for the introduction of three implicit intraday auctions, to be held on a pan-European basis, respectively, at 3:00pm on day D-1, at 10:00pm on day D-1 and at 10.00am on day D. Following the approval of the Algorithm Methodology, ACER subsequently set the reference timing of January 2023 for the start of IDAs operations².

As for the complementary auctions, in the regional context of Italy, the transmission system operators (TSO) and Nominated Electricity Market Operators (NEMO) of Italy (GME³), France, Austria, Slovenia

¹ See ACER Resolution no. 01/2019.

² See ACER Resolution no. 04/2020, Annex III.

³ GME has been designated as the only NEMO for all areas of the Italian electricity market by notification to the European Commission dated 15 September 2015 by the Ministry of Economic Development, following the

and Greece – by virtue of the option provided by the art. 63 of the CACM Regulation - have launched a specific Local Implementation Project, known as "LIP 14"⁴, with the task of preparing a proposal, to be submitted to the prior consultation of the interested parties, describing the technical-operational procedures, aimed at achieving integration of the XBID continuous trading with complementary regional auctions, to be carried out on the northern borders of Italy and between Italy and Greece, as well as on the internal borders between Italian bidding zones⁵, starting from the operational launch of the XBID project in Italy.

In line with the provisions of articles 12 and 63 of CACM, the NEMOs and TSOs of LIP 14, in **December 2016**, therefore launched a public consultation at EU level through publication, on the JAO (Joint Allocation Office) website, of the document "*Consultation Paper on Intraday Coupling model for Italian Borders*" which illustrated the possible solutions to integrate the continuous trading method with implicit complementary auctions for opening the cross border capacity allocation. After the consultation phase, in **February 2017**, the NEMOs and TSOs of LIP 14, taking into account the comments received, submitted to the competent national authorities (NRAs), for their approval, the joint proposal of *Complementary Regional Intraday Auctions* (hereinafter: **CRIDA**) for the design and implementation of two regional intraday auctions complementary to continuous trading.

The national regulatory authorities of Italy, France, Austria, Slovenia and Greece, for the purposes of the approval envisaged pursuant to the CACM Regulation, however, requested the LIP14's parties, in **August 2017**, to: *i.* amend the CRIDA proposal, so as to make it consistent with the contents of the Plan for the implementation of the market coupling operator function (MCO Plan); *ii.* clarify the algorithms to be used for the CRIDA and the products and market time units subject to trading; *iii.* harmonize the CRIDA proposal with the proposals submitted by ENTSO-E to ACER in relation to the IDA European auctions, i.e. with the Intra-Day Cross Zonal Capacity Pricing (IDCZCP) and with the Intra-Day Cross Zonal Gate Opening Time (IDCZGOT), in consideration of the interdependence and similarity between the CRIDA and the IDA, the latter intended to replace the regional auctions once they have entered into operation.

By implementing the aforementioned requests, the NEMOs and TSOs of LIP14 then sent to the NRAs, a second CRIDA proposal in **October 2017**, also subject to subsequent amendment request. In particular, the regional NRAs in **June 2018**, sent to LIP 14 a "Request for Amendment" to adjust the planning of the CRIDA by introducing, among other things, a third regional auction to be held at 3:00 pm on the day D-1, to complement the two auctions already proposed, and adjusting the auction schedule on day D, moving it from 7:30 am to 10:00 am. In this way, the CRIDA operations schedule would have coincided with those of the IDAs, thus conceiving the CRIDAs as an early implementation, on a regional scale, of the IDAs. In light of the comments received, the LIP14 NEMOs and TSOs amended and submitted to the NRAs a new CRIDA proposal in **October 2018**.

acquisition of the opinion of the Authority on 6 August 2015, 414/2015/l/eel, as required by the CACM Regulation.

⁴ In February 2020, the LIP 14 regional project was also joined by the Bulgaria's NEMO and TSO.

⁵ The MIs in the auction, to be carried out on Italian internal bidding zones only, may also interrupt the continuous trading of the single intraday coupling only if formally conceived as CRIDA.

In **November 2018**, the NRAs of the LIP14 finally submitted a further request for amendment to the NEMOs and TSOs to separate the CRIDA proposal into two distinct proposals, one relating to "Italy-North" and one relating to "Greece -Italy" in such a way that the geographical scope of these proposals coincides with the corresponding Capacity Calculation Regions (CCRs). Following this latest amendment request, the NEMOs and TSOs of **LIP14** therefore sent two separate CRIDA proposals in **March 2019**, one relating to the CCR of "Italy North" and one relating to the CCR of "Greece-Italy", finally approved by the NRAs in **May 2019**.

In this scenario, the European intraday market model therefore is based on a hybrid configuration that entails the continuous trading method up to h-1, interspersed with three implicit auctions, represented by CRIDA, with the aim of valuing the inter-zonal residual intraday capacity, which will be replaced by the pan-European auctions (IDA) once they enter into operation.

2.2 The national context

At a national level, the implementation of the provisions provided by the CACM Regulation regarding single intraday coupling was the subject of initial reflections by the regulator as early as 2016. In fact, with the consultation document (DCO) 798/2016/R/EEL of 28 December 2016, for the observations of the interested parties, ARERA submitted its first guidelines on the evolution expected in the medium term for the intraday market following the implementation of the provisions of the CACM Regulation.

Specifically, in this DCO, ARERA outlined, among the possible impacts deriving from the implementation of the European provisions relating to intraday markets:

- the maintenance of the implicit auction sessions within the future continuous trading intraday market;
- the opportunity, in the context of continuous trading, to include the possibility of bids/offers by portfolio for each bidding zone (*portfolio bidding*), separately by generation and load;
- the provision relating to the closure time of the intraday market (*gate closure time*) close to real time and not earlier than one hour from the start of the corresponding delivery.

Due to the participation of Italy in the LIP 14 project ARERA, as part of the definition of the regulatory framework functional to allow the operational launch of the XBID project on the Italian borders, as the competent regulator for Italy, has subsequently approved the two CRIDA proposals referred to in the paragraph above. In particular:

- by Resolution 174/2019/R/EEL of 7 May 2019, in coordination with the Greek regulatory authority, the proposal relating to the methodology for the design and implementation of complementary regional intraday auctions (CRIDA) for the Greece- Italy CCR, jointly prepared by NEMO and TSO of LIP 14, pursuant to art. 63 of the CACM Regulation;
- by Resolution 210/2019/R/EEL of 28 May 2019, in coordination with the other regulatory authorities of the Italy North region, the joint proposal relating to the methodology for the design and implementation of complementary regional intraday auctions (CRIDA) for the Italy-

North CCR, jointly prepared by NEMO and TSO of LIP 14, pursuant to art. 63 of the CACM Regulation.

