

To: DG Energy, Unit B2 Internal Market, Wholesale markets; electricity and gas

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Prot. AFIR-Ing.eel/EF-gr/43 -20

Milan, August 6th, 2020

PUBLIC CONSULTATION REGARDING THE ITALIAN IMPLEMENTATION PLAN

Please find here below Edison's response to the Italian Implementation Plan under consultation.

Please, do not hesitate to contact us for further information.

Best regards.





General Remarks

Edison shares the analysis made by the Italian authorities on the resource adequacy concerns which require the implementation of ad-hoc measures, such as capacity remuneration mechanisms, to ensure the adequacy of the electricity system.

As correctly highlighted in part 1 of the document, the Italian electricity system is going to face an unprecedented transition towards a deep decarbonization thanks to the coal generation phase-out by 2025 and ambitious RES growth targets by 2030 set in the Italian National Energy and Climate Plan. This transition is happening in a national electricity system already characterized by a significant reduction of adequacy margins following an important decommissioning of thermal capacity in the last years. The wide penetration of incentivized RES and a contraction of demand due to energy efficiency measures and the economic crisis (which will be exacerbated by the current COVID-19 crisis) reduced the remuneration of thermal power plants in wholesale energy markets, due to a decrease of operating hours and prices price signals coming from electricity markets are largely insufficient to drive the investment decisions in new capacities or the decisions to keep existing power plants in operation to ensure the adequacy of the power system.

Besides the specific situation of the Italian electricity system, Edison also fully agrees with the Italian authorities on the assessment of the market failures which prevent energy only markets from providing proper price signals to ensure the compliance with the security of supply targets set by public authorities. In fact, investors cannot rely on price spikes whose frequency and level are largely unpredictable to undertake capital-intensive investments with long payback periods and, for this reason, investments in the sector are often characterised by "boom and bust" cycles.

To sum up, Edison shares the analysis made by the Italian authorities on the structural difficulties that "energy only" markets face to ensure the level of capacity necessary to guarantee the adequacy of the power system and the security of supply according to the objectives set by public authorities (e.g. 3h LOLE). We believe that the market reforms proposed have all the premises to improve the functioning of electricity markets and price signals, but nevertheless we also share the view expressed by the Italian authorities whereby in order to ensure capacity investments in due time and avoid the risk of otherwise unacceptable deteriorations of security of supply, the Capacity Market introduced in 2019 remains necessary for investors and market participants to support investment decisions or decisions to keep existing power plants operational according to the needs identified by the TSO. In point of fact the auctions held in 2019 with delivery years 2022 and 2023 gave proper price signals and as a consequence new investments in capacity (gas-fired plants, storage and renewable sources) have been stimulated, without any form of discrimination in terms of country of origin and technology (for those compliant with the emission limits pursuant to art. 22.3(b) of Regulation (EU) 2019/943).



In this context, as underlined in the conclusion of the Implementation Plan, continuity and certainty of these long-term price signals, in new as well as existing capacity, is of paramount importance in the view of the important challenges linked to the energy transition (first of all the phase-out of coal generation by 2025). Capacity market is therefore essential in order to preserve a well-functioning market characterized by a proper level of competition, assure an appropriate, economically efficient level of capacity and achieve the desired quality of service and adequacy in the electricity system. In these terms, both national and European adequacy assessments showed that Italian generation assets will be able to cover the peaks load, ensuring proper level of security of supply, only in presence of a capacity remuneration mechanism that keeps the economical sustainability of existing capacity and allows the required investment in new capacity. Therefore, the implementation of future auctions for delivery years following 2023 should be considered a priority immediately after the European Commission will issue its opinion on the Italian Implementation Plan, according to article 21.6 of Regulation (EU) 2019/943.

Finally, Edison welcomes the commitment of the Italian authorities and of the TSO to continuously improve the Capacity Market design and to monitor its effects. The involvement of market participants is fundamental in this process in order to ensure the efficiency of the mechanism and a well-functioning market-based procurement (encompassing main auctions, adjustment auctions and the secondary market). Edison is of course available to contribute to the improvement of the design of the Italian Capacity Market within the framework established by the European Commission's Decisions of 2018 and 2019 (Decision C(2018)617 and Decision C(2019)4509).

Specific comments on the proposed market reforms

Edison supports the market reforms proposed by Italian authorities and believes that they can improve the functioning of the electricity wholesale markets and the Ancillary Services Market as well as competition in the retail market. In general, it is important that all these measures are implemented with the objectives to strengthen competition in electricity markets and to ensure the level playing field for all market participants.

Here below, we introduce some specific comments on the proposed market reforms.

Removing price caps

Edison welcomes the removal of price limits in the Day-Ahead (DA) and Intra-Day (ID) market, consistently with the ACER decisions 04/2020 and 05/2020. Although, Edison also believes that in order to allow the market to provide adequate price signals, the same intervention should be extended also to the Ancillary Services Market (ASM). In fact, the possible valorisation of the balancing services at negative price is



important to reflect the value of the services provided by new players, especially for those RES plants which could result eligible for the supply of downward services. Moreover, the removal of price floor in the ASM would facilitate the emergence of consistent price signals over all the market timeframes (from day-ahead to real time).

Increasing interconnection and internal grid capacity

Edison globally welcomes the package of investments in interconnections that have been presented in the Implementation Plan which seems consistent with the last version of Terna's Investment Plan. Edison believes that the development of the interconnections (both cross-border and internal) was and will be crucial in preserving and further developing the internal market for energy, in ensuring energy security and competitiveness and in contributing to the achievement of 2030 and 2050 European climate targets. Energy infrastructures play a key role as enablers of the energy transition, but also to reach the common energy and climate targets and facilitate the future evolution of the energy market.

Enabling self-generation, energy storage, demand side measures and energy efficiency

Edison shares the view of the Italian authorities on the fact that the proposed market reforms alone will not be sufficient to attract new investment in energy intensive storage, such as pumped hydro storage plants. The introduction of dedicated long-term remuneration schemes is therefore essential to incentivise market players to invest in this technology which is key for the energy transition in order for the electricity system to be able to accommodate a large amount of non-programmable RES. This remuneration scheme should ideally award a fixed remuneration (e.g. in €/MW/year) to the asset developer for a relevant amount of years in exchange of the provision of services aimed at managing RES production profile (e.g. time shifting services). Besides the provision of these services, asset owners should be allowed to participate in wholesale and ancillary services markets with the remaining capacity of their facility.

Ensuring cost-efficient and market-based procurement of balancing and ancillary services

Edison appreciates the path of market reforms that have been exposed in the Implementation Plan: a general review of the dispatching rules that aims to open the ASM to new market players, also in aggregated form, will allow to improve the efficiency in the procurement of these services and contribute to decarbonization, provided that a technology neutral approach is adopted.



Edison believes that the new market design should primarily secure the supply of ancillary and balancing services through the market by ensuring adequate remuneration for market participants which reflect the actual value of the services provided. This is clearly the key for a cost-efficient procurement system for ancillary services.

In this framework, Edison strongly believes that the TSO should play a role as neutral market facilitators in the procurement of ancillary and balancing services, limiting its intervention in supplying such services only when it verifies that market participants are unable to efficiently provide them. Thus, with specific regard to voltage regulation services, Edison believes that a market-based procurement solution should be implemented as fast as possible and should not be limited to pilot projects dedicated to RES and distributed generation.

Another important aspect of the presented reform of the dispatching rules is the redefinition of some of the current characteristics of the aggregated units (now called UVAM – Mixed Enabled Virtual Units, in the future generically referred as UVA – Enabled Virtual Unit). Edison generally welcomes this evolution which is in line with the objectives of the Clean Energy Package to open electricity markets to the participation of all market players in a technology neutral way. Nevertheless, according to article 17 of Directive (EU) 2019/943, the regulatory framework should foresee that aggregators (BSPs) should pay financial compensation for the costs incurred by BRPs because of the activity of the former. In this sense, the future regulation introduced by the Italian authorities should guarantee that the legitimate interests of both BSPs and BRPs are preserved to avoid cross-subsidies and, in the end, to ensure the smooth functioning of the electricity markets,

Removing regulated prices

Edison welcomes the plan of the Italian authorities to remove the current system of reference prices by 1st January 2021 for small enterprises and by 1st January 2022 for household and microenterprises. This measure, as recognised also in country report 2020 issued by the European Commission on February 26 under the European Semester, is of utmost importance to improve competitiveness of the Italian retail market and, for this reason, the deadlines established should be met without further delay. Moreover, in order for this reform to be truly effective, the migration of consumers from the regulated to the free market should be managed in a way that favour competition between suppliers (e.g. through competitive tendering).



This document contains Energia Libera's comments to the *EU Consultation on Italian market reform plan* (prot. n. 103/20, comments to be sent within 12 August 2020 via email to ener-market-reforms@ec.europa.eu).

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The EU's energy system has been undergoing a radical change in the last decades and the energy market is at the centre of this change. Therefore, Member States have been working to acknowledge the EU regulations in order to establish a single market for energy and decarbonisation of the system. Italian National Energy and Climate Plan (*Piano Nazionale Integrato Energia e Clima*) established 2025 as the phase out year for coal-fired plants (about 7GW) - a crucial step for decarbonising the national energy mix – and ambitious targets for the development of non-programmable renewable sources in 2030.

In line with the requests indicated in the EU regulations, the Italian authorities have started up a deep reform of the wholesale electricity market, which also foresees:

- The European integration of energy spot markets, thus the forthcoming involvement in the project of single intraday market coupling which will be achieved by integrating Northern Italy borders into the XBID project;
- The integration of balancing markets by making Terna S.p.A. (**Terna**) enter into the platforms for the exchange of balancing energy;
- The elimination of caps and floors in the wholesale electricity markets
- Reviewing imbalance settlement;
- Opening up the dispatching markets to new resources even as aggregates in order to allow system flexibility in a scenario of growing penetration of non-programmable renewables.
- Terna starting up pilot projects involving resources currently not necessarily qualified for the ancillary services market in compliance with decision n° 300/2017/R/eel of the Energy and Environment Authority (ARERA) in order to test functioning, quality of service and the remuneration required to activate these resources.

ARERA's first important consultation on the reform of electricity dispatching has outlined the first trends regarding aggregation, remuneration of ancillary services, coordination between the intraday market with continuous trading and h-1 gate closure time and the dispatching services market, thus



establishing roles and responsibilities of market players such as balancing service providers (BSPs) and balancing responsible parties (BRPs).

A crucial element for the evolution of a now more distributed electricity system with many non-programmable renewable sources is a suitable meshing of the grid to reduce congestions and allow energy transmission to consumers from more decentralised power plants.

Even the retail market is entering into a phase aimed at its full liberalisation. Law decree n. 162 of 30 December 2019 established the end of the so-called greater protection (*Maggior Tutela*) on 1 January 2021 for small enterprises and on 1 January 2022 for microenterprises and domestic customers. Thus, ARERA has designed detailed offers for small enterprises for what concerns supply regulation with dedicated gradual protections and competitive procedures to assign the last resort service.

Energia Libera wishes that all currently adopted measures shall guarantee a suitable competitive structure in all implementation phases of the transition process. More specifically, regarding ARERA's reform for the removal of caps and floors on the wholesale markets - made to implement article 10 of EU Regulation 943/2019 - Energia Libera hopes that also the o €/MWh floor currently present on the Dispatching Market will be removed.

As previously mentioned, the Italian electricity sector is undergoing a strong transformation process towards a low-carbon energy model with maximum penetration of renewables and aimed at the decommissioning of all coal-fired power plants within 2025. Energia Libera believes this evolution should also include a regulatory framework capable of addressing investment choices that can guarantee safety and adequacy of the electricity system also during the transition phase.

Energia Libera takes into great consideration the analysis made by the Italian Authorities on the structural problems of the energy only electricity markets to guarantee the right capacity to achieve the pre-established adequacy targets (e.g. 3h LOLE). Although we believe the aforementioned reforms aimed at improving the wholesale electricity market might facilitate the emergence of more pertinent price signals, , some bespoke measures are deemed necessary in order to guarantee adequacy in the short-medium term such as capacity remuneration mechanisms that – if correctly articulated – can support investment choices and the maintenance of the capacities required to guarantee service adequacy.



