

Terna response to the EC consultation on the Climate, Energy and Environmental Aid Guidelines

Terna welcomes the opportunity to provide its view on the EC proposal on Guidelines on State aid for climate, environmental protection and energy 2022, published on 7th June 2021. Indeed, the **state aid Guidelines are one of the fundamental pillars of the functioning of the internal market**, especially for the **energy sector**, which is going through a profound change, driven by the need to ensure the achievement of energy and climate objectives set at European and national level. The **electricity sector**, specifically, plays a significant role in achieving these goals, thanks to the intrinsic efficiency of the electricity carrier and to the technological maturity of the electric renewable energy sources. It is therefore of utmost importance to ensure that the State aid rules are “fit for purpose” and up to date for the new challenges that the energy sector is facing toward the **carbon neutrality targets**.

Although a comprehensive assessment of the EC proposal would require the joint reading of the new State aid Guidelines with the General Block Exemption Regulation (GBER) - whose revision the EC announce to be scheduled in summer 2021 but that has not been published yet - please find below our view on the aspects of main relevance for Terna from a TSO perspective, with the final objective to enable all necessary measures to contribute to the energy transition while guaranteeing the security of supply and the safe management of the electricity system.

General remarks

We believe that the main criteria which should guide the State aid rule revision should be **simplification, clarity and consistency with the applicable regulatory framework**.

It is important to notice that **delivering the transformational change** across the energy sector **required by the Green Deal is time-critical and boosting investments** - both public and private - **is key for achieving this change**. Moreover, a number of those investments is **capital-intensive** and their deployment is strongly depending on the Member State's ability to set up market based mechanisms which allow for the formation of **adequate price signals** – or else they would simply not be made.

With this in mind, an important scope for improving the EEAGs is **excluding the state aid nature of those measures based on a competitive, transparent and non-discriminatory bidding process** that allow the widest participation of interested parties. Indeed, tenders provide transparent and objective means for identifying the recipients to be awarded and competitive bidding processes are expected to reveal the most efficient price level – as opposed to procedures where payment levels are administratively fixed. In this regard, the Commission itself recognised that the remuneration of an activity **based on market prices** is to be considered as proportionate.

Market based procedures are of utmost importance when providing efficient investment incentives through long term price signals and should be considered as part of the overall electricity market, provided that such procedures are in line with the rules and design principles prescribed in the European regulation, as is the case for market-based capacity remuneration

mechanisms in Regulation 2019/943.

In its proposal, the EC only introduces some simplifications for the assessment of market-based measures, while we strongly believe that the **scope of the CEEAG should leave out all measures which meet the above said requirements**, exempting them from pre-notification and approval processes.

This change would be significantly beneficial in terms of clarity and, overall, we believe the definition of a minimum set of clear and general rules would:

- facilitate their homogeneous application at EU level;
- avoid interpretation issues with potential impact in terms of administrative burden for Member States, “forced” to notify the measure for reason of legal certainty;
- ease the administrative burden brought by the notification phase also for the European Commission, which could focus its activity on ex post monitoring of the measures adopted by Member States rather than on ex-ante assessment of measures with no (or negligible) impact on the internal market.

The revision of the State aid rules should also take adequately into account not only the most recent market and technology developments, but also the whole new regulatory framework introduced after the EEAGs 2014-2020 and primarily the most recent Clean Energy Package, network codes and guidelines, which are already a strong legislative instrument aimed at supporting the climate goals.

In addition, we consider that services should not be considered as measures subject to State aid rules if they are procured according to rules in the sectoral legislation such as electricity Network Codes and Guidelines and which are implemented for complying with the requirements contained therein. In fact, if this condition is respected, the evaluation process from the Commission becomes redundant since compatibility with the applicable EU legislation is ensured. This aspect will be further addressed in the following paragraph when referring to the interruptibility service.

In view of the above, while we appreciate the improvements introduced by the Commission in its proposal, we consider that State Aid rules need to be further streamlined and updated.

Aid for the security of Supply (cfr. Chapter 4.8)

In its proposal, the EC defines compatibility rules for aid measures aimed at increasing the security of electricity supply. Such category would include “*capacity mechanisms and interruptibility schemes for dealing with long and short-term security of supply issues resulting from market failures preventing sufficient investment in electricity generation capacity, storage or demand response*”. The EC proposal results therefore in enlarging the scope of the aid category for generation adequacy already foreseen in the Guidelines on State aid for environmental protection and energy 2014-2020.

With regard to this section of the rules, we believe the EC proposal does not adequately take into account:

1. the recent legislative development, namely the entry into force of Regulation (EU) 2019/943 on the internal market for electricity;
2. the aim of interruptibility and the specific features of the service provided by interruptible resources;
3. the role of long term prices resulting from market based competitive bidding procedures.