Afterwards, ARERA promoted a further consultation procedure with the publication, on 23 July 2019, of the DCO 322/2019/R/EEL "Integrated text of the electricity dispatching (TIDE) - overall guidelines" within which the Regulator indicated the possible measures aimed at pursuing two macro-objectives: *i) the identification of the main lines of intervention for the evolution of the dispatching service in the new context in rapid and continuous evolution, [...]; ii) the completion of the integration of the Italian markets with those of the other European countries, taking into account the European regulatory framework, with particular reference to the coupling of the intraday markets characterized by continuous trading (possibly integrated with auction mechanisms) and by the shift of the gate closure at the hour preceding that to which the object of the negotiation refers.*

By Resolution 350/2019 /R/EEL of 30 July 2019, ARERA lastly provided instructions to Terna and GME for joining the European intraday market, indicating that:

- *the integration of the Italian market within the XBID project will entail a change in the organization of the national MI: market participants will be given the opportunity to access continuous trading on a European scale up to H-1 and the implicit auction sessions will be reduced from seven to three, introducing the complementary regional auctions (CRIDA);*
- *it is necessary to adopt a transitional structure of faster implementation with the aim of extending the XBID project to the Italian borders in the so-called "third wave";*
- *Italian market participants should also be given the opportunity to trade for zonal portfolios including multiple production and consumption units, [...], by introducing a nomination platform so that each participant allocates on the corresponding enabled and non-enabled units the XBID trading balance determined on the related zonal portfolio.*

In the same resolution, ARERA also provided, as regards GME's activities, that GME, in the process of integration within the SIDC, in addition to the Local Trading System platform - through which Italian market participants may complete trading and interact with XBID systems – shall also manage the "*Nomination platform*", aimed at allowing the possibility of trading for zonal portfolios, as well as the settlement of the balance between the commercial position in the portfolio and the amounts nominated and which, to this end, prepare the necessary amendment to the Electricity Market Rules (Rules) and to the related Technical Rules (DTF).

3 TRADING MODEL AND NUMBER OF IMPLICIT AUCTIONS FOR THE INTEGRATION OF XBID AND CRIDA IN THE ITALIAN MARKET

Taking into account the provisions of the CACM Regulation, ACER Resolution no. 01/2019, ARERA Resolutions no.174/2019/R/EEL and no.210/2019/R/EEL, as well as ARERA Resolution no.350/2019/R/EEL, this document describes the Italian intraday market model which would integrate with the European Single Intra-Day Coupling and which GME intends to submit to market participants' consultation.

The Italian intraday market (MI) would be organized according to a hybrid model, which combines the continuous trading sessions (through the XBID) with implicit auction sessions (corresponding to the CRIDA).

In continuity with the current design of the Italian market, also following the integration with the single intraday coupling, the market time unit would be, at least in an initial phase, the hour and the products available on the Italian market would be exclusively simple hourly products.

For the purposes of this document, we will indicate the MI session in continuous trading with MI-XBID, while the auction sessions (CRIDA) - to be carried out between the bidding zones of the Italian market and, at the same time, in coupling on the participating borders - will be indicated with MI n , where n indicates the progressive number of the auction sessions that will be carried out with reference to each delivery day D.

In particular, every day, after the closure of the MGP, whose timing will remain unchanged, the continuous trading and the CRIDA would take place according to the following schedule:

- **At 3:00 pm on day D-1⁶**, MI1 (the first CRIDA) would be performed with the residual capacity from MGP and in which all 24 hours of the following day would be traded; for this CRIDA, which on the Italian market would be identified as MI1, the results would be published by 3.30 pm and this auction should be extended not only to the Italian market zones but also to Slovenia and Greece⁷. Therefore, in the first CRIDA (MI1) the interconnection capacities between all zones of the Italian market would be allocated, as well as the interconnection capacity on the borders between Italy and Slovenia and between Italy and Greece⁸. During the execution of

⁶ At 3:00 pm there is the closing of the session for the submission of bids/offers (gate closure time -GCT) for MI1. The session for the submission of bids/offers would be opened as soon as the results of the MGP were announced.

⁷ Currently, France and Austria seem inclined not to activate regional auctions and wait for the start of the pan-European IDAs. The participation of Slovenia and Greece in the first and subsequent CRIDAs must in any case be confirmed by their respective counterparts.

⁸ As is known, the Italian MI2 and MI6 sessions are currently held in coupling with the corresponding intraday markets carried out by BSP and EPEX, respectively, in Slovenia and Switzerland. Since Switzerland is not part of the EU, it has so far not participated in the European working tables nor in the regional tables for the implementation of the CACM and, therefore, the possible continuation and inclusion in the CRIDA context of the

CRIDAs, market participants with offer points on Italian territory may not submit offers on the XBID⁹, and the capacity relating to the "borders" subject to CRIDA may not be allocated through XBID (all "borders" internal to Italy as well as the "borders" between Italy and Slovenia and Italy and Greece).

- **At 3:30 pm on day D-1**, and in any case after publishing the results of the first CRIDA (MI1), the continuous trading of the MI-XBID would open for all 24 hours of day D;
- **At 10:00 pm on day D-1**, after the conclusion by the TSOs of the recalculation of the interconnection capacity available for the following day, the second CRIDA¹⁰ (MI2 for the Italian market) would take place. In this CRIDA (MI2) all 24 hours of the following day would be traded and the residual capacity (not yet allocated) in MI-XBID would be allocated at the time of the closing of the session for the collection of bids/offers, including any capacity provided following the recalculation carried out by the TSOs¹¹. The results would be published by 10:30 pm and the second CRIDA should be extended not only to the Italian market zones but also to Slovenia and Greece¹². Therefore, in the second CRIDA (MI2) the interconnection capacities between all the Italian market zones as well as the interconnection capacity on the borders between Italy and Slovenia and Italy and Greece would be allocated.
- **From 9:45 pm to 10:30 pm on day D-1**, simultaneously with the performance of the second CRIDA (MI2)¹³, for the zones where the CRIDA is being carried out (for Italy: all the Italian market zones) the XBID trading of the hours subject to trading of the CRIDA itself (24 hours of day D) would be suspended and therefore the capacity relating to the "borders" subject to CRIDA (all the "borders" internal to Italy as well as the "borders" between Italy and Slovenia and Italy and Greece) would not be allocated through XBID;
- **At 10:30 pm on day D-1**, and in any case after publishing the results of the second CRIDA (MI2) the trading of the MI-XBID would reopen for all 24 hours of the day D.
- **Starting from 11:00 pm on day D-1 and with validity for the first hour of day D** (from 00:00 am to 1:00 am) and, subsequently, every hour with validity for the next hour, the MI-XBID

intra-day coupling on the related border may only take place upon positive response by the competent institutions.

⁹ Article 63 of the CACM provides that during the CRIDA, continuous trading may be interrupted both between the zones and within the zones the CRIDA is being carried out. This interruption, pursuant to the same article, should not be longer than 10 minutes. However, in the CRIDA proposals, the LIP14 TSOs and NEMOs have highlighted to the NRAs the need for this interruption to exceed this duration, since it is not technically feasible to carry out the activities and procedures necessary for CRIDA in 10 minutes. Furthermore, the NEMOs and TSOs have undertaken to optimize this procedure and in any case, when the IDAs will be implemented, the interruption of continuous trading on XBID would be the one provided for the IDAs.

¹⁰ 10:00 pm shall be the GCT for the submission of bids/offers relating to MI2, whose session is opened as soon as the results of the MGP are announced.