Due to the adequacy issues of the electricity system highlighted by the competent authorities, Italy has decided to introduce a capacity remuneration mechanism aimed at remunerating the capacity to guarantee the adequacy of the system through competitive and market selection procedures:

- Support efficiency of the existing plants necessary to guarantee adequacy. These plants, designed to ensure a baseload production, are now placed out by non-programmable renewable sources, thus they have been obliged to operate in a different manner by offering:
 - Energy for the supply of residual load, which has a different trend curve from that of
 overall need, especially in days with a photovoltaic production (more general
 renewable), strong variations during the day and an increased speed at night due to
 the contemporary increase of need and reduced photovoltaic production, which
 implies a rapid increase of production coming from conventional sources;
 - Flexibility services, fundamental to support penetration of non-programmable renewables into the system, solve bottlenecks and support grid frequency and tension;
- Stimulate suitable investments on new capacities. In its 2020 Development Plan, Terna stated they would like to make 5.4 GW of gas-fired programmable and flexible power plants to replace the current coal-fired plants.

Following the approval of the co-called DG Competition, Italy established – via Decree of the Ministry of Economic Development of 28 June 2019 – a Capacity Market (*Mercato della Capacità*). November 2019 saw the first two competitive procedures to be delivered by 2022 and 2023 for the current capacity and for multiyear delivery (15 years) between 2022 and 2023 for new capacity.

The coming into force of EU Regulation 2019/943 on the domestic market of electricity has led to this new confrontation with DG Energy, now called to give its opinion on the Italian Implementation Plan.

In order to support the necessary transition of the Italian electricity system, Energia Libera believes that Combined Gas Cycle Turbines (**CCGT**) with flexible characteristics capable of supplying flexibility services in real time are the key to support the growing penetration of non-programmable renewables and the adequacy of the electricity system.



Therefore, a suitable and specific remuneration is necessary to guarantee these plants remain in operation as well as the development of new ones to replace coal-fired power plants with new programmable capacities. Thus, we underline the importance of giving long-term price signals to the existing CCGTs. If this does not occur, we believe there could be the risk of a turnover in terms of decommissioning and new capacities, which could lead in turn to the risk of a generation inadequacy and general instability of the market.

The importance of these plants was evident during the Covid-19 health emergency, when the sudden reduced energy need was fulfilled by a greater production coming from non-programmable renewables linked to the outcome of the day ahead market, with impacts on the grid that Terna was able to manage with the help of flexible resources dispatched downstream of the dispatching market.

Therefore, Energia Libera is particularly focused on the Capacity Market and hopes there will be developments that will also take into account:

- The evolution of foreign participation different from the current mechanism, which foresees a financial participation only from traders authorised to work on the day-ahead market without any specific capacity requirement;
- The importance of flexible resources and the need of a suitable market remuneration for them;
- The need of greater flexibility on the market segment following the first auctions to minimize the risks linked to the grantee and increase liquidity in the different market phases.

Moreover, we would like to emphasize the need of a greater coordination among neighbouring Member States in terms of cooperation and harmonization in order to strengthen the single energy market.

Finally, in order to review and continuously improve the design of the Capacity Market, we agree with the opening of the Italian institution, who "are strongly committed to continuously improving the capacity market design on the basis of monitoring its effects and the results of the planned market reforms, to ensure it meets better its objectives".





ENGIE Italia S.p.A. response to DG ENERGY on Italian market reform plan

6th August 2020

ENGIE Italia S.p.A. (hereafter, "ENGIE") welcomes the opportunity to provide its comments to DG ENERGY consultation on the Italian Implementation Plan for the requirements set in article 20 of Regulation 2019/943 on the Internal Electricity Market. ENGIE supports most of the analysis provided in the implementation plan submitted by the Italian TSO. When considering the current market design in Italy as well as the list and implementation timeline of proposed measures (Annex A), ENGIE believes that the electricity markets in Italy are overall in line with the requirements contained in the new Electricity Market Regulation. In addition, ENGIE acknowledges that the capacity market is a needed mechanism to address residual adequacy issues that cannot be solved even when the measures mentioned in the implementation plan will be in place and therefore is in favour of CRM with future auctions covering the years from 2024 onwards, being these essentials to meet the capacity requirements. In other words, ENGIE believes that a competitive market-wide capacity market will still be required in Italy in order to trigger the investments needed in light of the specific situation of Italy and the on-going energy transition to a low carbon economy in Europe.

In this perspective, ENGIE wishes that the main principles and rules of the forthcoming Italian market dispatching reform ("TIDE") should be clearly defined as much as possible in advance respect to the future auction rounds.

Regarding the capacity mechanism in place, ENGIE appreciates the implementation in 2019 by Ministry of Economic Development, Energy Authority and Italian TSO of a new CRM mechanism for 2022 and 2023. However, ENGIE believes that the capacity mechanism should be now carefully fine-tuned by taking into account a number of priorities.

Among them, as is common knowledge, the progressive growth of renewables, will decrease the equivalent full load hours of gas-fired power plants, thus reducing the possibilities for them to recover fixed costs, while these plants are clearly needed to ensure adequacy and to cope with the intermittent production of wind and solar units. They will positively contribute to the decarbonization not only as perfect complement to RES, but also allowing the coal phase out and in the future gradually using also green gas. Consequently, in order to ensure a sustainable level of firm capacity (with generation, storage and demand response, and especially in specific market zones), it is key to know the final rules governing the future auctions well in advance compared to the delivery periods, as well as a much higher remuneration that the existing and flexible gas fired plants are entitled to perceive in return to their capacity obligation (currently set at 33k€/MW/year).

ENGIE recommends a more detailed market view on some key points, such as the publication of the demand curves well in advance respect to the beginning of the auctions (if compared to the last preauctions scheduling). On one hand, this would ensure an increased level of transparency; on the other hand, capacity market participants would manage to carry out with a better planning the needed assessments before implementing their strategies. The consequent effect on the system would be to have more available capacity and therefore more competitive and efficient auctions.

In addition, it would be very useful to have a more detailed timeline for all the market phases, starting with the phases following the main auction ("asta madre"). The mechanism should indeed better

guarantee and foster the opportunities to adjust and/or renegotiate the allocated capacity commitments after the main auctions. This would surely increase the whole system flexibility, granting the highest possible level of participation.

In this context, ENGIE deems important that the TSO communicates if it still considers the adjustment auctions necessary to meet the adequacy target for the 2022 and 2023 delivery period, since this awareness is strictly linked to the operators' industrial willingness to invest in new projects sufficiently in advance to take part in the adjustment auctions.

Finally, with specific regard to potential new projects to be financed and developed, given the increasing interest, it is of the utmost importance to explain in more details, within the whole discipline, the needed conditions to allow the participation of electrochemical storage plants in the capacity market scheme (e.g. de-rating factor, min/max C-rate, obligation hours).



Consultation on Italian market reform plan

Comments by Elettricità Futura

August 3rd, 2020

General Comments

The European Commission launched the consultation on the Italian market reform plan on the 1st July 2020, after Italy submitted its planned reform measures to the Commission on the 25 h June 2020. This consultation is welcomed by Elettricità Futura, the leading Italian Association representing major players in the national electricity supply industry, including electrical energy generators from Renewable Energy Sources (RES) as well as traditional sources, traders and DSOs. Elettricità Futura hereby provides comments on behalf of his membership base.

Specific Comments

The Italian electricity system has undergone substantial changes over the past years, with a sizeable reduction in programmable thermoelectric generation capacity and a significant development of less predictable variable energy sources at the same time. This has led to severe concerns over the present and future system adequacy. The TSO already reports episodes of resource shortage at demand peak and warns of greater shortages in the future. To tackle such a situation, a mechanism must necessarily be put in place to provide the right signals to invest and/or divest in generation capacity. This is considered essential to preserve quality of service and avoid frequent, undesirable situations that call for distributed power cuts. The absence of long-term price signals in the energy markets hinders the possibility of putting in place investments in new as well as existing capacity. Such price signals are necessary in order to assure an appropriate, economically efficient level of capacity and achieve the desired quality of service and adequacy level in the electricity system.

Elettricità Futura is convinced that the full sweep of measures and market reforms put in place in Italy are key to support the transition towards a complete decarbonisation of the electricity system. According to our view, the list of measures and the execution timeline proposed by Italy in its implementation plan can contribute towards the removal of existing market failures. Nevertheless, these measures alone might not be sufficient to mobilise the needed investments to preserve system adequacy level in the short and medium terms.

The Italian National Energy and Climate Plan (NECP) foresees a swift phase-out of coal-fired generation plants by 2025 and the consequent expected decommissioning of capacity, with a risk of accelerating the decrease in the margins of adequacy and levels of system security. Moreover, the increasing penetration of non-programmable renewable sources induces higher volatility in the spot market price and a general decrease of the average energy price. Consequently, the risk perceived by companies is bound to increase and lead to a lack of investment in new power plants, as well as in the maintenance of existing flexible capacity.



In conclusion, Elettricità Futura supports the contents of the Italian market reform plan and agrees with the statement in this plan that any market price increase due to the inadequacy of plant capacity would not be sufficient to promote investments in the short and medium terms. In order to let investors put in place their financial resources, market price increase due to plant capacity shortfall should be structural and, to a certain extent, predictable. The Capacity Market should therefore be maintained for the forthcoming years as an essential tool to guarantee security of supply by providing the right long-term price signals. The first two "mother auctions" were completed for the delivery years 2022 and 2023, stimulating new investments in gas-fired plants, storage and renewable sources. However, around 7 GW of coal-fired capacity is set to be phased-out by 2025 in accordance with the Italian NECP and it will be necessary to provide stability through long-term price signals by enabling new Capacity Market auctions for delivery in 2024 and beyond, in a perspective of technological neutrality.



Genova, 12 August 2020

EUROPEAN COMMISSION CONSULTATION ITALIAN MARKET REFORM IMPLEMENTATION PLAN ERG S.p.A. Response

ERG S.p.A. is an independent power producer from clean, renewable and sustainable sources. We are an Italian enterprise active across Europe, operating in the energy sector for more than 80 years.

We welcome the opportunity to provide our view on the proposed Italian Implementation Plan outlined in this consultation. In responding we would like to highlight the following general key points:

- ✓ markets reforms must be well designed, free of regulatory distortions and enter into force in due time in order to be successfully implemented;
- ✓ any kind of proposed market reform today must fit for the transition towards a low carbon energy system;
- ✓ since market conditions can change rapidly, a flexible/dynamic approach is needed in order to find the best available solutions for the present and/or the even "greener" future.

As far as this last point is concerned, it is our deep belief that Italian relevant stakeholders as National Regulatory Authority, Transmission System Operator and Nominated Electricity Market Operator, have taken into consideration the "lesson learned" from the pandemic phase on the Italian electricity market.

During COVID'19 lock-down and post lock-down periods, Italian electricity market experimented a foretaste of a potential near future system characterized by:

- √ a deep penetration of renewable sources (RES);
- √ the fundamental and continuous appeal to services on the balancing market (with a relevant increase of balancing costs);
- ✓ a sharp reduction of import of foreign electricity.

The current (*hopefully*) post pandemic phase should serve as a reflection moment in order to focus on new – or potential worsening issues – and take the due actions to prevent criticalities.

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Taking these brief points as a premise, we consider the proposed implementation plan a good overview of almost all the relevant topics currently under discussion in Italy; at the same time, we would propose the following priority ranking among the reported issues:

- ✓ promoting European market integration and ensuring cost-efficient, market-based and technologyneutral procurement of balancing and ancillary services;
- ✓ increasing interconnection and internal grid capacity;
- √ removing price caps in all energy markets;
- √ addressing proper remuneration mechanisms or markets for the upcoming energy mix, based upon RES technologies like wind and PV with no or low variable costs and thermoelectric units with a low load factor / stop and go regime;
- √ removing regulated prices.

As far as European market integration with the Single Intra-Day Coupling is concerned, we consider SIDC as a key component for completing the European Internal Energy Market. With the rising share of intermittent production of electricity in the European generation mix, connecting intraday markets through cross-border trading is an increasingly important tool for market parties to balance their positions closer to real time and across borders.

Allowing RES sources to participate actively to the intraday market (and, consequently, to the ancillary services) is of the utmost importance: the delay accumulated so far is not conceivable in a market fit-fortransition.

With reference to negative prices, we consider of paramount importance that their introduction is ensured not only in the Day-Ahead and Intra Day markets segments (as provided by Italian stakeholders) but also on the Ancillary Service Market. This prediction could help to remove obstacles to the supply of ancillary services (especially downward regulation) by non-programmable renewable sources.