1. On the first point, Terna recommends that the CEEAG are amended in order to ensure their **full consistency with Regulation (EU) 2019/943**. The EC proposal considers the Regulation (EU) 2019/943 by introducing in the CEEAG the same design principles set by the Regulation for the capacity mechanisms. In this respect, we would like to highlight three main issues:

- the Regulation (EU) 2019/943 introduced a detailed discipline on adequacy of resources and, more specifically, the design principles and process for the development of capacity mechanisms which provide for: i) the possibility for Member States to introduce capacity mechanisms, subject to an evaluation of the potential impact on neighbouring States, aimed at addressing critical adequacy issues resulting after the adequacy assessments; ii) the need to comply with a number of conditions among which the same ones that would be assessed by the European Commission during the notification phase pursuant to the State aid rules (for instance, the presence of a market failure). In addition, the obligations stemming from the Regulation also significantly reduce the discretion of the Member States in applying adequacy measures. In view of the above we believe that, with reference to the aid category for generation adequacy, the CEEAG is superseded by the Regulation and **this category should therefore no longer be mentioned in the Guidelines**;
- moreover, the Regulation (EU) 2019/943 (article 22) defines design principles for capacity mechanisms only, while the proposed State Aid rules foresees such principles should be applied to all the measures included in the scope of the aid category for security of supply. While the above-mentioned design principles are appropriate, **the EC proposal results in enlarging the scope of application of the Regulation (EU) 2019/943 to measures other than capacity mechanisms**: under a formal point of view **such a result should not be achieved through a State Aid Guidelines revision**.
- Without prejudice to the two points above, in case security of supply measures (including capacity mechanisms) are left within the scope of CEEAG, we consider that the condition under point 326 should be further clarified. This paragraph requires that *“the Member States should explain how a lock-in of this gas-fired energy generation will be avoided. For example, this may include binding commitments by the beneficiary to implement decarbonisation technologies such as CCS/CCU or substitute natural gas by renewable or low carbon gas or to close the plant on a timeline consistent with the Union’s climate targets”*. This requirement is borrowed for the aid category *“Aid for the reduction and removal of greenhouse gas emissions”*. However, if applied to capacity mechanisms, there is a risk of inconsistency with the requirements stemming from Regulation 2019/943: in fact, the latter already ensures that possible negative environmental externalities are

adequately addressed by providing for the mechanism to be technologically neutral and by allowing the participation only to resources which are able to respect defined greenhouse gases emission limits. Also in this case, we would stress that the application of State Aid Guidelines must avoid any overlap with Regulation 2019/943 provisions, which pose a risk of incompatibility and legal uncertainty.

2. On the inclusion of **interruptibility schemes** among security of supply measures, we consider it necessary to delete this provision in view of the fact that this measure, given the features of the service provided, is to be considered as an emergency measure (activated in 200ms) aiming at guaranteeing the security of the system rather than its adequacy. For the same reason, the definition provided for interruptibility scheme (point 18 (47)) - defining these schemes as a measure for security of electricity supply - is not appropriate and should be removed as well.

With specific regard to the service procured by Terna, it is key to highlight that it is part of the Defence Plan, designed to contribute to defend the dynamic and static stability in the electricity system or address short term network security problems by interrupting load. The service is indeed activated to deal with severe and unexpected short-term events that require to automatically actuate the interruption within 200 milliseconds from the request and that therefore cannot be solved by the activation of ancillary services like Frequency Containment Reserve (FCR) or Frequency Restoration Reserve (FRR). More in detail, the service is aimed at preventing or easing the consequence on the system of potential multiple events or events in cascade that could cause the separation of the Italian grid from the European network. It enables the resolution of severe grid transients due, for example, to the sudden outages of interconnection lines with foreign countries. Several dynamic critical transients can be controlled thanks to the interruptibility service such as for example: transient stability, undesired generation trips, transient overload on lines. The service is automatically activated by protection trips (distance, line differential, busbar, etc.) or underfrequency transients.

As an example, this service has been activated in order to mitigate the consequences of the Continental Europe synchronous area system splitting occurred on 2021 January 8th at 14:05, when the transition to emergency state (drop of frequency below 49.8 Hz) was contrasted by tripping Interruptible resources. The joint intervention of Italy and France load shedding resources was the first reaction to the emergency situation that blocked the fast decrease of frequency and permitted the fast restoring of system frequency value from emergency range up to normal operation range. The activation of these resources made it possible to avoid very serious consequences for the whole European electricity system.

This is only one of several examples we can mention.