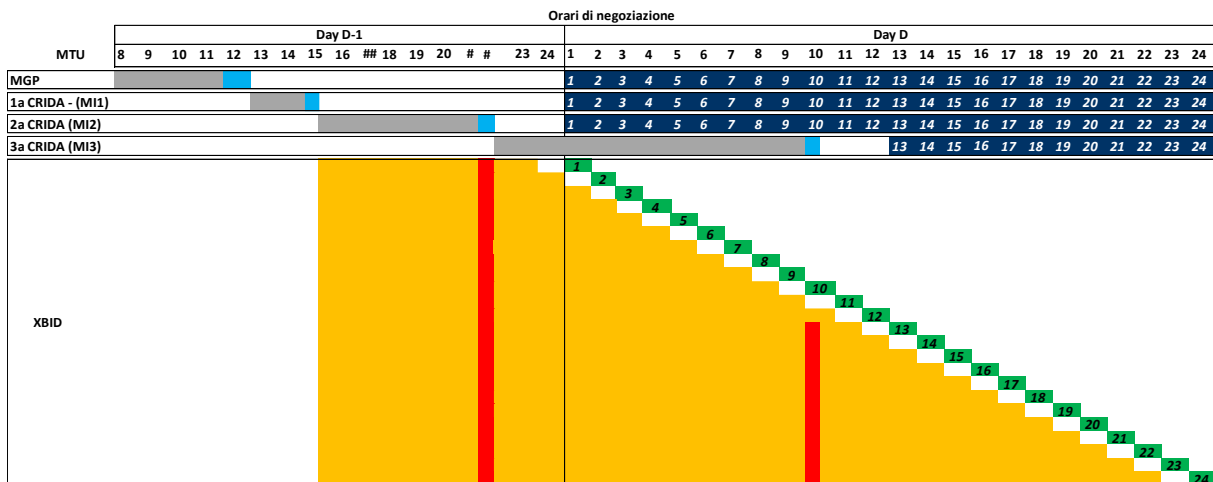
¹¹ The suspension of the capacity allocation on XBID would be carried out by the TSOs concerned which would set the capacity values on XBID to zero. At the same time, to allow CRIDA to take place, the residual capacity values on the borders where the CRIDA is being carried out would be communicated by the TSOs to the PXs. In the case of GME, Terna would therefore send these capacity values in order to carry out the MI sessions.

¹² See note 7 above.

¹³ The interruption of the XBID trading would start 15 minutes before the beginning of the auction, to give the TSOs the time necessary to stop the allocation of capacity on XBID and make the remaining capacity available for allocation through CRIDA.

trading would close according to the h-1 principle, i.e. that each hour shall be tradeable up to an hour before the delivery;

- **At 10:00 am on day D**, after the recalculation of the interconnection capacity available for the remaining hours of the day by the TSOs, the third CRIDA would take place¹⁴ (MI3 for the Italian market). In this CRIDA (MI3), the last 12 hours of day D (from 12.00 am to 12.00 pm) would be traded and the remaining capacity (not yet allocated) in MI-XBID would be allocated at the time of the closing of the session for the collection of bids/offers, including any capacity made available following the recalculation carried out by the TSOs. The results would be published by 10.30 am and the third CRIDA would be extended not only to Italian market zones but also to Slovenia and Greece¹⁵. Therefore, in the third CRIDA (MI3) the interconnection capacities between all the Italian market zones, as well as the interconnection capacity on the borders between Italy and Slovenia and Italy and Greece, would be allocated.
- **From 9:45 am to 10:30 am on day D**, simultaneously with the third CRIDA (MI3)¹⁶, for the zones where the CRIDA is being carried out (for Italy: all the Italian market zones) the MI-XBID trading of the hours subject to trading of the CRIDA itself (from 12:00 am to 00:00 am on day D) would be suspended;
- **At 10:30 am on day D**, and in any case following the publication of the results of the third CRIDA (MI3), the continuous trading of the MI-XBID will reopen for the remaining hours of day D, in compliance with the h-1 principle.



Nota: questo schema è solo una rappresentazione grafica della proposta che fornisce una generica quadro dell'integrazione tra la negoziazione continua in XBID e le CRIDA. Nello schema non sono riportati gli specifici orari di negoziazione

	Sottomissione delle offerte
	Calcolo dei risultati
	Ore negoziabili del giorno D nelle aste MGP e MI
	Periodo di trading su XBID
	Ore negoziabili del giorno D in XBID
	Interruzione del trading XBID durante l'esecuzione delle CRIDA

4 INTRODUCTION OF THE CONTINUOUS TRADING IN THE ITALIAN ELECTRICITY MARKET

¹⁴ At 10.00 am the session for the collection of bids/offers stops and the calculation of the results begins.

¹⁵ See note 7 above.

¹⁶ See note 13 above.

The market model described in the previous paragraph, where both auction sessions (MIn) and continuous trading sessions (MI-XBID) coexist, entails an implementation that takes into account the needs and characteristics of the Italian market and dispatching.

The trading methods on the MIn (corresponding to the CRIDA auctions) will be similar to those currently in force and the only changes that will affect these markets will be related to the reduction of the number of sessions from seven to three, as well as to the changes in their trading times.

The management of continuous trading, on the other hand, requires adjustments that take into account both the specific features of this trading method and the functioning of the Italian market.

However, before analyzing how GME, in line with ARERA's indications set out in resolution 350/2019/R/EEL, intends to integrate continuous trading within the Italian electricity market, it is advisable to provide a short description of the methods adopted for the implicit allocation of capacity through the XBID platform in the SIDC operational process.

The management of the XBID platform takes into account both bids/offers collected by the NEMOs and the capacities available on each interconnection. Specifically, each NEMO (GME for Italy) is connected through its Local Trading System (LTS¹⁷) to the XBID system, which therefore receives from all NEMOs the bids/offers locally collected (i.e. with reference to each bidding zone in which each NEMO is operating) from their respective market participants. On the other hand, the European TSOs are connected to the XBID system to which they send the interconnection capacities relating to each border under their responsibility.

In this way, the XBID platform is able to match, in real time, the bids/offers received from all the connected LTS, taking into account not only the economic merit order of the bids/offers, according to the criteria ordinarily adopted on the continuous trading markets (price/time priority), but also the availability of the transit capacities to be allocated along the path of the energy being traded, starting from the bidding zone of the seller participant up to the bidding zone of the buyer participant. If two or more bids/offers are matched, the XBID system shall consequently update the available interconnection capacities, taking into account the capacity allocated on the borders crossed by the path from the seller's bidding zone to that of the buyer. Therefore, the allocation and updating of the interconnection capacities following a matching, do not only concern the interconnections of the bidding zones of the seller and the buyer, but all the interconnections linking the zones located along the corresponding path. Once this capacity update has been carried out, the system shall verify the possibility of additional matching in light of the updated capacity.

Therefore, lacking sufficient available transit capacity, trading offers cannot be matched, while they would have been matchable only by taking into account the economic merit (price/time).

¹⁷ For the purposes of this document, LTS shall mean the trading platform used by each NEMO to collect the bids/offers of its market participants and to notify them of the concluded transactions.

4.1 GME's Local Trading System

As far as Italy is concerned, given the zonal structure of the market, in XBID the same Italian market zones of the auction markets managed by GME would be mapped, both geographic zones and virtual foreign zones¹⁸, with the corresponding interconnection capacities.