We consider interconnections among neighboring Countries and the increase of internal grid capacity as fundamental points of the electricity market reform: on this second aspect, we recognize the efforts of the Italian TSO in improving the network physical state. However, we believe that a further step is mandatory. We are referring to the need for an in-depth analysis of the resources and services required at nodal level, with the aim to properly debottleneck the key segments of the grid, thus preventing the ever increasing use of RES curtailment orders by the TSO, which represents a non-market based solution and therefore it should be activated only as a last-chance option.



As well stated in the document – even with a different motivation – there is a risk that the TSO will adopt the use of re-dispatching orders as a tool for the ordinary managing the electrical system, instead of an emergency/ residual measure to overcome exceptional events.

With reference to the development of the transmission (and distribution) network, we believe that a tidy, accurate and global approach to the repowering activities on the existing network, associated with the development of new segments of the grid – would lead to a comprehensive debottlenecking of the system, thus solving the largest amount of problems related to the electricity market.

A specific aspect that under our point of view has not been well elaborated in the document refers to energy storage and relevant technologies: we believe this technology will represent a game-changer in the next few years, with relevant impacts on market structure and operativity.

The current debate in Italy is focused on a specific frequency regulation service (so called Fast Reserve) which will be the subject of an ad hoc pilot project, already deliberated by the Italian Energy Authority and the TSO: surprisingly, this service is not mentioned in the document. Moreover, the information already provided on this key technology seems too general: since other Countries have already reached a mature stage of development on this area, we urge relevant stakeholders to share further and in-depth details on the energy storage sector, providing operators of the Italian market an operational strategy for both hydro-pumping and battery technologies.

Lastly, we would focus the discussion on the use of Capacity Remuneration Mechanisms as a stable part of the electricity market.

As provided by Italian TSO Adequacy Report 2019, Italy needs a long-term tool to give affordable price signals for investors and, above all, to provide adequacy for the system, at least until the coal phase out from electricity generation will not be completed.

Since the mechanism will be revised in order to ensure its compliance with EU Regulation n. 943/2019 (art. 23), we consider worth mentioning that the revision should refer not only to address the participation of foreign capacity but also to improve the rules referred to RES participation to the mechanism itself.

Currently, even if under a formal point of view RES participation is allowed, the risks of participation and penalties introduced during the delivery period by the Operating Regulation prevent *de facto* the non-programmable RES from taking part in this market.



On general grounds, in terms of process and information provided, we cannot but praise the Great Britain version of the Implementation Plan and the level of details provided to operators, relevant stakeholders and to the EU Commission (it should be considered as a best practice).

Under this point of view, we believe that the pieces of information provided by Italian stakeholders should be further detailed as well as the provided timeline.



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Milan, August 12th 2020

Consultation on Italian market reform plan

The European energy system has been undergoing a radical change in the last decades, and the energy market is at the centre of this change. Therefore, Member States have been working to implement the EU regulations in order to establish a single market for energy and decarbonisation of the system. Italian National Energy and Climate Plan (Piano Nazionale Integrato Energia e Clima - PNIEC) established 2025 as the phase out year for coal-fired plants (still about 7 GW) - a crucial step for decarbonising the national energy mix – and ambitious targets for the development of non-programmable renewable sources in 2030.

In line with the requests indicated in the EU regulations, the Italian authorities have started a deep reform of the wholesale electricity market, which also foresees:

- the European integration of energy spot markets, with the forthcoming involvement in the project of single intraday market coupling which will be achieved by integrating Northern Italy borders into the XBID project;
- the integration of balancing markets by making Terna S.p.A. enter into the platforms for the exchange of balancing energy;
- the elimination of caps and floors in the wholesale electricity markets;
- reviewing imbalance settlement;
- opening up the dispatching markets to new resources even as aggregates in order to allow system flexibility in a scenario of growing penetration of non-programmable renewables;
- Terna starting pilot projects involving resources currently not necessarily qualified for the ancillary services market in compliance with decision n. 300/2017/R/eel of the Energy and Environment Authority (ARERA) in order to test functioning, quality of service and the remuneration required to activate these resources.

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the first trends regarding aggregation, remuneration of ancillary services, coordination between the intraday market with continuous trading and h-1 gate closure time and the dispatching services market, thus establishing roles and responsibilities of market players such as balancing service providers (BSPs) and balancing responsible parties (BRPs).

A crucial element for the evolution of a more distributed electricity system with many non-programmable renewable sources is a suitable meshing of the grid to reduce congestions and allow energy transmission to consumers from more decentralised power plants.

Even the retail market is at last entering into a phase aimed at its full liberalisation. Law decree n. 162 of 30 December 2019 established the end of the regulated tariff ("maggior tutela") on 1 January 2021 for small enterprises and on 1 January 2022 for microenterprises and domestic customers. Thus, ARERA has designed detailed offers for small enterprises for what concerns supply regulation with dedicated gradual protections and competitive procedures to assign the last resort service.

We hope that all currently adopted measures can guarantee a suitable competitive structure in all the implementation phases of the transition process. More specifically, regarding ARERA's reform for the removal of caps and floors on the wholesale markets - made to implement article 10 of EU Regulation 943/2019 - we hope that also the 0 €/MWh floor currently present on the Dispatching Market will be removed.

As previously mentioned, the Italian electricity sector is undergoing a strong transformation process towards a low-carbon energy model with maximum penetration of renewables and aimed at the decommissioning of all coal-fired power plants within 2025. We believe this evolution should also include a regulatory framework capable of addressing investment choices that can guarantee safety and adequacy of the electricity system during the transition phase.

We take into great consideration the analysis made by the Italian Authorities on the structural problems of the energy only electricity markets to guarantee the right capacity to achieve the pre-established adequacy targets (e.g. 3h LOLE). Although we believe the aforementioned reforms aimed at improving the wholesale electricity market might facilitate the emergence of better price signals, some bespoke measures are deemed necessary in order to guarantee adequacy in the short-medium term, such as capacity remuneration mechanisms that – if correctly articulated – can support investment choices and the maintenance of the capacity required to guarantee service adequacy.



Due to the adequacy issues of the electricity system highlighted by the competent authorities, Italy has decided to introduce a capacity remuneration mechanism aimed at remunerating the capacity to guarantee the adequacy of the system through competitive and market selection procedures:

- support efficiency of the existing plants necessary to guarantee adequacy. These plants, designed to ensure a baseload production, are now displaced by non-programmable renewable sources, thus they have been obliged to operate in a different manner by offering:
 - energy for the supply of residual load, which has a different trend curve from that
 of overall need, especially in days with a photovoltaic production, strong variations
 during the day and an increased speed at night due to the contemporary increase
 of need and reduced photovoltaic production, which implies a rapid increase of
 production coming from conventional sources;
 - o flexibility services, fundamental to support penetration of non-programmable renewables into the system, solve bottlenecks and support grid frequency and tension;
- stimulate suitable investments on new capacity. In its 2020 Development Plan, Terna stated they would like 5.4 GW of gas-fired programmable and flexible power plants to replace the current ageing coal-fired plants.

Following the approval of the co-called DG Competition, Italy established – via Decree of the Ministry of Economic Development (MiSE) of 28 June 2019 – a Capacity Market (Mercato della Capacità - MC). November 2019 saw the first two competitive procedures to be delivered by 2022 and 2023 for the current capacity and for multiyear delivery (15 years) between 2022 and 2023 for new capacity.

The coming into force of EU Regulation 2019/943 on the domestic market of electricity has led to this new confrontation with DG Energy, now called to give its opinion on the Italian Implementation Plan.

In order to support the necessary transition of the Italian electricity system, we believe that Combined Gas Cycle Turbines (CCGT) with flexible characteristics capable of supplying flexibility services in real time can be the key to support the growing penetration of non-programmable renewables and the adequacy of the electricity system.

Therefore, a suitable and specific remuneration is necessary to guarantee these plants



remain in operation as well as the development of new ones to replace coal-fired power plants with new programmable capacities. Thus, we underline the importance of giving long-term price signals to the existing CCGTs. If this does not occur, we believe there could be the risk of a turnover in terms of decommissioning and new capacities, which could lead in turn to the risk of a generation inadequacy and general instability of the market.

The importance of these plants was evident during the Covid-19 health emergency, when the suddenly reduced energy need was fulfilled by a greater production coming from non-programmable renewables linked to the outcome of the day ahead market, with impacts on the grid that Terna was able to manage with the help of flexible resources dispatched downstream of the dispatching market.

Therefore, we are particularly **focused on the Capacity Market** and hope there will be developments that will also take into account:

- the evolution of foreign participation different from the current mechanism, which foresees a financial participation only from traders authorised to work on the day-ahead market without any specific capacity requirement;
- The importance of flexible resources and the need of a suitable market remuneration for them;
- The need of greater flexibility on the market segment following the first auctions to minimize the risks linked to the grantee and increase liquidity in the different market phases.

Moreover, we would like to emphasize the need of a greater coordination amongst neighbouring Member States in terms of cooperation and harmonization in order to strengthen the single energy market.

Finally, in order to review and continuously improve the design of the Capacity Market, we agree with the opening of the Italian institution, who "are strongly committed to continuously improving the capacity market design on the basis of monitoring its effects and the results of the planned market reforms, to ensure it meets better its objectives".

Yours sincerely,





Prot. n. 1608/2020/AR/e 11/08/2020

Consultation on Italian market reform plan

General considerations

UTILITALIA is an association of nearly 500 energy, water and environmental utilities. It operates towards European and Italian institutions or stakeholders in order to promote the requirements of the associated members.

The Italian power market reliability and stability is a very significant topic for the association, representing several important generation companies, including the second power generation utility for capacity installed in Italy. UTILITALIA is actively involved in fostering all the necessary regulatory interventions to assure adequacy, security and efficiency to the power market, in which programmable generation plants are required to play a key role in the energy transition, leading to the ambitious targets of the National Energy and Climate Plan (NECP) regarding CO2 emissions reduction and RES development.

UTILITALIA believes that capacity market is an essential remedy to achieve the mentioned goals. For this reason, a positive Commission's opinion on the Italian Implementation Plan put under public consultation would be considered as a basic step to rapidly proceed with further auctions and schedule new capacity contracts, in order to keep the Italian power market adequate and secure over the next years.

The following considerations are aligned to the above mentioned general concepts.

Specific considerations

Utilitalia agrees on the fact that Italian power system is interested by relevant criticalities. In the last years, about 15 GW of traditional thermal capacity have been dismissed. In addition to this, nearly 3 GW of plants, even not yet decommissioned, are operationally unavailable. The parallel supply and demand volatility increase suggests that, even in the current scenario, the Italian electric system is not provided with the necessary resources to cover peak demand, system adequacy and security of supply.

Furthermore, higher challenges are expected in the future times, due to the achievement of the ambitious NECP targets, especially the coal generation plants phase-out by 2025 (approximately 7 GW) and the RES growth (around +32 GW of PV, +9 GW of wind) by 2030. In a similar context, dominated by RES capacity, the equivalent full load hours of programmable power plants is expected to strongly decrease and, without a capacity remuneration mechanism, it would substantially take these plants out of the market, although their support to the RES development is vital for the system. Moreover, the import contribution to the adequacy margin would grow, exposing the Country to potential issues in case of relative scarcity.

For the reasons above, without a proactive approach of the market regulation by which ensuring a stable capacity remuneration mechanism, the electricity system would face very severe



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operational conditions. This trend is well described by the Implementation Plan, also referring to the analysis offered by the TSO Terna in the Italian Adequacy Report 2019 about the LOLE estimation hours and consequent potentially not supplied energy.

Another relevant criticality correctly underlined by the Plan is about the growing unpredictability of profits and prices that a power market with an increasing contribution from RES would offer. In a similar scenario, the number and the frequency of scarcity hours would be high, with the consequent impossibility to cover fixed costs of programmable power plants and their probable closure. In fact, investors, whose decisions are normally led by long-term strategies and project financing schemes, are unwilling to take final choices in case of low spot price and reduced operating hours.

We agree that electricity system needs strategic solutions to facilitate investments in new adequacy resources to compensate the ongoing reduction of the available capacity. The NECP itself correctly associates the implementation of new market remedies to the actual possibility of reaching the main systemic targets. The Italian capacity market, launched in late 2019, already in line with the general objectives of the NECP in terms of decarbonisation and non-programmable RES growth, is a first step to safeguard the contribution of programmable power plants to the energy transition.

As a result, the capacity market auctions with delivery 2022 and 2023 have already promoted the development of new, more efficient and sustainable plants, including renewable capacity, for about 5,8 GW. The future auctions, covering the years as of 2024, are for this reason as much as essential to offer a certain remuneration to capacity owners in exchange for the uncertain earnings from spot markets.