For the above, the interruptibility is to be qualified as an emergency service under the scope of the Regulation (EU) 2017/2196 establishing a network code on electricity emergency and restoration (E&R Code), while it is not appropriate to frame it within the context of other network codes/guidelines, such as the Regulation (EU) 2017/2195 establishing a guideline on electricity balancing. In fact, it's not a conventional frequency response tool because it's triggered only by strong frequency deviation events that cannot be compensated by balancing

resources or by other possible events such as overloads, protection trips or unexpected topological changes.

As a general rule, we reiterate that in so far as interruptibility complies with the sectoral EU legislation, and the service is procured by means of transparent and competitive procedures, it should not be considered as state aid.

3. Lastly, as anticipated in the “General Remarks”, well-designed markets providing **long term price signals** are needed for promoting the development of technologically advanced solutions – with low environmental impact – which allow to cope with the challenges deriving from the energy transition.

Spot market have indeed proved to be unable to support the necessary investments. In principle, an efficient electricity wholesale market must provide reliable electricity at the least cost to consumers. This means making the best use of existing resources (short-run efficiency) and promoting efficient investment in new resources (long-run efficiency). An electricity market based on short-term prices is unable to reflect through prices the growing inadequacy of the electric power system in a medium/long-term perspective. Indeed, expected scarcity prices may theoretically provide an adequate incentive for maintaining or installing capacity. However, scarcity conditions are featured by extreme uncertainty and randomness both in frequency and intensity of occurrence. Even if the prices were to rise, this would only happen for a few hours, concentrated in specific years characterized by particular conditions. With specific regard to the sale of services to the System Operator within the ancillary services market, as the margins depend on the provision of ancillary services for which there is no predictability of the forward value, nor the possibility of hedging - unless the System Operator provides guarantees through forward contracts - the achievable revenues do not mitigate the risk associated with the investment.

In this market context it becomes extremely difficult for market operators to plan investments in new and efficient generation capacity even though the system needs them to maintain the necessary levels of adequacy and quality of service. As the uncertainty related to expected scarcity spot prices is not capable of providing an adequate price signal to investments in new flexible and more efficient capacity: consequently, investors are increasingly reluctant to base their decisions on the expectation of uncertain scarcity rents. The electricity system therefore needs new market instruments to ensure long term price signals for investment decisions, to facilitate the full integration of non-programmable RES into the electricity system and to enable the decarbonisation process of the generation fleet.

In consideration of the above and as already highlighted, the revision of the current state aid rules should clarify that these market instruments – based on a **competitive and transparent bidding procedure**, which allow for the widest participation and which provide a **market-based remuneration** to contracted parties - do not constitute state aid as these are part of the overall electricity market.

Energy Infrastructure aid category (cfr. Chapter 4.9)

With regard to the category of aid for energy infrastructure, we welcome the clarification provided that investments in energy infrastructure carried out under a legal monopoly are not subject to State aid rules (point 331).

Aid for the reduction and removal of greenhouse gas emissions including through support for renewable energy (cfr. Chapter 4.1)

Concerning support schemes for RES deployment, we support the requirements raised in **point 104** that "*beneficiaries should remain exposed to price variation and market risk [and] should not be incentivised to offer their output below their marginal costs and must not receive aid for production in any periods in which the market value of that production is negative*". We consider in general that market functioning and competition distortions could be mitigated by designing mechanisms which stimulate RES awarded units to react to spot market price signals, to correctly forecast their feed-in and to participate in frequency and non-frequency ancillary services. From the TSO perspective, in fact, with the rapid increase of RES connected to the power system it is increasingly important that such units are also enabled to provide grid services on the ancillary services markets, helping to ensure system security and supply.

Finally, with regard to **point 107**, we fully support the principle that *incentives must not be provided for the generation of energy that would displace less polluting forms of energy*. In addition, since EU policies support in parallel the increase of energy efficiency and clean energy production, we also recommend clarifying the principle that **energy should be firstly used in the most efficient way** and therefore **to introduce the condition that beneficiaries of aids must not receive incentives to absorb electricity at times when renewable energy sources could be used more efficiently in the power system**.

This should be valid for instance for electrolyzers which absorb electricity from the grid: applying this condition would mean that these technologies should be incentivised only when they use electricity which otherwise would be curtailed, ensuring this way that renewable electricity is primarily used to satisfy electricity demand (both consumption and demand from electric storage capacities with higher efficiency compared to hydrogen storage). This would mean avoiding, where possible, any losses from the conversion from the electric carrier to hydrogen, in line with the "efficiency first" principle.

Incentivising a less efficient use of electricity would lead in fact to an **increase of the RES generation capacity needed to feed the demand of current and future electrified sectors** and consequently an increase in the investments needed to achieve decarbonisation targets.