As a result, GME's LTS would be composed of as many order books as the Italian market zones. Furthermore, in compliance with the principle according to which two bids/offers can be matched provided that there is sufficient interconnection capacity along all the borders crossed by the path that goes from the seller's bidding zone to the buyer's bidding zone, in each "zonal" order book the following bids/offers would be visible:

- bids/offers referring to the same zone;
- bids/offers referring to the other zones in the XBID, both those of the Italian market and of the markets of the other European countries belonging to XBID, provided that there is interconnection capacity available to allow their matching.

When accessing the GME's Local Trading System, the participant would therefore select the order book of one of the Italian market zones in which his/her offer points are located and would view, in this book, all the bids/offers anonymously and with no possibility of identifying the reference zone, with the exception of his/her offers to which separate evidence would be given. As a result, the GME's LTS book for each Italian market zone would display a potentially different set of bids/offers based on the interconnection capacities currently available.

BOX 1 – Example of bids/offers on the book

Let's assume a market made up of zones A and B only, connected to each other and for which, at the opening of continuous trading on XBID, there is no longer any interconnection capacity available in the direction from zone A to zone B, but with capacity of interconnection available in the opposite direction.

¹⁸ Virtual foreign zones shall mean the Italian market zones where there are foreign virtual production and consumption units through which participants submit bids/offers for the purchase and sale of energy using the interconnection capacity purchased through explicit auctions. Therefore, these zones, for the purposes of the market, are in all respects "Italian" zones connected to the adjacent Italian geographical zone. These virtual zones are adopted for the sole purpose of providing separate evidence to the planned import/export following trading on the Italian markets as a result of the bids/offers of the owners of the virtual production and consumption units abroad and they never "separate" from the adjacent Italian geographical zone.

By accessing the zone A book, all the bids/offers referring to zone A would be visible¹⁹, as well as all the sale offers referring to zone B. However, by accessing the zone A book, the purchase offers referring to zone B would not be visible as such offers, if compatible by price, could not be matched with the sales offers of zone A since there would be no available capacity to allow the flow of energy from zone A to zone B. As a consequence, by accessing the zone B trading book, in addition to the bids/offers relating to zone B, only purchase offers relating to zone A would be visible

Given this scenario, we can assume that there is a matching between a sale offer referred to zone B and a purchase offer referred to zone A. This matching, generating a transit of energy from B to A, would not only allocate the available capacity in this direction for an amount equal to that involved in the transaction, but would simultaneously release interconnection capacity in the opposite direction, from A to B, which was congested before that matching.

Therefore, immediately after the matching of a sale offer in zone B with a purchase offer in zone A and the related capacity update (with capacity available in the direction from A to B), the purchase offers of zone B would be displayed on the book in zone A, while the sales offers of zone A would be displayed on the book in zone B, within the limits of available capacity.

Following the possible matching of sale offers of zone A with purchase offers of zone B, which exhaust the interconnection capacity from A to B, we would return to the initial situation in which the sales offers of zone A would no longer be visible in the book of zone B and the purchase offers in zone B would no longer be visible in the book of zone A.

4.2 Unit bidding and portfolio bidding

The Italian market has so far been based on a trading system by "plant" (unit bidding). This trading method requires that participants, in sending bids/offers on the MGP and MI spot markets (which currently operate only by auctions) shall also specify the production unit, or consumption unit, which undertakes the commitment/right to produce/consume the energy covered by the bid/offer.

This trading method allows defining both the commercial results, in terms of energy purchased and sold by each participant, and the binding injection and withdrawal schedule of each production and consumption unit for the purposes of the subsequent dispatching activity. In short, the scheduling of the production and consumption units takes place at the same time as trading, through a process of nomination of the binding injection and withdrawal schedules which is performed implicitly in the system for managing bids/offers on the market.

In auction markets, where bids/offers must be submitted not in real time, but within a GOT and without knowing the bids/offers of other participants, the unit bidding allows defining an *ex-ante* bidding strategy (for example through the diversification of the bids/offers and the submission of several bids/offers at different prices for the same unit in each single hour) which covers both the commercial needs (prices and quantities offered), and the dispatching needs of the individual units

¹⁹ Bids/offers whose corresponding injection or withdrawal of energy takes place in the same zone A and which therefore, if matched together, would not entail the allocation of interconnection capacity.

(production/load profiles compatible with the technical characteristics or consumption forecasts of the units) on all 24 hours of the day.

However, unit bidding could be complex to manage in a continuous trading market, in which the bidding strategies must be constantly and in real time adjusted based on the evolution of the trading prices and the prices offered on the book. As a result, in case of imposed adoption of only unit bidding even in continuous trading (MI-XBID), participants would be required to coordinate their bidding strategies with the dispatching constraints of the individual units; such coordination, in the presence of numerous plants to manage, would therefore require the adoption of automatic trading tools that should be properly developed and set, with possible critical issues and risks of error.

Consequently, in order not to impose the adoption of automatic trading tools and to mitigate possible costs and risks, it was considered advisable, for the purpose of continuous trading in MI-XBID, to provide participants with the possibility of separating the trading activity from the scheduling of the units, which could take place after the closing of the trading phase of the MI-XBID.

As a consequence, GME, in line with ARERA's provisions (see ARERA, Res. 350/2019/R/EEL), intends to guarantee Italian market participants, who access GME's LTS, the possibility to choose whether to offer on the MI -XBID via portfolio or, as on the MGP and on the MIn, by single unit. Each market participant²⁰ may therefore choose the trading method he/she intends to use, between unit bidding and portfolio bidding, while submitting a bid/offer on the GME's LTS according to the needs of the moment.

To allow portfolio bidding, GME would assign to each market participant, in each Italian market zone, a portfolio representing of all units in his/her availability which are subject to zonal pricing, i.e. production units (UP), the mixed production and pumping units (UMPP) and the foreign virtual production and consumption units (UPV and UCV)²¹.

The consumption units belonging to the Italian geographic zones (UC), given the National Single price (PUN) remuneration to which they are subject to on the MGP, should instead be traded separately from the units subject to the zonal price, in order to allow, consistently with what is already provided for the MIn, for MSD and for the imbalance charges, that the related non-arbitration fee can be applied to the trading concluded with reference to said UC. Furthermore, since these UCs have no physical characterization, but only a commercial one, and that each dispatching user owns, in each zone, a single consumption unit representing all his/her end customers, it is not necessary to create consumption portfolios.

As a consequence, portfolio trading on the MI-XBID would be possible (yet not mandatory) only for units subject to zonal price, while trading on UCs would only take place per unit.

²⁰ Each market participant shall access the GME platforms through one or more users, each of whom may choose from time to time between the trading methods envisaged.

²¹ Given the zonal structure of the Italian market, UPs and UMPPs are exclusively located in geographical zones, while UPVs and UCVs are exclusively located in virtual foreign zones.

Similarly to what is envisaged for auction-based MGP and MI, also for negotiation on MI-XBID, each participant would, by default, have all the units of which he/she is a dispatching user. Furthermore, the possibility of submitting a specific proxy, different from those possibly submitted for the MGP and the MIn, through which a dispatching user may assign to another participant the power to submit bids/offers on his/her own units, would be provided for the MI-XBID. However, unlike the proxies existing for MGP and MIn, the dispatching user who submits, for the purposes of the MI-XBID, a proxy in favor of another participant relating to a unit (regardless of the type) would lose the possibility of submitting bids/offers on the MI-XBID on that unit²². Furthermore, proxies in favor of more than one participant would not be allowed. Consequently, lacking communications, the proxies in force on MGP and MIn would not be extended to MI-XBID and for these sessions, specific proxies should be submitted and would remain distinct thus without changing in any way the effectiveness of the proxies already submitted for the aforementioned auction markets.