Without a capacity remuneration mechanism, the market alone would not be able to assure the correct level of available capacity needed and neither to offer the right price signals to the investors. Consequently, would be extremely difficult for market operators to plan investments in new and more efficient generation capacity, although the system needs them to keep the necessary levels of adequacy and security.

In conclusion, UTILITALIA believes that the market reforms described by the Plan will be crucial to support the whole system transition in order to achieve the NECP targets and guarantee long term adequacy. In particular, capacity market as launched in 2019 will be indispensable for the power market integrity of the next years, in order to provide the right price signals to the market operators and enable investments in new, efficient and flexible capacity, offering adequacy and security to the system. The two auctions held with delivery period in 2022 and 2023 succeeded in reaching this target, therefore this regulatory scheme should be confirmed in order to deal with the future challenges.



Contribution to the consultation on the Italian market reform plan

The European Commission opened a public consultation on the Italian market reform plan, based on a consultation document (CD) called the *Italian implementation plan*.

DR4EU is an informal network of companies¹ involved in developing demand side response in more than 20 countries in Europe and beyond.

DR4EU is happy to provide a contribution focusing on demand response (DR) participation in the Italian market, as is now, and on the evolutions expected in the short term.

This contribution will be based both on the current situation in Italy, and on the provisions on the Clean energy package (CEP) regarding DR and aggregation.

Currently, DR participation in the Italian market is not allowed but in a pilot framework

According to the CEP, and particularly to the directive on electricity markets (EMD):

- any consumer should be allowed to choose a demand response aggregator independently from their supply contract (as per art.13);
- DR, including via aggregators, should be allowed to participate in all electricity markets (as per article 17-1) as well as to provide ancillary services to grid operators (art.17-2).

As of now, in Italy, this is altogether impossible for almost all consumers and for all markets. To our knowledge, the only possibility for DR to participate is in a pilot framework called UVAM, whereby the TSO (Terna) would use DR for balancing. As mentioned in the CD, this was approved² by the NRA (Arera) in early 2017 and later modified in 2017 and 2018. However, this remains a pilot project, launched on a temporary basis, with various technical and regulatory limitations, and only covering a small market segment of ancillary services.

The full participation of DR to all electricity markets is not even mentioned as a goal, and a fortiori no time frame is set. And indeed, to our knowledge, no proposition has been published, and no practical or preparatory work is going on nor considered by Italy so far.

The CD suggests (p.23 onwards) that "enabling demand side response" is achieved in Italy by rolling out smart meters, but this only covers so-called implicit demand response, i.e. change in demand triggered by price signals initiated by the electricity supplier. This does not allow explicit DR, i.e. bidding DR in the markets (except for UVAM pilot), and *a fortiori* it does not allow consumers to choose an aggregator to do so, independently from their supply contract.

DR4EU considers that removing such barriers is a necessary step to streamline the Italian market and in particular, to avoid at least some of the adequacy concerns in Italy.

¹ Entities most involved regarding this contribution are: Cathode, Energy Pool, Sympower and Voltalis.

² Deliberazione 25 maggio 2017 later modified, cf. https://www.arera.it/allegati/docs/17/300-17ti.pdf

Recommendation: open markets to DR alongside generation, without any discrimination, including both electricity markets and ancillary services, in parallel with any capacity mechanism

The CEP requires Italy (as all Member States) to foster and allow the participation of DR to all electricity markets and ancillary services, including via aggregation. The Italian market reform plan should include provisions to achieve this goal, and a clear process and schedule to do so.

It should be emphasized that accepting DR participation in the capacity market (only) would not be sufficient: it is essential that DR is *also* allowed to provide an alternative to generation in all electricity wholesale markets, as mentioned above. Investment in either side, production or generation, will thus be fostered on a level playing field, so that resource adequacy can be achieved at smallest costs, and with fewer distortions to all markets.

Besides, should Italy still face adequacy issues and plan to keep in place a Capacity Market, this should be actually extended to demand side resources, meaning that:

- demand side resources should be allowed to bid in the capacity market without discrimination versus generation, and without additional requirements that would not be justified or proportionate; in particular:
 - demand side aggregated units should be accepted as an alternative to production units, as entities allowed to bid in the capacity market at aggregated level;
 - regulatory barriers should be removed, such as those imposed in apparently 'technical' terms which are in fact a huge hurdle for the participation of demand side, especially from numerous small consumers (e.g. Annex 2 of the Regulation for Capacity Market Units³): the only relevant requirements should be specified at aggregated level, in terms of service delivered and not at individual level for each consumer site.
- new demand side aggregated units (UCMC) should be allowed to enter into long term capacity contracts (e.g. 15-year contract, as proposed for new production plants) so as to foster investments in the most cost-effective resources.

DR4EU remains available for any additional information regarding DR that may be useful to the Commission to assess the Italian market reform plan and capacity market.

* *

remain confidential know how of the consumers and aggregators.

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³ Ref. https://www.terna.it/en/electric-system/capacity-market/regulations. According to annex 2, the Applicant should provide Terna *for each consumtion site/withdrawal point* the available power, the modulable power, technical documentation of each equipment and wiring diagram, etc. and, on top of this, when an aggregation platform is used, description of hardware, software and logic - all elements which are not necessary and should

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EFET response to DG ENER on Italian market reform plan

EFET response – 31 July 2020

The European Federation of Energy Traders (EFET*) welcomes the opportunity to provide our comments to DG ENER consultation on the Italian Implementation Plan for the requirements set in article 20 of Regulation 2019/943 on the Internal Electricity Market (IEM).

Markets can provide the right amount and type of generation capacity to meet demands from users, if they are well designed, free of regulatory distortions and sufficiently connected to the EU electricity network. We acknowledge that capacity mechanisms can be introduced to address residual adequacy problems that cannot be solved by removing distortions.

We recall our core belief: capacity mechanisms, where implemented, should be carefully designed in order not to interfere with the free formation of price signals in the energy markets. With this respect, EFET recommends the Italian and EU institutions to design a capacity mechanism which reacts upon undistorted price signals and allows the most efficient solution to be provided by the market.

The Italian Implementation Plan consultation document is a good overview of the measures that Italy is planning to adopt in order to eliminate market distortions, also in light of Article 20.3 of Regulation (EU) 2019/943 - which will contribute to reducing adequacy issues in the medium to long term and to integrating renewable energy sources into the system. The priorities should be:

- Promote European market integration and ensuring cost-efficient and market-based procurement of balancing and ancillary services;
- · Removing price caps;
- Increasing interconnection and internal grid capacity;
- Removing regulated prices.

Promote European market integration and ensuring cost-efficient and market-based procurement of balancing and ancillary services

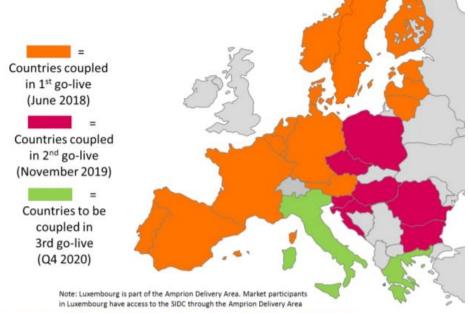
The integration of the Italian electricity market with the Single Intra-Day Coupling (SIDC) is a key component for completing the European Internal Energy Market. With the rising share of intermittent generation in the European generation mix, connecting intraday markets through cross-border trading is an increasingly important tool for market parties to balance their positions closer to real time and across borders.

^{*} The European Federation of Energy Traders (EFET) promotes and facilitates European energy trading in open, transparent and liquid wholesale markets, unhindered by national borders or other undue obstacles. We build trust in power and gas markets across Europe, so that they may underpin a sustainable and secure energy supply and enable the transition to a carbon neutral economy. EFET currently represents more than 100 energy trading companies, active in over 27 European countries. For more information: www.efet.org



First and foremost, we would like to recall that the CACM Regulation's main priority for intraday is to ensure efficient, non-discriminatory access to cross-zonal capacity through implicit continuous trading. Hence, the completion of the XBID project and the participation of all Italian borders to it should be considered the priority for the region. The continuous intraday market – as defined as the target model in CACM – is best suited to deliver a real-time price signal and allow market participants to continuously optimise the dispatch of their production and consumptions units. This simplifies market entry for new competitors and it minimises the volume and cost of TSO balancing activity. A liquid continuous intraday market will become increasingly vital, as intermittency becomes more important in European electricity systems¹.

We believe that Italy should bring up to speed its intraday market reform as it is already among the last European countries to join the cross-border intraday project. The project has been delayed in Italy several times. Only this year it has been postponed from June 2020 to Q4 2020 and now to Q1 2021. Therefore, we strongly recommend the Italian market to join the SIDC by Q1 2021 at the latest as Italy and Greece are the only two EU countries not coupled as of July 2020. We encourage Italian institutions, to take the lead, involve stakeholders in a coordinated fashion and have the detailed provisions by the second half of 2020 for the transitory period, including the details on the IT infrastructure built for XBID (LTS and Nomination Platform). Italy should clarify the milestone needed to reach the target design. It is essential to make the technical specifications of the platforms (both LTS and Nomination Platform) available to market participants as soon as possible and at least 6 months before the go-live date of Q1 2021 to settle all necessary internal procedures. We encourage the European institutions to watch over the process.



Source: ENTSO-E 2020, https://www.entsoe.eu/network_codes/cacm/implementation/sidc/

The Italian balancing reform (TIDE²) is another crucial aspect to guarantee for European market integration. We believe that the target of introducing a 15-minutes imbalance settlement period (ISP) set by the European Balancing Guidelines (EBGL) by January 2021 is not analysed in

¹ See EFET paper <u>Towards an efficient intraday market design in electricity</u>

² See also EFET response to ARERA consultation on the electricity market reform (TIDE)



detail in the consultation paper. A properly designed imbalance regime is key to remove market distortions and we expected greater analysis in the consultation document.

Given the difficulties of joining XBID and introduce an Intraday Market to H-1 (since 2010), we have reason to believe that there a high risk that the 15mins ISP might be delayed. Also, we do not see how it would fit SIDC starting in Q1 2021 and introducing the 15mins ISP, including the consequences on the evolution for ID products. Moreover, it is not clear if portfolio bidding might be available from January 2021 or already when Italy might join SIDC Q1 2021. The reforms should start on the same date or even before for portfolio bidding in order to give market players enough time to test their systems.

In addition, continuous cross-border intraday trading with coupling products with lower granularity, e.g. 15-minute, would make the market design even better suited for RES generation. Technologies and services such as demand-response and storage, which are particularly suited to absorb the effects of RES generation intermittency, also benefit from continuous trading and shorter granularity. Safeguarding and improving the efficiency of continuous trading would contribute to the development of these activities.

In general, we recommend a more detailed timeline/roadmap with a clear milestones and accountable parties to develop the proposals more in detail. The timeline provided in the consultation is too general and it makes very difficult for market players to estimate regulatory risk when they enter e.g. balancing contracts for a period between Jan-2020 and Dec-2022.

We ask for greater clarification in the BSP/BRP relationship and whether the single price will be extended to the BRP.

Removing price caps

We would like to also make reference to articles 20(2) and 20(3) of Electricity Regulation 2019/943, where Member States also have a responsibility to do away with restrictions to wholesale price formation. Some of these restrictions may stem from the very NRAs that are expected to do away with them as per article 10(2). For example, we refer to provisions regarding harmonised clearing and bidding price limits at European level, and how non-harmonised limits may remain in certain European markets.

We stated several times that any measures restricting free price formation from the energy wholesale power and balancing market should be avoided. Italian wholesale electricity prices still face unjustified restrictions (€/Mwh 0 - 3.000). In Italy, such limitations persist today on the day-ahead, intraday and balancing market. These floors and caps should have been removed by the 1st of January 2020 as stated in art.10 of EU Regulation 2019/943:

- 1. There shall be neither a maximum nor a minimum limit to the wholesale electricity price. This provision shall apply, inter alia, to bidding and clearing in all timeframes and shall include balancing energy and imbalance prices, without prejudice to the technical price limits which may be applied in the balancing timeframe and in the day-ahead and intraday timeframes in accordance with paragraph
- 2. NEMOs may apply harmonised limits on maximum and minimum clearing prices for dayahead and intraday timeframes. Those limits shall be sufficiently high so as not to unnecessarily restrict trade, shall be harmonised for the internal market and shall take into account the maximum value of lost load. NEMOs shall implement a transparent mechanism to adjust automatically the technical bidding limits in due time in the event



that the set limits are expected to be reached. The adjusted higher limits shall remain applicable until further increases under that mechanism are required.