4.3 Trading on MI-XBID: margins and bid/offers matching of the same participant

Taking into account the content of the previous paragraphs, each Italian market participant wishing to trade on the MI-XBID may submit, in each zone, bids/offers referring alternatively to:

- The portfolio consisting of the zonal price units (UP and UMPP, or UPV and UCV) located in this zone and in the availability of the participant, being he/she a dispatching user of these units²³ or having received a specific proxy from the relevant dispatching user;
- One of the zonal price units located in this zone and in the availability of the participant, being he/she a dispatching user of these units²⁴ or having received a specific proxy from the relevant dispatching user;
- One of the PUN (UC) units located in this zone and in the availability of the participant, being he/she a dispatching user of these units²⁵ or having received a specific proxy from the relevant dispatching user²⁶.

In order to ensure a match between the bids/offers concluded on the MI-XBID and the actual (generation) capacity in the availability of the participant, the amounts offered will be subject to "adequacy" checks similar to those carried out on the bids/offers submitted on MGP and MIn, as well as checks carried out on the recording of transactions in the PCE.

²² On the MGP and on the MIn, the dispatching user may submit a proxy to offer on one unit in favor of multiple participants and the dispatching user shall still be entitled to submit bids/offers on that unit. As a result, both the dispatching user and all participants authorized by the same dispatching user may submit bids/offers on the MGP and MIn on a unit subject to proxy.

²³ And did not provide proxy on these units to another participant.

²⁴ And did not provide proxy on these units to another participant.

²⁵ And did not provide proxy on these units to another participant.

²⁶ If a participant owns more than one UC (by accumulating multiple proxies on different UCs and possibly being himself/herself the dispatching user of a UC) in the same zone, these UCs may never be aggregated by portfolio but must always be managed through referenced bids/offers to the individual UC.

In particular, after the MI1 takes place, at the opening of the MI-XBID trading relating to a flow day D, for each hour h the following step-up or step-down margins will be defined:

- for each UP, UMPP and UPV, a step-up margin equal to the step-up margin defined by Terna on the basis of the technical characteristics of the single unit (for UP and UMPP) or of the import interconnection capacity towards Italy purchased through an explicit auction (for the UPV), reduced by the net sales²⁷ made in the previous auction markets;
- for each UCV and UC, a step-up margin equal to the amounts corresponding to the net purchases made in the previous auction markets²⁸;
- for each UP and UPV, a step-down margin equal to the amounts corresponding to the net purchases made in the previous auction markets²⁹;
- for each UMPP and UCV, a step-down margin equal to the step-down margin defined by Terna on the basis of the technical characteristics of the individual unit (for UMPP) or of the export interconnection capacity towards Italy purchased through an explicit auction (for UCV), reduced by the net purchases³⁰ made in the previous auction markets;
- for each UC a step-down margin that is obtained from the IPEX platform, in which the MGP and the MIn are managed.³¹

Once the step-up and step-down margins to be applied at the opening of the MI-XBID have been defined, each bid/offer submitted on the MI-XBID and referring to a specific hour h would therefore be subject to an adequacy check and would be admitted in the related order book if:

- the amounts submitted for sale on a unit or on the portfolio are less than or equal to the step-up margin of the unit (in the case of a bid/offer referring to a single unit), or to the sum of the step-up margins of the units underlying the portfolio (in the case bid/offer referred to the portfolio), reduced or increased by the amounts already sold or already purchased with reference to the same unit or to the same portfolio on MI-XBID, as well as further reduced by the amounts submitted for sale already present on the order book and not yet matched and referred to the same unit or to the same portfolio;

²⁷ To be understood as the difference between sales and purchases. If net purchases have been concluded for UMPPs (amounts purchased in auction markets greater than the amounts sold), these net purchases shall increase the step-up margin of such UMPPs.

²⁸ The step-up margin of the UCVs and UCs defined by Terna is equal to zero, since only net purchases can be concluded on these units.

²⁹ The step-down margin of the UPs and UPVs defined by Terna is zero, since only net sales can be concluded on these units.

³⁰ To be understood as the difference between sales and purchases. If net sales have been concluded for UMPPs (amounts sold in auction markets greater than the amounts purchased), these net sales increase the step-down margin of said UMPPs.

³¹ Given the nature of the UC, the step-down margin on IPEX can be changed by the market participant. This is because the definition of a step-down margin is aimed exclusively at avoiding errors in the trading and does not have a "physical" value. In fact, if energy is purchased on a UC for amounts greater than those that will actually be withdrawn from the network, the dispatching user will accrue imbalances which, although valued at penalizing prices, shall still represent a sale made by such user towards Terna "in real time". Therefore, such behaviour does not constitute a financial risk for the system, also taking into account that purchases made on GME's spot energy markets are subject to prior financial adequacy check on their total value.

- the amounts submitted for purchase on a unit or on the portfolio are less than or equal to the step-down margin of the unit (in the case of a bid/offer referring to a single unit), or the sum of the step-down margins of the units underlying the portfolio (in the case bid/offer referred to the portfolio), reduced or increased by the amounts already purchased or already sold with reference to the same unit or to the same portfolio on MI-XBID, as well as further reduced by the amounts subject to purchase offers already present on the order book and not yet matched and referring to the same unit or to the same portfolio.

Furthermore, during the trading of the MI-XBID, Terna may update the step-up and step-down margins of the units to take into account bids/offers accepted and/or the constraints imposed on the same unit during the MSD, or for other dispatching needs.

Obviously, over the course of MI2 and MI3³²:

- when closing the MI-XBID, to allow the MI2 or MI3 to take place, the margins of the units for the purposes of the MI2 and MI3 trading would be updated taking into account only the trades already concluded during the MI-XBID and referring to those units. The trading concluded on the MI-XBID and referring to the portfolio would not instead determine the change in the step-down and step-up margins applied to the units belonging to this portfolio for the purposes of trading on MI2 and MI3;
- when reopening the MI-XBID, the margins of the units and the portfolio would be updated taking into account the trades concluded during MI2 and MI3.

In addition to the checks on the physical margins, the MI-XBID would also be subject to limitations to prevent in some cases the combination of bids/offers submitted by the same participant. In particular, the matching of bids/offers submitted by the same participant would be prohibited in the following cases:

- bids/offers refer to the same zonal portfolio;
- bids/offers refer to the same unit (this condition applies to all units, including UCs);

Conversely, the matching of bids/offers submitted by the same participant in all other cases would be allowed:

- bids/offers referring to distinct market zones, regardless of whether they refer to units or portfolios, and the matching of which determines the allocation of interconnection capacity;
- bids/offers referring to separate UCs even if in the same zone;
- bids/offers referring to a zonal portfolio and a UC respectively, even if in the same zone.

At the closure of the MI-XBID trading relating to a specific hour h , on the basis of the trading concluded by each participant, the following would therefore be defined:

³² The MI1 session is not included as it is not preceded by any continuous trading session.

- for each unit, an updated production/consumption schedule obtained as the sum of all the amounts traded and referred to said unit during the MI-XBID and during the auction sessions (MGP and MIn) and the MSD;
- for each portfolio, a commercial position that the participant is required to nominate, obtained as the sum of all the amounts traded and referring to this portfolio. This position should therefore be nominated according to the criteria described in the paragraph below.

4.4 Nomination platform³³

Taking into account that participants would be allowed to offer a portfolio on the MI-XBID, it is necessary to introduce a Nomination Platform (PN) managed by GME into the Italian electricity market, as defined by ARERA Res. 350/2019/R/EEL, through which it is possible to schedule the commercial position of a portfolio on the units belonging to the portfolio itself (so-called nomination).

The need to schedule the units through the PN does not therefore take place for the trading concluded on the MI-XBID and referring to the individual units, since the result of these trading sessions contributes to the definition of the injection/withdrawal schedule of these unit³⁴.

The party entitled to schedule a unit on the PN is the participant who has the right to submit bids/offers referring to this unit on the MI-XBID.

The general criteria to be respected for scheduling the units on the PN would be two:

- Compliance with the technical parameters of the units being nominated. This implies that an amount of energy may not be scheduled on each unit which, when added to the schedule already carried out as a result of the trading already concluded on the energy markets and on the MSD where the participant has traded with specific reference to each unit³⁵, does not comply with these parameters;
- Compliance with commercial parameters. This implies that the sum of the total nominations registered on the units belonging to a portfolio must reflect and not exceed the commercial position gained on the same portfolio. In other words, the overall nominated amounts must be consistent with the commercial position of the related portfolio.

Taking into account what has already been described in the previous paragraphs, the schedule on the PN will have to be carried out only with reference to the units subject to the zonal price, while it would not be necessary (nor possible) to schedule the UCs through the PN. Furthermore, for the schedulable

³³ From an infrastructural point of view, the Nomination Platform and the Local Trading System of GME represent a single IT platform and this in order to "allow an efficient and timely harmonization of the nomination platform with the commercial positions deriving from trading on XBID carried out on the LTS [...]" (Del. ARERA 350/2019/R EEL). However, for the purposes of this document, the respective functions are kept separate to properly reflect the respective regulatory context.

³⁴ This applies by definition to UCs, for which the trading by unit is the only one allowed.

³⁵ Energy markets shall mean MGP, MIn and also the trading sessions concluded on the units (and not by portfolio) on MI-XBID.

units through the PN, this scheduling would be added to the schedules defined through the trading carried out with specific reference to said units on MGP, MIn, MI-XBID and MSD.

The nomination must be made through the PN, separately for each hour h and within 57 minutes before the start of delivery of each hour h ³⁶ (so-called h-57).

Without prejudice to the fact that h-57 is the final and binding deadline for the nomination, GME may notify Terna, before this deadline, of the provisionally nominated schedules, subjecting them to any checks in relation to the technical and commercial parameters, on the basis of what will be provided by the rules relating to dispatching activities defined by Terna and approved by ARERA³⁷. For the purposes of the nomination, as well as trading on MI-XBID, it must be taken into account that, simultaneously with the continuous trading on MI-XBID, Terna shall select the bids/offers on the MSDs relating to day D starting from day D-1 and during day D, by notifying the participants and GME of the results, consisting of both the accepted bids/offers and the corresponding injection and withdrawal schedule³⁸, and the feasibility interval.

This feasibility interval would correspond to the interval between the minimum amount and the maximum amount which, even following the trading on the subsequent energy markets or the related nominations, may be overall scheduled on one unit³⁹. The feasibility intervals defined by Terna would also lead to an update of the margins of the units enabled to MSD to be considered for the purpose of adequacy checks during the trading phase on the energy market sessions not yet concluded⁴⁰. Therefore, there may be the case of a participant who has gained a commercial position on a zonal portfolio consistent with the margins of the corresponding units available before the results of the MSD were disclosed but, following the results of the MSD and the related margin update, the commercial position may not be correctly scheduled. In this case, in order to avoid an imbalance in the MI-XBID schedule, this participant should necessarily conclude trading on MI-XBID to avoid such imbalance⁴¹.

³⁶ The PN will open the screen for submitting nominations several hours in advance, it being understood that these nominations may be modified until the deadline for their conclusion.

³⁷ The references to Terna's activities and to the MSD operating methods reported in this document are to be considered as approximate and not binding in relation to the choices made in this regard by Terna and ARERA.

³⁸ The amounts accepted on MSD, cumulative to the bids/offers accepted on the energy markets, constitute the binding schedule of the units.

³⁹ For example, an UP that has an MI1 schedule of 100 MWh and for which a sale offer on MSD for 50 MWh is accepted, in addition to having a schedule of 150 MWh, may have a feasibility interval from 80 MWh to 170 MWh. This implies that this unit, in the following energy markets, may not change its schedule by placing it outside such feasibility range.

⁴⁰ See par. 4.3.

⁴¹ For instance, a participant owns the UP₁ and UP₂ which both have a step-up margin of 200 MWh, this participant did not participate in MGP and MI and he/she sold exclusively on MI-XBID 300 MWh with reference to hour 1 of day D. Before knowing the results of the MSD₁, this participant would have a step-up margin of 100 MWh on his/her portfolio, given by the difference between the sum of the step-up margins of the two UPs (equal to 400 MWh) and the balance on sale already accrued by trading on MI-XBID (300 MWh). Terna, following MSD, has defined a feasibility margin for both units from 50 MWh to 100 MWh. This implies that this participant not only would have no step-up margin in order to trade on MI-XBID but, his/her commercial position (equal to 300

After the h-57 deadline, the schedule resulting as nomination shall be subject to the following checks by the PN⁴²:

- An adequacy check to verify its consistency with the step-up/step-down margin⁴³, as well as with any feasibility interval that Terna may have defined on the unit itself. Otherwise, the amounts being nominated would be corrected downward or upward, according with the margins and the feasibility interval;
- An adequacy check to verify that the sum of the amounts being nominated is consistent and not exceeding the commercial position that has been determined on the portfolio to which the units being nominated belong. If this check fails, the amounts being nominated would be reduced up to the level of this position, without however violating the technical constraints of each unit, even if this made it impossible to correct the schedules until the commercial position was respected⁴⁴.

The aforementioned adequacy checks would therefore be carried out giving priority to the checks in relation to the technical parameters of the units (margins and, where applicable, feasibility interval), in order to make the necessary corrections to make this nominated schedules consistent with the technical parameters and with dispatching needs. Afterwards, instead, checks would be carried out to verify compliance with the commercial parameters and, in the event of inconsistencies, the schedules would be corrected without allowing these corrections to violate the technical parameters. In making the corrections, a temporal priority order could be followed, by making any corrections on the schedules presented earlier⁴⁵.

Please note that it would be possible to carry out schedules of the opposite sign (i.e. both injection and withdrawal schedules) within the units belonging to the same zonal portfolio and that the adequacy check in relation to the commercial position of the zonal portfolio would be carried out

MWh) may not be fully scheduled on the two UPs, on which at most he/she may schedule a total of 200 MWh (100 MWh on UP1 and 100 MWh on UP2) in compliance with the feasibility interval defined by Terna.

⁴² No checks would be carried out before 4:00, when sending the schedule to the PN, except for formal checks on the ownership of the unit with which the schedule is sent and the syntactic correctness of the information sent.