We believe that the integration of electricity markets at regional level should be the minimum target that Italy should pursue in cooperation with neighbouring NRAs as well as TSOs and Power Exchanges. The Italian electricity market has indeed some peculiarities, most of all the regional configuration with a system price and the central dispatch system. We truly believe that in order to achieve an effective integration with other markets in Europe, it is time to overcome those specificities and annexed limitations. In particular, regarding the dispatching system we believe that with the increasing penetration of decentralised renewable generation, central dispatch shall be used only when dealing with specific local network constraints, since it significantly affects the freedom of the market participants.

We would welcome a swift orderly transition from central dispatch to self-dispatch, with the condition that the future grid development, as anticipated in Terna's development plan, will truly solve the congestion issues that still impact the internal network.

In this respect, investment projects that favour price convergence between zones should be prioritised and internal zones mergers should be promoted when possible. We regret, in this sense, the addition of the zone "Calabria" from 2021. Authorisations procedures for the necessary infrastructure interventions, should be accelerated, as investments are necessary to overcome some bottlenecks and ultimately the PUN. In fact, the current splitting of the Italian market in multiple bidding zones, together with the existence of a system price like PUN, represents a peculiarity compared to most other European markets.

We understand that this might be a legislative decision, however, in view of the growing integration of markets in Europe, mainly thanks to the day-ahead market coupling and cross border intraday project (SIDC) and considering the constraints that the integration of the PUN calculation in the EUPHEMIA algorithm represent, the future elimination of PUN may be welcome. Overall, we call on a swift transition to self-dispatch and internal zones mergers accompanied by the introduction of portfolio bidding, which is the standard solution in most of the EU power markets.

In order to assess the impact of the calculation of imbalance prices based on nodal balancing prices, more information and explanation about what meant by this concept is needed. What would be the actual nodal configuration used for computations? What is the evidence available insofar as to the geographical/service/perimeter configuration of such nodes? Simulated price data for at least 5 years should be made available following the work done by Terna on *Delibera* 800/2016/R/eel.

Preliminarily, we believe that an imbalance price set at node level increases the balancing risk. It may also give different incentive to market participants to be balanced and possibly to trade in the ID market. We therefore approve Italy's choice to adopt the "single pricing" criteria for the imbalance calculation of any kind of unit as the preferred methodology stated in the EBGL. In fact, it is the only method which respect the principle of cost reflectivity. Maintaining the "dual pricing" criteria only for the mandatory authorized units (*unità obbligatoriamente abilitate*) would be discriminatory for the market.



Increasing interconnection and internal grid capacity

Italy is well placed to reaching its interconnection targets as referred in point (d) of Article 4 of Regulation (EU) 2018/1999.

We highlight that the interconnection project expected to be up and running by 2020 on the French border through the 3-P HVDC "Piossasco-Grand'lle" intervention has been delayed to mid-2021. Therefore, we ask for an update on such project in the National Development Plan (NDP) and any other delay that may arise.

Greater transparency on electrical curtailments, especially on Italian northern borders should be addressed.

Removing regulated prices for the retail market

According to Decree Law no. 162/2019 (so called "Milleproroghe"), converted into Law no. 8/2020, such reference prices will not be available as of 1st January 2021 for small enterprises and as of 1st January 2022 for households and microenterprises.

EFET welcomes the full liberalization of the Italian market that will enable all customers to freely choose their supplier and will ensure the establishment of a level playing field among all market participants at all market levels (B2B and B2C) in the Italian market.

Conclusion

We understand that an electricity market based on spot prices may not be capable of providing an adequate price signal to investments in new production capacity if distortions are present, which by their nature have time horizons related to construction times and the return on long-term investments. In this market picture it becomes extremely difficult for market operators to plan investments in new and efficient generation capacity.

Efet hopes there will be developments in the capacity market scheme that will also take into account the evolution of foreign participation different from the current mechanism, which foresees a financial participation only from traders authorised to work on the day-ahead market without any specific "capacity" requirement³.

As far as cross-border participation to CRMs is concerned, we insist on two fundamental principles, namely:

- Effective direct participation of foreign asset owners/operators generation, demandresponse, storage – to CRMs, with appropriate incentives and/or obligations on TSOs, where this effective participation depends on them;
- Equal treatment of foreign and domestic capacities contributing to a CRM, with an attention to the specific rights and obligations of capacity providers in the CRM and, where relevant, related to energy market functioning.

³ See <u>EFET response to the ENTSO-E consultation on methodologies for cross-border participation to capacity mechanisms</u>



The measures and market reforms put in place across the entire value chain in Italy and described in the Italian market reform plan can surely help the transition phase to a full decarbonization of the electricity system. However, these measures risk being not sufficient to mobilize the right level of investment to preserve adequacy level in the short/medium term.

Given all the above, we believe that a not distortive and well-design Capacity Market could be a measure to support the existing plants to guarantee adequacy and stimulate suitable investments on new capacities.

Yet, we share the Commission's view that markets can provide the right amount and type of generation capacity to meet demands from users, if they are well designed, free of regulatory distortions and sufficiently connected to the EU electricity network.

Regulatory and Antitrust Italy



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Oggetto: Enel's feedback to Italian Implementation Plan

Following the launch on the 1st July of a consultation on electricity market reforms in Italy by the European Commission, Enel submits its view on the document sent by Italy on the 25 h June.

As explained in the Plan submitted by the Italian Authorities, in the last years, Italy has experienced an important evolution of the electricity system driven by a significant development of variable energy sources accompanied by a contextual substantial reduction in installed thermal programmable capacity. This kind of evolution has brought to severe system adequacy concerns. In particular, critical situations characterized by shortage of resources at demand peak had already occurred and others could take place. In order to preserve the stability and quality of service, avoiding that frequent distributed power cuts could become a permanent undesired feature of the Italian electricity system, a mechanism able to give right signals to invest and/or divest in capacity has to be necessarily put in place.

In fact, the lack of long term price signals in the energy and ancillary services spot markets precludes the possibility of facing the investments in new capacity and in existing plants (in order to keep them in a state of efficiency) even if the system requires these assets to keep the desired levels of adequacy and quality of service.

The measures and market reforms put in place across the entire value chain in Italy and described in the Implementation Plan can surely help the transition phase to a full decarbonization of the electricity system. However, these measures risk being not sufficient to mobilize the right level of investment to preserve adequacy level in the short/medium term.

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In fact, the fast penetration of variable non-programmable renewable source brings a high volatility in the spot market price and a general decrease of the average energy price. These events eventually increase the risk perceived by companies. The consequence is that the latter will not invest in new capacity and in the maintenance of the existing power plants asking for their definitive closure.

Moreover, the National Energy and Climate Plan envisages a quick phase-out of coal-fired plans by 2025. This eventually implies an even faster decrease of adequacy margins and security level for the entire system.

In this situation, we agree with the view emerging from the Plan and, in particular, with the assumption that even the hypothetical increase of prices due to capacity inadequacy could be not enough to bring new investments in the short-medium term. In fact, the price increase should be structural and somehow predictable in order to push investors to put their financial resource at risk.

Given all the above, we strongly believe that the Capacity Market must continue to be in place in the next years in order to deliver the right long-term price signals essential to assure security of supply.

The first two auctions for the delivery years 2022-23 represented a first implementation of the mechanism and gave the right price signals to the entire system: new investments in gas-fired plants, storages and renewable sources are about to be carried out.

On this way and mostly in view of the accelerated coal phase-out by 2025 for approximately 7 GW, it is fundamental to give stability to long-term price signals allowing for new auctions of the Italian Capacity Market for the delivery years beyond 2023. These second wave of auctions has to be the opportunity to detail, without prejudice to the overall well-established design of the mechanism, specific provisions in order to encourage a more enlarged participation of new flexible resources such as Demand Response.

Best regards.





Remarks of EP Produzione S.p.A. to the Italian Implementation Plan according to the Article 20 of Regulation (EU) 2019/943 of 5 June 2019 on the internal market for electricity

EP Produzione appreciates the possibility offered by the European Commission, through this consultation, to be able to provide its view on the Italian electricity market reform plan.

In fact, our company has committed, and will engage in the future, important economic resources in Italy for the development of new generation capacity and for the efficient maintenance of the existing one. As known, the focus of our group is to participate actively and contribute to energy transformation while carefully balancing the dimensions of security of supply, social aspects, regional aspects, and environmental protection. In decarbonization, we strive to seek real solutions, truly decommissioning the most carbon-intensive sources while investing and actively converting to low-carbon or to fully renewable sources.

Therefore, the following elements are fundamental from our point of view: the stability of the regulatory framework, a long-term vision, and the presence of price signals necessary for generation capacity investment and divestment decisions.

The Italian Implementation plan, from this point of view, represents an expected and appreciated response, providing at the same time an evolutionary vision of the electricity market and the "temporary" measures to ensure the sustainability of this evolution. The Capacity Market, in this context, represents the main tool to face the current transition process by compensating for the distortions and failures of the current spot market, with particular reference to the absence of correct long-term price signals to invest in new generation capacity to guarantee the adequacy of the Italian electricity system along the energy transition path indicated by the Italian NECP.

COMMENTS TO SPECIFIC TOPICS/PARAGRAPHS

- 1. **Overview of the resource adequacy concerns identified in Italy** We completely agree with the analysis reported in this paragraph that shows:
 - how the transition process towards a decarbonised economy, in order to be sustainable, requires the presence of a certain level of thermal programmable capacity, which guarantees the required levels of adequacy margins. However, the current market



structure, together with the reduction in demand and the development of incentivized generation with dispatching priority, together with the phase-out of coal power plants planned by 2025, has created and increased a real missing money problem for this thermoelectric generation and the absence of price signals that should trigger private investments to support the necessary programmable capacity;

• the importance of a measure such as the capacity market to make up for the shortcomings of the current market architecture in this transition phase.

2. The Electricity Market in Italy/Capacity Market No comments.

- 3. Relevant market failures The paragraph is agreed and appreciated since it clearly establishes, on the basis of actual objective data, how the adequacy level of the Italian electricity system has significantly decreased in the last few years. This situation threatens to evolve dangerously in the coming years towards a condition of stable system inadequacy. Although the level of inadequacy is clearly reduced and under pressure, the architecture of the market does not provide those price signals which should act as drivers for investors.
- 4. Implementation plan of the market reforms concerning Article 20(3) of Regulation 2019/943 In the following, our comments on some of the proposed measures:
 - Removing price caps (4.1) In general, we think that the price caps removal alone will not be able to solve the inadequacy risk: as private investors, we think it is highly unlikely that price signals provided by the energy market could be clear and constant enough to convince investors to commit huge amounts of capital in new generation capacity. More specifically, in our opinion this measure should be the very last step of all the reform. In particular, negative prices should only be allowed after the completion of the dispatching and imbalance reform. Furthermore, it is important that the removal of the floor affects the dispatching services market as well as the energy markets. In fact, it is important that even the market or price signals are free from constraints such as CAP and Floor which are too restrictive.
 - Increasing interconnection and internal grid capacity (4.3) We agree, but we believe that such interventions (in particular, those relating to internal grid) should be always subject to sound and reliable cost-benefit analysis. In fact, in some cases, intervention on the line may be more expensive for the system than converting existing resources (such as the transformation of decommissioned plants into synchronous compensators to be used for voltage regulation).
 - Enabling self-generation, energy storage, demand side measures (also with a massive smart meter replacement and development) and energy efficiency (4.4) With regard to



storages, it is important that the development of these systems is entrusted to private subjects and not to TERNA. The TSO, as unique buyer of the related services, should manage the procedures for providing these services. These tenders should be competitive and managed in total transparency.

5. Conclusions – We agree with the conclusions expressed in the document, with particular refer to what reported in points 116, 118 and 119: the market reforms currently being implemented, under implementation or at study in Italy, with some corrections and improvements that we have proposed and that we will continue to propose in the appropriate forums and local consultations, are suitable for the removal of the identified regulatory distortions and market failures that may have caused or contributed to the adequacy concern.

Nevertheless, as clearly indicated in the implementation plan, we strongly agree on the fact that the identified measures are not enough to solve all the identified market failures and allow the system to reach and maintain the required adequacy margins during the energy transition and the coal phase-out. For the adequacy risk to be solved, a capacity market is needed. Hence, in order to prevent that the aforementioned criticalities will imply a stop of the investments needed to support the transition towards a decarbonised system, it will be necessary to maintain the Capacity Market in force.