⁴³ The step-up/step-down margin of the unit is calculated by taking into account the unit margins as defined by Terna also following the MSD, excluding purchases/sales already concluded on the same unit in the energy markets (MGP, MI1, MI2, MI3 and trading referring to the same unit concluded on MI-XBID) and in the MSD sessions that have already taken place.

⁴⁴ For example, an operator who has a portfolio consisting of two units, UP1 and UP2, for which a feasibility interval is imposed for an hour h which for both units, ranges from 100 to 300 MWh, and the operator, before the imposition of said interval, made, in compliance with the margins of the units, a sale for only 50 MWh. Upon the deadline for the nomination, the participant sends the PN a 50 MWh schedule on the UP1, consistent with the balance of the portfolio. However, in order to comply with the feasibility intervals of these UPs, the respective nominations will be corrected by default, imposing a nomination equal to 100 MWh on both UP1 and UP2. In this way, the participant would have a nominated amount of 200 MWh, for a commercial sale position of 50 MWh. For this participant, therefore, it cannot be guaranteed that the overall nominated schedules are consistent with and not in excess of the commercial position.

⁴⁵ In the case of schedules sent with a single file, by uploading this file to the nomination platform, the order in which the schedules were inserted in the file would apply.

considering the sum of the total nominated injection and withdrawal schedules⁴⁶. Therefore, a participant who has accrued on a zonal portfolio, with reference to an hour h , a commercial position of 100 MWh, may nominate 200 MWh as an injection increase of one unit and 100 MWh as an injection decrease (equivalent to a withdrawal) of another unit, provided that both units belong to that portfolio.

If, at the deadline for the nomination, once the checks and any adjustments described in this paragraph have been carried out, on a zonal portfolio there is a difference between the commercial position of the portfolio and the overall nominated schedules on the units of the same portfolio, this difference would represent an imbalance in the MI-XBID schedule, whose commercial value and settlement management is described in the paragraph below.

4.5 The MI-XBID scheduled imbalance

In the paragraph above, the concept of MI-XBID scheduled imbalance was introduced, consisting of the difference, in each hour h , between the commercial position of a portfolio and the sum of the nominated schedules on the units of such portfolio, as possibly corrected as a result of adequacy checks.

This MI-XBID scheduled imbalance would constitute an energy purchase/sale transaction of the participant towards GME. Below are the possible scenarios:

- MI-XBID scheduled imbalance as purchase:
 - o in the presence of a commercial sale position, if the net injection schedule⁴⁷ nominated, as eventually corrected, is lower than the commercial position;
 - o in the presence of a commercial purchase position⁴⁸, if the net withdrawal schedule⁴⁹ nominated, as eventually corrected, is greater than the commercial position⁵⁰;
- MI-XBID scheduled imbalance as sale

⁴⁶ To this end, please note that a step-down planning of the unit injection schedule is equivalent to a withdrawal schedule and a step-down planning of a unit withdrawal schedule is equivalent to an injection schedule. Please also note that nominations of the opposite sign are allowed even in the presence of a commercial position amounting to zero, provided that the overall amounts scheduled for injection and withdrawal are balanced.

⁴⁷ In the presence of a commercial sale position, both injection and withdrawal schedules can be nominated provided that the resulting net generates an injection schedule (injection nominations \geq withdrawal nominations), consistent with the sign of the account's commercial position.

⁴⁸ The presence, among the units valued at a zonal price, of both UMPP and UCV, allows defining a net purchase position referring to a portfolio that incorporates at least one of these units.

⁴⁹ In the presence of a commercial purchase position, both withdrawal and injection schedules may be nominated, provided that the resulting net generates a withdrawal schedule (withdrawal nominations \geq withdrawal injections), consistent with the sign of the account's commercial position.

⁵⁰ This situation may occur if all the following conditions are met: 1) after a MSD/MIn session, the margins are updated following the acceptance of bids/offers, or when following a MSD session the feasibility intervals of the unit are defined; 2) the participant has, before the results of the MSD/MIn, defined a commercial position on the MI-XBID which is not fully schedulable on the units in his/her availability given the technical constraints subsequently imposed, following the results on MSD/MIn, on these units; 3) the participant is no longer able to trade on MI-XBID in order to bring the commercial position back to a level that allows complete schedule in compliance with the technical constraints imposed, following the MSD/MIn, on these units.

- in the presence of a commercial purchase position, if the net withdrawal schedule nominated, as eventually corrected, is lower than the commercial position;
- in the presence of a commercial sale position, if the net injection schedule nominated, as eventually corrected, is greater than the commercial position⁵¹ (see example of note 44).

This scheduled imbalance in the MI-XBID, whether for sale or purchase, would represent a purchase/sale transaction with GME, to be managed, in line with the provisions contained in the premises of ARERA Resolution 350/2019/R/EEL, by using the same methods adopted for the PCE imbalance schedule.

Therefore, consistent with the criteria adopted for the PCE scheduled imbalance, the MI-XBID scheduled imbalance would also be attributed to the participant holding the position. The only exception may occur, as provided for on the PCE, if the attribution of the MI-XBID scheduled imbalance to the participant determines a debt exposure not adequately covered by the financial guarantees of this participant towards GME. In this case, GME would attribute the MI-XBID scheduled imbalance to Terna, by also indicating the dispatching user of the units belonging to the participant's portfolio, so that Terna may in turn claim against such dispatching user⁵².

Pursuant to ARERA's Resolution 350/2019/R/EEL, this schedule imbalance should be valued, "*by equating this balance to the actual imbalances valued at the imbalance price of the non-enabled units resulting for the specific zone to which the portfolio belongs*", namely at a price representing the cost incurred by Terna, on MSD, to obtain non-scheduled energy⁵³.

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⁵¹ This situation may occur if all the following conditions are met: 1) after a MSD/MIn session, the margins are updated due to the acceptance of bids/offers, or if after a MSD session the feasibility intervals of the unit are defined; 2) the participant has, before the results of the MSD/MIn, defined a commercial position on the MI-XBID which is not fully schedulable on the units in his/her availability given the technical constraints subsequently imposed, following the results on MSD/MIn, on these units; 3) the participant is no longer able to trade on MI-XBID in order to bring the commercial position back to a level that allows complete schedule in compliance with the technical constraints imposed, following the MSD/MIn, on these units.

⁵² The limitations imposed during the trading phase prevent a participant from taking on sales positions exceeding the sum of the step-up margins of the units belonging to the portfolio and have two purposes: 1) to prevent the operator from taking a "long" position that cannot be scheduled on the his/her units; 2) prevent the participant from being commercially exposed to the system (be it in the PCE, MI-XBID schedule or in real time) for an imbalance not covered by the guarantees that the dispatching user has previously paid to Terna when signing the dispatching contract.

⁵³ As far as the valuation of this imbalance is concerned, please refer to subsequent ARERA's provisions on the matter.

The MI-XBID would be considered as a continuous trading session that supports the MIn (auction-based⁵⁴) and therefore would fall within the sphere of the energy spot markets (MPE) which are an integral part of netting⁵⁵.

All the economic items arising on the MI-XBID, whether they are purchase or sale transactions concluded during continuous trading, or concluded as a scheduled imbalance in the MI-XBID, would therefore be offset by the economic items of the netting markets and would be regulated financially and invoiced according to the methods and times provided for in the netting markets.

As regards the financial adequacy checks relating to MI-XBID, they would be made only on the purchase offers⁵⁶ submitted during the continuous trading, verifying that the entire value of the offers (including VAT), is fully covered by the guarantees in the availability of the participant for netting purposes when submitting the offer in the book⁵⁷. If the offer fails this check, it will be rejected as it is not adequate and will be rejected from the order book.

No financial adequacy check, consistent with the provisions adopted on the MGP and on the MIn, would instead be carried out on the sales offers, except in the following cases:

- sale offer referring to UCs for which the non-arbitrage fee is higher than the sale price (as already provided for on the MIn);
- sales offer at negative prices.

Similarly, financial adequacy checks will not be carried out even in relation to the purchase offers valued at negative prices.

As described in the paragraph above, the ways in which the MI-XBID imbalance schedules generates, which are made known only after both the deadline for trading (h-1) and the deadline for nominations (h -57), do not allow carrying out a prior financial adequacy check.

Therefore, please note that the MI-XBID purchase imbalances would be attributed to the participant only if their value is covered by the guarantees of the participant towards GME; otherwise, such purchases would be attributed to Terna, which would claim against the relevant dispatching user of the units belonging to the participant's portfolio.

⁵⁴ For MIs, the same criteria, timescales and methods currently in force for MI regarding billing and payments, as well as guarantee system would apply.

⁵⁵ To date, the following markets are part of netting: the MGP and MI of the electricity market, the MGP-GAS, the MI-GAS, the MGS and the MPL of the gas market.

⁵⁶ Including negative price offers as indicated in paragraph 6 below.

⁵⁷ A mechanism for reserving the financial guarantee will be envisaged to be used to cover MI-XBID operations for a specific flow date before the related trading; this amount may be changed by the participant.

6 ADDITIONAL ASPECTS RELATING TO THE INTEGRATION OF THE ITALIAN ELECTRICITY MARKET WITH THE SINGLE INTRADAY COUPLING (SIDC)

Introduction of negative prices

The integration of the Italian intraday markets within the European intraday coupling envisaged by the CACM requires the adoption of the same "*clearing price limits*" as those provided for by the provisions of the "*ACER decision no 05/2017 on the Nominated Electricity Market Operators' proposal for harmonized maximum and minimum clearing prices for single intraday coupling*", pursuant to which these clearing price limits are set at +9,999 €/MWh and -9,999 €/MWh respectively.

For the Italian Day-Ahead Market, already integrated within the European single day-ahead coupling (SDAC), the implementation of the corresponding "*ACER decision no 04/2017 on the nominated electricity market operators' proposal for harmonized maximum and minimum clearing prices for single day-ahead coupling*", which provides that the maximum and minimum price limits are equal to +3,000 €/MWh and -500 €/MWh respectively, took place by limiting the application of the minimum price limit to only clearing prices (which on the Italian MGP could theoretically have minimum values of -500 €/MWh). The minimum bidding limit applied to the MGP is instead equal to 0 €/MWh⁵⁸. As a consequence, on the MGP, the bids/offers may have minimum/maximum prices amounting to respectively 0€/MWh and + 3,000 €/MWh, while the clearing price limits, in compliance with the Acer Decision no 04/2017 are -500 €/MWh and +3.000 €/MWh respectively.

However, taking into account the structure of the day-ahead coupling, based on an auction mechanism, as well as the amount of interconnection capacity available with foreign countries and the needs of the Italian market, the onset of a negative clearing price in the bidding zones of the Italian market is currently not realistically conceivable, as the needs of these zones could not be met only by imports from abroad and would in any case require the activation of offers relating to Italian generation plants. In light of this, even in a market situation in which all the supply curves of the foreign market zones showed negative prices, satisfying Italian demand would still require the activation of Italian sales offers which, having to be submitted at a minimum price of at least 0 €/MWh, would not allow the formation of a negative clearing price in the Italian zones.

This approach relating to MGP - prompted by the need to maintain overall consistency between the price limits of the energy market and the corresponding provisions relating to the dispatching markets, the valuation of imbalance charges, as well as the incentive mechanisms of the renewable sources – may not be extended to intraday markets, when they will be an integral part of the European intraday coupling.

As a matter of fact, the introduction of an intraday market session based on continuous trading (MI-XBID) requires, for a correct and clean performance of market operations, that bidding limits (limits on the prices that can be formulated in the offers) and clearing price limits match and are harmonized on all bidding zones that are part of the coupling. In fact, in a continuous trading mechanism there is not

⁵⁸ The maximum price limit used as a bidding limit on the MGP amounts to 3,000 €/MWh, corresponding to the maximum clearing price referred to in ACER decision no 04/2017.

a single clearing price for each zone, but the price of the individual offers is itself the matching price and therefore a differentiation between the limits set for the offer prices and the matching prices would require the imposition of restrictions on trading and on the display of offers on the book which would infringe the economic merit principle and would alter the correct functioning of the market.

As a consequence, on the MI-XBID and, for the obvious need for consistency and elimination of undue arbitrage opportunities, on the MIn (CRIDA), the implementation of the provisions of the ACER decision no 05/2017 should take place by providing that the minimum and maximum price limits equal to -9,999 €/MWh and +9,999 €/MWh shall apply not only to the clearing prices but also in relation to the offer limits and that, consequently, matching with negative prices may occur.

This would imply the extension of a negative bidding limit also to the MGP, equal to the minimum clearing price of -500 €/MWh, referred to in ACER decision no 04/2017.

7 FUTURE ACTIVITIES

Based on the applicable regulatory framework, the operational launch of the XBID project on Italian borders involves the need to reconfigure the intraday market (MI), moving from the current market design which involves the execution of 7 (seven) implicit auctions to a different solution that provides continuous trading sessions up to H-1 (M-XBID), interspersed with three complementary implicit regional auctions, the so-called CRIDA (MIn), in the terms described in the previous paragraphs of this consultation document.

In order to implement the new MI design, it will therefore be necessary to change the current configuration of the electricity market, the ME Rules and the Technical Rules regulating its operation.

The operational launch of the Italian market in the XBID project and in the SIDC also requires the completion and coordination of activities to be carried out at different levels:

- National level: adjustment of the Electricity Market Rules and related Technical Rules, of the provisions of the Network Code (Terna, ARERA), of the Integrated Text of the Electricity Dispatching - TIDE (ARERA), as well as any other provisions relating to incentivized generation;
- Regional level (LIP14): completion of the operational and procedural activities relating to the regional processes necessary to allow the inclusion of Italian borders and bidding zones in the European *intraday coupling* (GME-TERNA);
- European level: completion of the operational and procedural activities relating to the European processes necessary to allow the inclusion of Italian borders and bidding zones in the European *intraday coupling*.

GME, in being an active part to allow Italy to integrate into the European intraday coupling as soon as possible, will notify participants, in coordination with Terna and ARERA, of any updates of the go-live date that may be necessary to implement requests that may arise not only at the national level, but also at the regional and European level, and which reflect the needs of the parties and stakeholders involved on the different working tables.

Clearly, in order to allow participants to gain the necessary knowledge of the new operating model of the intraday market, free practice sessions will be organized, the methods of organization and participation of which will be communicated by GME well in advance, through specific press release published on the institutional website www.mercatoelettrico.org, as well as on the information system of the electricity market.