Falck Renewables S.p.A., listed on the Italian stock exchange in the STAR segment ("FKR.MI") and included in the FTSE Italia Mid Cap Index, develops, designs, builds and manages power production plants from renewable sources, with an installed capacity of 1,133 MW (1,096.3 MW according to the IFRS 11 reclassification) in the United Kingdom, Italy, United States, Spain, France, Norway and Sweden, using wind power, solar power, WtE and biomass technologies. The Group is a global player in the renewable energy technical advisory and asset management services business, through its wholly owned subsidiary Vector Cuatro, providing asset management services to clients accounting for approximately 2,800 MW of installed capacity and with experience in more than 40 countries.

Consultation on Italian market reform plan

Comments by Falck Renewables

7 August 2020

General comments

Falck Renewables welcomes the start of an overall reform process of the Italian dispatching regulation, aimed at ensuring that the system maintains stable and efficient conditions in a context of continuous evolution. Such reform will enable active participation and supply of the necessary resources for balancing the electricity grid to all potential eligible parties.

Nevertheless, we believe that the reform proposals planned by Italy on the participation of the distributed generation and renewable sources to the Ancillary Services Market are not sufficient to mobilise the needed investments to preserve system adequacy level in the near future. We therefore look forward to further developments by the relevant national institutions on these issues.

If the goal to be achieved is the full integration of renewables, a more ambitious market design is needed. We insist, therefore, on the need for new infrastructure investments to enable such integration.

We further highlight that the current structure of the European energy system, designed at the early stages of liberalization where fossil fuels used to dominate electricity generation, is the source of the so-called "price cannibalization" effect, harming renewables, thermal generation and, ultimately, final consumers. The recent changes to the market design included in the Clean Energy Package try to eliminate all differences between renewables and hydrocarbon-based generation and sets prices on the marginal cost of fuel plus a margin for thermal plants. This has several side effects which are detrimental to decarbonization and creates a vicious price spiral, meaning that with greater renewable energy penetration, wholesale electricity prices decrease to around zero.

Price gets unsustainably low also for thermal plants, which are necessary to provide balancing services and capacity. In response to this situation, national regulators put forward additional



incentives – such as "Capacity Payments" or "Strategic Reserve" – necessary to limit the shortfalls of the current market design. These additional incentives, paid by final consumers, do not solve the structural problem and create further distortions in the market.

Falck strongly believe that renewable energy technologies and fossil fuels should, therefore, be traded on distinct market segments where price formation mechanism may reflect the underlying cost structure related to the specific technology.

Specific comments

Removal of the bidding price floor

Falck welcomes the **removal of the bidding price floor** that will be introduced in both dayahead (MGP) and intraday (MI) markets at the end of 2020, allowing the possibility of bidding at negative prices on the national electricity market. However, we consider that such review might lead to a temporary suspension of payments during hours with negative prices and the subsequent recovery at the end of the plant's technical lifetime, in line with the model already used for wind curtailment (*Mancata Produzione Eolica - MPE*).

Moreover, periods with bidding at negative prices, where electricity production is likely to be high, may not coincide with the end of the incentive period. Falck, therefore, proposes that the incentive is recovered not at the end of the incentive period, as with wind curtailment, but on an annual basis (year +1 compared to the reference year), also applying a coefficient to adapt such extension to the above conditions.

We further believe that negative prices should also be introduced on the Ancillary Services Market (named MSD) in the longer term. This provision would modify an asymmetric market design which currently foresees the removal of the bidding price floor on commercial markets only (MGP and MI).

Cost-efficient and market-based procurement of ancillary services

The opening of the Ancillary Services Market to new resources, such as non-programmable renewable sources and distributed energy resources, is deemed necessary to allow broader participation of operators to the market, thus, ensuring the operation of the network with higher levels of RES penetration.

Falck supports the streamlining of ancillary services contained in the oncoming reform of dispatching rules, commonly known as TIDE reform, particularly with regards to primary reserve and voltage regulation services. We believe that wider regulation and distinction of these services, taking into account their individual peculiarities although in a perspective of technological neutrality, may facilitate the monitoring of their development and, where necessary, the adoption of appropriate corrective measures.



Falck also seeks to achieve greater transparency in the ancillary services markets, in a perspective of increased harmonization and integration with other EU wholesale markets. According to the EU Guideline on electricity balancing (BAL), the national TSO must publish information related to the system balance, balancing energy bids, balancing and cross-zonal capacity for balancing services to ensure transparency and guidance to operators' choice. Increased transparency is therefore a necessary step to gain insight into market developments and enable operators to direct their investments accordingly.

Capacity Market

Following the first two Capacity Market auctions with delivery in 2022 and 2023, new investments in renewable sources, storage and gas-fired plants are projected. In order to guarantee security of supply through long-term price signals, Falck strongly supports the enabling of new Capacity Market auctions for delivery in 2024 and beyond, in a perspective of real technological neutrality. Nevertheless, a **revision** of the mechanism is necessary to make it **fully accessible to renewable sources and storage systems**, with a view to preserving the continued operation and availability of existing and new plants that provide resource adequacy and flexibility of the electricity system.

Regulation 2019/943

Public Consultation on the Italian National Implementation Plan

Eni opinion

With reference to the public consultation on the Implementation Plan submitted by Italy, Eni welcomes the opportunity to further comment on the state – in terms of system adequacy - of the Italian power system and support the maintenance of the current capacity remuneration mechanism, based on market-wide reliability option scheme, as approved by the European Commission in 2018 and 2019.

Given the ambitious targets set by the Italian NCEP for the decarbonization of the power sector (which entail a 32% share of RES-based power generation by 2030 and the complete phase-out of coal generation by 2025) and the on-going decommissioning process of older and inefficient thermal plants, the current capacity market has proven to be a fundamental tool in helping the system evolve in such direction. The results of the auctions run for the years 2022 and 2023 (both auctions selected, at the respective price-cap, an amount of capacity well below the required targets set by the TSO – following a reliability standard of 3/hours/year of LOLE – and supported the new build of over 5,8 GW of capacity, including storages) clearly showed the importance of having a CRM in place, as a tool to support investment in new capacity, the maintenance of existing low-carbon assets and the complete phase-out of as much as 8 GW of coal-fired capacity.

Eni believes that, without a similar scheme, the market will not be able to provide, at least in the mid-term, the expected level of adequacy and the system would be exposed to a further worsening of its adequacy conditions, due to additional retirements and decommissioning decisions. Taking into account the RES targets mentioned above, prices would be subject to an increased volatility therefore contributing to a higher market risk for operators, . This would create pressure on dispatchable generators which would be required to operate in a shrinking number of hours and would be progressively pushed out – in economic terms – from the market with relevant consequences in terms of system security (e.g. for the maintenance of an adequate reserve margin, especially upwards) and competition in the real-time balancing or ancillary services markets.

Therefore, while being convinced that the effort put into carrying out a profound reform of the electricity market – as broadly described in the Plan – and to deliver the necessary grid infrastructures will play a role in reshaping the functioning of the market, we believe that the current market paradigm needs to be coupled with a CRM able to support the market-viability of dispatchable generation, whose role will be crucial in ensuring the adequacy of the system under ambitious decarbonization targets. Hence, we consider of utmost importance to ensure that capacity auctions can be run also for the years 2024 and beyond in order to guarantee a smooth transition towards a decarbonized – yet highly reliable – system and we call for a timely approval of the Implementation Plan and the consequent opening of the next auction phases in the Capacity Market.

Lastly, we note that the usefulness of forward procurement schemes for dispatchable capacity (i.e. capacity that provides a significant contribution to system adequacy and security) has clearly emerged during the current COVID-related contingencies. During the COVID related lockdown phase, demand was exceptionally low and prices were mostly driven by RES variable generation patterns (or, from another perspective, by the residual load pattern). This situation also demonstrated the risks of an extremely thin reserve margin (as dispatchable generation was usually pushed out of the Day-ahead economic merit order by RES generation), which required an increased TSO activity on the ancillary and balancing markets, with the consequent costs. Moreover, this kind of contingency also showed the potential unreliability — as a flexibility tool - of demand-side response assets; in the Italian experience, most of the currently contracted DSR (including, for instance, interruptibility services providers or assets contracted through independent aggregators) was not fully available during the lockdown phase, since industrial activities were not operating.

These conditions were further exacerbated when an exceptionally low demand was coupled with a higher-than-average RES output (for instance, on April 5th), that rose up to cover over 70% of the hourly demand, providing a good case-study of how a more decarbonized power system could operate. In this respect, it must be noted that the requested upward and downward balancing energy were double-than-average and were heavily reliant on gas-fired generation. In Eni's view, these evidences further support the need of the current capacity market as a tool to ensure — also in a more decarbonized prospective scenario - the correct level of system adequacy.

Comments on the "Consultation on Italian market reform plan"

First of all I would thank you for the opportunity you give us to comment the "Italian market reform plan", and then I want to underline the high quality of the "Italian Implementation Plan" (IIP) at the time it was submitted.

According to IIP Introduction: "The Commission within four months issues an opinion on whether the planned measures are sufficient to eliminate the regulatory distortions or market failures that were identified as causing or contributing to the resource adequacy concern. The opinion from the European Commission may contain an invitation to the Member States to amend their Implementation Plans." So, today, my general comment is to suggest considering that the opinion of the European Commission contains an invitation to the Member State to modify and update its implementation plan.

I think that the recent recovery measures adopted by Italian Government², finally approved by Italian Parliament³ in July 17, and the August 5 Minister of Economic Development Stefano Patuanelli comment⁴ need to be included in a new IIP update version. In fact, in my opinion, these new facts seem to me able to give an important acceleration to Italian perspectives toward the implementation of 2040 objectives of the "Integrated National Energy and Climate Plan" (PNIEC)⁵ and, for these reasons, I suggest to consider the opportunity to invite Italy to modify and update accordingly the submitted IIP.

In detail:

With regard to the recovery measures adopted I'm referring to:

Art. 119 "Incentivi per l'efficienza energetica, sisma bonus, fotovoltaico e colonnine di ricarica di veicoli elettrici" or so called "Superbonus 110%". Art. 119 introduce in years 2020 and 2021 a fiscal bonus equal to 110% of the amount spent to renovate and insulate buildings and the replacement of heat-generation systems with other more efficient and renewable systems (the micro-cogenerators include also the fuel cell technology). The sum allocated by Art. 119 is equal to 14.5 billion euros⁸.

And Art. 121 "Opzione per la cessione o per lo sconto in luogo delle detrazioni fiscali" that gives the option for the transfer or for the discount instead of tax deductions⁹.

The Italian "Integrated National Energy and Climate Plan" mentions: "continuing measures to renovate and insulate buildings (given the high potential), with average annual rates that could exceed 2% and the replacement of heat-generation systems with other more efficient and renewable systems" only in the context of the 2040 objectives 10. I think that Art. 119 and Art. 121 will be able to give a relevant boost to energy efficiency in building starting from 2020 and 2021, so I suggest considering the opportunity to invite Italy to modify and update accordingly the submitted IIP (this positive news could improve data indicated in points 90 and 91¹¹).

With regard to the Minister of Economic Development Stefano Patuanelli comment, available only in Italian language, he said: "Quando parlo di idrogeno per Taranto, non parlo di una produzione di acciaio dall'idrogeno, o quantomeno non ci si può limitare a questo perché è un elemento di prospettiva troppo lunga. Io penso che Taranto possa diventare l'hub dell'idrogeno. Idrogeno che deve essere prodotto e incentivato prevalentemente da fonte fotovoltaica che ha la produzione economicamente più vantaggiosa mentre l'Europa, sospinta dai paesi del Nord, sta puntando più sulla parte, sull'elettrolisi da impianti eolici, perché

¹ "Italian Implementation Plan" (IIP) for the requirements set in article 20 of Regulation 2019/943 of 5th June 2019 on the Internal Electricity Market (IEM), [https://ec europa eu/energy/sites/ener/files/italy market reform plan pdf], accessed August 11, 2020

[&]quot;DECRETO-LEGGE 19 maggio 2020, n. 34 Misure urgenti in materia di salute, sostegno al lavoro e all'economia, nonche' di politiche sociali connesse all'emergenza epidemiologica da COVID-19" (20G00052) (GU n 128 del 19-5-2020 - Suppl Ordinario n 21) [https://www.gazzettaufficiale.it/eli/id/2020/05/19/20G00052], accessed August 11, 2020

^{3 &}quot;LEGGE 17 luglio 2020, n. 77 Conversione in legge, con modificazioni, del decreto-legge 19 maggio 2020, n 34, recante misure urgenti in materia di salute, sostegno al lavoro e all'economia, nonche' di politiche sociali connesse all'emergenza epidemiologica da COVID-19" (20G00095) (GU n 180 del 18-7-2020 - Suppl Ordinario n 25)

 $[[]http://www \ gazzettaufficiale \ it/eli/gu/2020/07/18/180/so/25/sg/pdf], \ accessed \ August \ 11, \ 2020 \ ^4 \quad RAI \quad 2, \quad \text{``TG2} \quad \textbf{Post} \quad \textbf{del} \quad \textbf{05/08/2020} \quad - \quad \textbf{Tra} \quad \textbf{sviluppo} \quad \textbf{e} \quad \textbf{recessione''}$ Interview with Minister of Economic Development Stefano Patuanelli [http://www tg2 rai it/dl/RaiTV/programmi/media/ContentItem-a03d9d37-10ed-4d01-bb09-9a4e79983d1f-tg2 html#p=0], accessed August 11, 2020

Ministero dello Sviluppo Economico, "Pubblicato il testo definitivo del Piano Energia e Clima (PNIEC)", 21 Gennaio 2020 [https://www.mise.gov.it/index.php/it/198-notiziestampa/2040668-pniec2030], accessed August 11, 2020;

Ministry of Economic Development, Ministry of the Environment and Protection of Natural Resources and the Sea, Ministry of Infrastructure and Transport, "Integrated National Energy and Climate Plan" (PNIEC), [https://www.mise.gov.it/images/stories/documenti/it_final_necp_main_en.pdf], accessed August 11, 2020

^{6 &}quot;LEGGE 17 luglio 2020, n. 77", Art 119, cit

Ministero dello Sviluppo Economico, "Superbonus e Sismabonus 110%: i decreti attuativi", [https://www mise gov it/index php/it/incentivi/energia/superbonus-110], accessed August 11, 2020

[&]quot;Decreto Requisiti - ALLEGATO I - Massimali specifici di costo per gli interventi sottoposti a dichiarazione del fornitore o dell'installatore ai sensi dell'Allegato A Tabella l Spesa per specifica onnicomprensiva massima ammissibile della detrazione tipologia di intervento". August 6. https://www mise gov it/images/stories/normativa/Decreto_efficienza_energetica_2020rev pdf], accessed August 11, 2020 street to the street to

^{9 &}quot;LEGGE 17 luglio 2020, n. 77", Art 121, cit

¹⁰ Ministry of Economic Development, Ministry of the Environment and Protection of Natural Resources and the Sea, Ministry of Infrastructure and Transport, "Integrated National Energy and Climate Plan" (PNIEC), p 299, cit

^{11 &}quot;Italian Implementation Plan" (IIP), points 90 and 91, cit

Comments on the "Consultation on Italian market reform plan"

ovviamente nel nord dell'Europa hanno più impianti eolici perché puntano su questo. Io penso che Taranto potrà essere il primo punto di approdo dell'idrogeno e hub di distribuzione per tutta l'Europa."12

Minister Patuanelli talks about the power-to-gas hydrogen production from photovoltaic power, and the hydrogen storage. These feasible technical solutions are mentioned many times in the Italian "Integrated National Energy and Climate Plan" but, in a storage perspective, it is still not considered in the present "Italian Implementation Plan".

Finally, considering that the next new auctions and then new capacity contracts may not be concluded until Italy has received the Commission's opinion on the IIP¹⁴ and, according to our estimation based on Terna data¹⁵, large part of this new capacity will regard storage capacity, I suggest to consider the possibility that the opinion of the European Commission contains an invitation to Italy to modify and update the present IIP, including also "hydrogen power-to-gas" in the portfolio of the feasible storage technologies.

Thank you again for your consideration and your time.

¹² RAI 2, "TG2 Post del 05/08/2020 - Tra sviluppo e recessione" Interview with Minister of Economic Development Stefano Patuanelli, start at minute: 19 37 - end at minute 20 16, cit 13 Ministry of Economic Development, Ministry of the Environment and Protection of Natural Resources and the Sea, Ministry of Infrastructure and Transport, "Integrated National Energy and Climate Plan" (PNIEC). Among other: p 10, p 100, p 101, p 120, p 123, p 124, p 125 and p 153, cit

Hailian Implementation Plan" (IIP), Introduction, cit
 Terna, "Italian Adequacy Report 2019", [https://download terna it/terna/Rapporto%20Adeguatezza%20Italia%202019_8d71cb7ff32ad37 pdf], accessed August 11, 2020; Terna, "Rendiconto esiti asta capacity market 2022", [https://download.terna.it/terna/2019_12_06_Rendiconto%20EsitiAsta%202022_PUBBLICATO_8d7c06cc9f8470b.pdf], accessed "Mercato della capacità Rendiconto Terna, degli madre [https://download.terna.it/terna/Rendiconto%20EsitiAsta%202023_8d78adbacbbe508.pdf], accessed August 11, 2020

The Company asks for full discretion about contents at the present document

Sorgenia S.p.A. response

To DG ENERGY consultation on

Italian Implementation Plan



The Present document contains the remarks of the company **Sorgenia S.p.A.** regarding the consultation document of **DG ENERGY** "*Italian Implementation Plan"* (hereafter: **Consultation**).

About Sorgenia

We're the first Italian non-incumbent company in the Italian energy free market. We currently run one of the most flexible and sustainable power plant fleet accounting overall for approximately 3'200 MW of installed power. In the end-sale sector, we provide more than 300'000 clients all over Italy with the energy they need. Founded in 1999, throughout its history, Sorgenia has invested more than 3 billion euros to develop its business. Sorgenia is strongly committed in energy transition related issues and for this reason we are planning a massive expansion of our generation portfolio towards renewable resources, including wind, photovoltaic, geothermal and biomass. We make extensive use of digital technologies as we strongly believe it is an enabling factor for the energy transition. This allowed Sorgenia to be recognized as the first Digital Energy Company in Italy since 2018.

Introduction and First Remarks

As the need to decarbonize human activities is ever more urgent, the energy system is undergoing a great change in terms of how we produce and consume energy. The generation mixes over the EU Member States are changing towards more clean and sustainable technologies, which mainly involve electricity production from Renewable Energy Sources (RES). Yet these resources lower the impact on the environment, they are inherently variable and unpredictable, making the dispatch and the overall grid management more difficult for system operators. The complementary role to RES power plants, in giving relevant adequacy contribution, providing the TSO with flexibility services and maintaining the proper standards in terms of quality and security of supply, is due to gas-fired power plants.

In a free energy market, decarbonization and system operator's needs, must be accompanied by economic signals able to ensure remuneration for existing power plants and able to trigger new investments when needed. In the latter years, the Italian generation mix has suffered from decommissioning of part of its thermo-electric fleet as a result of their inability to recover costs. This in turn has brought over generation adequacy issues. In this context, all the Italian relevant authorities (NRA, TSO e Ministries) have started a broad process of reforms, recalled in the Consultation, that can be summed up in:

- Promotion of Italian energy spot markets integration with neighbouring European spot markets. In these regards, the forthcoming participation of Italy in the SIDC/XBID;
- The integration of Italian balancing markets through European balancing platforms (TERRE, PICASSO, MARI and Imbalance Netting);
- The elimination of caps and floors in the wholesale electricity markets;

- Review of national discipline regarding imbalance settlement;
- Opening the dispatching markets to new resources in order to enlarge system flexibility in a scenario of growing penetration by non-programmable renewables;
- Kick-off of pilot projects involving resources currently not necessarily qualified for the ancillary services market in compliance with decision n° 300/2017/R/eel of Italian NRA (follows also as ARERA or Authority) in order to test functioning, quality of service and the remuneration required to activate these resources.

The Consultation remarks that these measures shall help resolve the adequacy issues faced by the Italian electricity system in the long-term. In addition, the Consultation points out the necessity to set up a capacity remuneration mechanism to urgently solve the most relevant adequacy issues.

Sorgenia appreciates the actions that are being taken by the Italian authorities to address adequacy issues in the long-term, in the view of helping the decarbonization process and develop a true European integrated energy market. We acknowledge the necessity of capacity remuneration mechanism in Italy in the short-term, yet we believe the matter requires important remarks aimed at preserve competition, ensure a fair level playing field and avoid possible distortions. In line with the provisions of EU Regulation 943/2019, Sorgenia believes that capacity remuneration mechanisms must be implemented with extreme prudence, assessing exante all the possible impacts on the national and neighbouring markets as well as on operators' business.

Sorgenia's Remarks

We present here below our remarks and proposals with reference to the issues presented in the Consultation.

With reference to the above-mentioned long-term measures, we strongly suggest the elimination of the 0 €/MWh floor in Italian Ancillary Service Market. In these regards, the Italian NRA has pointed out in its DCO 322/2019/R/eel – first positionings on reform of dispatch regulation – the willing to remove caps and floor on all market segments except for the Ancillary Services Market (follows also as **ASM** or **MSD**). The ARERA believes that removing the floor on the MSD could bring the risk of introducing distortions due to the presence of incentivised renewable plants. Sorgenia understands the ARERA concerns, however we believe that a well-functioning energy market shall have an 'homogeneous' structure. Not removing the floor in the MSD could create important distortions between the energy spot markets and the ASM, driven by some operators' behaviour. Regarding the presence of incentivized plants, we believe specific measures shall be addressed to limit the possible distortions. In these regards, as an example, RES incentives

might be paid latter in time with respect market execution for those hours when negative prices form.

With reference to the adequacy assessments (national and EU - the Mid-Term Adequacy Forecast (MAF) made by ENTSO-E), we would like to point out some important remarks. As Europe suffered from the COVID-19 pandemic, many countries saw their global electricity demand collapsing below record levels. In Italy, the drop reached -24% (April 2020) compared to the 2019 levels in the same period. There are no doubts the world's perspective has changed. Future scenarios must consider possible demand collapses in view of new pandemics in order to keep track of possible shocks in advance, so we encourage adopting approaches that consider possible structural impact of extraordinary events on system adequacy. As far as the past adequacy assessments are concerned, we strongly advise the possibility to review them in light of the pandemic taking place and with reference to new possible pandemics in order to assess whether the evaluated level of new required capacity is still confident. We believe this is of first importance, as it may have important consequences on the level of competitiveness and, as a result, on revenue streams of operators.

In these regards, we recall that demand shocks in the electricity sector do not affect all the operators at the same way. In fact, those operators having portfolios mainly composed by gasfired power plants, suffer more than others from low demand conditions. In such scenarios of demand collapse, these operators profit mainly by providing flexibility services to system operators. During Italy's lockdown, it is undoubted that the seal of the Italian electricity system has been guaranteed thanks to the fundamental role carried out by the existing Combined Cycle Gas Turbine (**CCGTs**) power plants. These power plants have been strongly used by the TSO during the most intense phases of the pandemic, ensuring the respect of security constrains and quality standards.

Regarding the correlation between adequacy and flexibility we would like to raise some considerations. The Italian adequacy assessments have been made in relation to the "LOLE" indicator (Loss of Load Expectation), which measure the inability of the system to ensure the security of supply. This indicator implicitly considers through complex statistical analysis the expected availability of power plants per market zone. We know that the contribution to system adequacy is weighted by the ability of the generation technology to be available (cfr. Derating Factors). However, we believe that other factors shall be added to the assessment of 'adequacy contribution', for instance considering the necessity of having a certain generation mix (minimum thermo-electric capacity connected to the grid) and/or considering the necessity of a certain flexible capacity available. The importance of CCGTs plants in ensuring the security of supply was evident during the Covid-19 health emergency, with impacts on the grid that the TSO was able to manage only thanks to the availability of these plants. In such critical situation, CCGTs plants have provided flexibility services, supplied voltage support services and served the TSO

with implicit services such as inertia and short-circuit power to the system. We believe that these aspects shall be considered in terms of 'adequacy contribution' and long-term price signals through capacity mechanisms.

Considering the afore-mentioned effects induced by the pandemic on electricity demand and system grid management, and the past large decommissioning of thermo-electric power plants, we are concerned about mechanisms that promote installation of new capacity.

Sorgenia believes that capacity remuneration mechanisms could represent a proper instrument to promote investments by providing long-term price signals, provided correctly designed. We believe, for the reasons mentioned in this document, the importance of providing price signals prior to existing CCGTs for them to remain active and keep on providing the flexibility services they provide to the system. Otherwise, we believe there could be the risk of a turnover in terms of new entries and decommissioning of existing power plants, which could lead in turn to the risk of a generation inadequacy and give the perception of market instability (which would be in opposition with Capacity mechanisms goal).

In conclusion, in a 'systemic' perspective, we believe that CCGTs are key to support the growing penetration of non-programmable renewables and bring over a progressive decarbonization, while ensuring the respect of security and quality standards.

We hope the European institutions may supervise the process of capacity mechanism implementation in Italy, also according to a continuous improvement approach.





Consultation on Italian market reform plan, in connection with capacity market extension request

12 August 2020

REGULATION (EU) 2019/943 art 20 asks member States willing to adopt a capacity market (CM) to submit an implementation plan with a timeline for adopting measures to eliminate any identified regulatory distortions or market failures.

Together with a list of feedbacks on the implementation plan, under consultation, Italian environmental organizations WWF Italy, Greenpeace Italy and Legambiente would mainly like to highlight that the submitted plan does not depict a strategy to address the adequacy problem which has led to the request of introducing a capacity market in 2022 and 2023, in a way that is aligned to the decarbonization strategy. The implementation plan, as proposed, rather looks to be based on the belief that a capacity market (specifically tailored for thermal power plans) should be a structural characteristic of the electricity system. The current design of CM is *de facto* a mechanism which attract additional investment into the fossil fuel sector, thus increasing investment lock-in and generating contradictions with the overall energy transition EU policy.

The list of measures described in the implementation plan (development of storage, grid extension, energy efficiency, DSM, development of RES) runs in parallel to the capacity market. The measures, as presented in the plan, do not contribute in a structural manner to the system adequacy. No impact on adequacy level of all listed measures is visible in the implementation plan. The plan is uniquely a description of measures. There is not a strategy nor a timeline showing how, and when the described measures will overcome the supposed adequacy problems (linked to the economics of fossil fuel plants) leading to the request of a capacity market to be in place.

The implementation plan should contribute to offer a market design which is able to promote the energy transition while reducing system costs, whereas it looks like a mere request of extending the current capacity market, with the current structure, which is designed to uniquely purchase capacity resources from thermal power plans.

There is an evident lack of strategy to integrate other measures rather than fossil thermal power capacity, in the adequacy function, and we believe that strategy should be substantial for the approval of the capacity market.

WWF IT, Greenpeace IT and Legambiente would also like to stress that the implementation plan does not modify (nor improve) the current design of the capacity market.

The current design is based on auction rules discriminating other sources rather than thermal capacity to access auction premium defined on the capacity market.

With auction 2022, 2023, the capacity market has led to the purchase of over 6GW of new fossil fuel power plans¹. That amount (6GW) corresponds to the suggested additional gas capacity to be in place to replace the coal power station in phase out in 2025. Both in National Energy Strategy (2017) and in National Energy and Climate plan, the required capacity to replace coal phase out is estimated ad some 5-6 GW.

The TSO has already secured enough conventional capacity to replace the coal phase out. The argument that a capacity market is needed on that ground is not any longer acceptable. Whereas it is now urgent to assure the capacity market does not become an incentive mechanism for existing and new fossil fuel power plants. Some modification should be included in the implementation plan in order to orient the current structure to a more balanced play field for all adequacy resources and not uniquely thermal capacity.

Upon this consideration we would like to formulate the following observation/requests to accompany the approval of the implementation plan under consultation:

- The implementation plan should be supported by quantitative data to show the target adequacy level in MW the TSO is aiming over time, and the contribution of the different measures (development of storage, energy efficiency, DSM, development of RES) should be visible in the implementation report. The implementation plan should take into due consideration the impact and the role of the listed measures which otherwise do not seem to contribute to the solution of system adequacy. In general higher transparency requirement should be included in the implementation plan, by assuring full disclosure of adequacy assumption leading to capacity demand in auctions.
- The derating factors of power plants participating to auction should be reviewed. It is not clear how the requested capacity demand (in 2022 and 2023) relates to the actual risk of power cuts. The amount of capacity and the characteristic of the capacity that the TSO intends to purchase on the capacity market should be proportional to the risk. The risk has to be quantified by the probability an event may happen in a specific period of time. The TSO states the risk is higher in few weeks during the year (July), whereas the TSO, through the capacity market, targets to assure the same level of capacity for all year round. The derating factor of the capacity market (CDP in Italian market design²) refers to annual average availability of a power plan and not to the specific availability of a power plan during the period of higher risk. For instance, existing capacity market rules allow PV to compete in the capacity market at some 10% of their rated capacity. Nevertheless the availability of PV system is much higher during July when the risk is higher. This probability is not incorporated in TSO capacity demand (should PV not be available, most likely air conditioning demand would be lower as well).

Similarly the CDP of thermal power plans should not be de-rated by some 20% of their capacity during the months of higher criticality (July-December, January). The CDP of thermal units is related to maintenance operation which can be programmed throughout the year according to system needs/risks. We think that an effort for a more efficient consideration of CDP of renewables (specifically PV) and thermal in the critical months could lead to a lower capacity demand, lower consumers' prices and lower lock in investments in fossil fuel. Following experiences of 2022 and 2023 we believe the capacity market rules should be reviewed in consideration of the actual

² Thermal power station are derated by some 20%, whereas renewable by some 90% of their capacity. CDP stands for coefficient of probability, it is the resulting capacity after derating. The capacity market applies a CDP of some 80-85% for thermal plants and some 10% for intermittent renewables.

¹ In the implementation plan the new capacity purchased with 2022-2023 auction of 5.8GW is derated at some 80-85%.

availability of power sources during period of higher risk in order to meet the principle stated in article 22 letter (c of REGULATION (EU) 2019/943.

- A penalty-premium mechanism for the TSO should be in place. In addition the TSO tends to overestimate the electricity demand and peak loads forecast³. Previous estimation have considerably differed from reality. The Covid economic crisis introduces new variables to be taken into consideration for future electricity forecast adding uncertainty and extending the risk of overestimation. The quantity and the quality of capacity to be purchased in CM should be proposed by a third party and validated by the TSO. By allowing the TSO to define the quantity to be purchased on a capacity market, the risk is an excessive risk coverage, leading to excessive costs for consumers and implicit incentive for fossil fuel. A penalty-premium mechanism for the TSO should also be in place. In absence the TSO clearly tends to over-purchase capacity to prevent any risk (which by definition is infinite).
- The implementation plan should include a comparative analysis of alternative options. Following experience of 2022 and 2023 auctions, both closing at maximum premium cost, the capacity market extension should be granted on the basis of a cost benefit analysis comparing the current capacity market design versus different options including the strategic reserve and a market design more oriented on environmental long term benefit. For instance the TSO has identified a potential of some 6 GW of new hydro pumped storage, which could supply the short term adequacy risk while building up an infrastructure which is compatible with the long term decarbonization objectives. Such options should be preferred in the development of new capacity. Different market rules for new capacity may lead to the development of hydro storage instead of new fossil capacity. The implementation plan has no evaluation of alternative options. It is a mechanism uniquely oriented to support fossil fuel technologies.
- The cost is high the analysis is poor. We believe the statement of the implementation plan "The price signals coming from the results of the auctions are consistent with the critical issues in terms of adequacy that the national electrical system is experiencing⁴" is too simplistic. A proper market analysis taking into consideration demand assessment, peak load effective trends, derating factor, exclusion of DSM from capacity market, lack of integration of energy efficiency measures into load forecast and criticalities, should be part of the implementation plan. The system is introducing a cost of 1-1.5 billion € a year on final consumers, equal to some 0,4c€/kWh alias 10% of generation cost. This cost, which jeopardize alternative policies, could not be cleared in a simple self-referential sentence.
- A more stringent link between CM and renewable target should be in place. The main justification for a CM to be in place is to assure adequacy resource while the energy transition to renewables is in place. Fossil fuel producers tend to shut down their capacity given the reduced electricity sales due to renewable development. On the contrary the introduction of a CM without a steady development of renewables would lead to an excessive remuneration of fossil fuel operators, receiving the capacity premium on top of electricity sales. Italian policy target of renewable imply a growth of some 4000MW of RES per year, currently RES are developed at some 1000MW year. The implementation plan should not be approved before a consistent renewable strategy is in place. The strategy should be backed by tangible measures assuring renewable capacity is in place in a

³ Market reform options for a reliable, cost-efficient and decarbonised Italian power system, December 2019, Christos Kolokathis, Michael Hogan

⁴ Chapter 2 point 25.

given period of time. In recent years development of renewable in Italy has slowed down and policy response has been absent, both on administrative and market measures. Permitting for renewable is excessively cumbersome, auction volumes for wind and solar are not aligned⁵ to 2030 target and no action has been taken to develop merchant renewables through PPA as stated both in National energy strategy and NECP. We fear the presence of a capacity market to be an additional incentive to postpone renewable development. In presence of a CM the more renewable development is postponed the higher the profits for thermal capacity. A corrective factor on capacity premium should be in place in consideration of the volume of fossil fuel sales in future years. This is to say, if revenue of fossil fuel plants are not reduced by renewable development, capacity premium should be proportionally reduced as well.

- Capacity market rules should be changed to introduce a more level playing field among different capacity resources. The current rules discriminate significantly DSM from participating to capacity auction. The strike price is too low for DSM solution and the investment threshold to be accepted in new capacity auction makes no sense for DSM options. DSM needs higher opportunity prices at lower investment costs. DSM, which is a much preferred option rather than the development of new fossil capacity, AT LEAST, should not be discriminated. Shorter delivery time should also be auctioned for new capacity, not necessarily 15 years, but 3-5 years period could be enough, this would also result in an efficient way to correct resource adequacy in consideration of potential gaps between forecast, market data, and technology development, thus reducing the risk of lock-in introduced by CM. If the TSO intends to purchase DSM capacity on a separate market the economic opportunity should not be lower than what is offered in the capacity market and there should not be capacity limit for the purchase of DSM resources. The DSM quantities should hence be deducted from the capacity demand. A level playing field for DSM, without cap on capacity, should be a founding criteria for the evaluation of the implementation plan.
- A pay as bid mechanism should set the capacity premium. Currently the premium is set at marginal price. The capacity premium for existing capacity should tend to fixed cost of power plans and not be function of capacity scarcity (moreover scarcity is set by forecast and therefore is an uncertain value). The problem is not scarcity, the problem is for fossil fuel power plants to recover fixed cost in current electricity market development. The CM should not over-remunerate existing infrastructure by allowing inframarginal revenue with the marginal price mechanism.

To conclude, the introduction of a capacity market has led to a new fossil fuel power plant rush for authorization in Italy, several fossil fuel plants —much and many more than the ones involved in the coal phase out- are under authorization process. This is not a sign of scarcity on the market but rather a sign of an excessive economic opportunity for fossil fuel offered by a market design tailored to thermal power plants. We are not experiencing, as a proof of fact, an equivalent dynamic development of alternative capacity options which are aligned to decarbonization target. This concern should be a priority in the assessment of the implementation plan.

The approval of the capacity market with the current rules would introduce excessive costs to final consumers in favor of fossil fuel, will exacerbate investment lock-in problems jeopardizing the support of alternative options, such as the development of storage, hydro pumped infrastructure, renewables and DSM solutions.

⁵ In addition, not all capacity in auction has been allocated during the first two session given authorization restriction for new RES power plants.

The implementation plan in consultation is a mere lists of measures alternative to fossil fuel generation without the integration of such measures into the capacity market. The implementation plan offer a view in with the capacity market stays (indefinitely) as the tool to assure adequacy in the long term and the CM, not introducing any modification from 2022, 2023 design, is *de facto* reserved to fossil fuel capacity only. This structure does not proof to be compatible with long term environmental targets nor it fulfils most of principles of art 22 of REGULATION (EU) 2019/943.

The current design of the capacity market is there to support fossil fuel technologies only. Auctions 2022, 2023 have already purchased over 6GW of new capacity. The capacity according to National Energy Strategy and NEPS already corresponds to the necessary quantities to assure adequacy and security level in view of 2025 coal phase out.

We hope a critical approach is adopted in the evaluation of the implementation plan, especially a request to make an effort to integrate alternative measures as resources to assure long term adequacy level for the electricity system, thus offering a strategy which, while assuring system security, reduce progressively the contribution of fossil fuel at sustainable consumers cost.