

Contribution of RTE to the Targeted Consultation for the Evaluation of the Guidelines on State aid for Environmental protection and Energy 2014-2020 (EEAG)

RTE is the French Transmission System Operator (TSO) for electricity. RTE is responsible for the development, maintenance and operation of the French transmission system, including its interconnections with other systems.

As TSO, RTE is in charge of the operation of the French power system. The French Energy Code entrusted RTE with the task of making proposals for the rules of the capacity mechanism, introduced by Law No. 2010-1488 of 7 December 2010 on the new organization of the electricity market. RTE is also in charge of

- the reservation and activation of flexibilities through competitive mechanisms for reserves and balancing
- managing competitive bidding processes in order to support the development of demand-side response and the new service of interruptibility by the Energy Code.

The capacity mechanisms as well as the competitive bidding processes dedicated to demand-side response and interruptibility are all regulated by the State aid rules.

RTE is heavily concerned by state aid regulation because the resources it uses to accomplish its public service missions could be considered, in a broad acceptance, as “State resources”, which is a decisive criterion to qualify a measure as a “state aid” (Article 107 of TFUE). Furthermore, many missions assigned to RTE lead him to design market mechanisms and to organize tendering processes that could have non-negligible impact on competition.

The French capacity mechanism and the auction for demand-side response have been subject to a formal investigation by the European Commission. RTE took part in the constructive discussions with the DG COMP and the French administration on the justification and design of these mechanisms in the framework of their notification or investigation by the DG COMP.

Explanation to answers to question 1

***** In preamble, RTE would like to mention the following. *****

Regarding the assessment on the effectiveness of capacity mechanisms, it is crucial to outline that capacity mechanisms are rather recent market architectures in the EU, which aim at guaranteeing the security of supply on the long-term. While RTE fully agrees that an ex-post assessment will be more than welcome i) to complement ex-ante analyses on social welfare such as RTE’s report on the impact assessment of the French capacity market (accessible at the following web address [https://clients.rte-france.com/htm/an/mediatheque/telecharge/20180901 RTE Capacity Market Impact Assessment Executive summary.pdf](https://clients.rte-france.com/htm/an/mediatheque/telecharge/20180901_RTE_Capacity_Market_Impact_Assessment_Executive_summary.pdf)) and ii) to make sure that the implementation of capacity mechanisms actually contributed to ensure the security of supply at the lowest cost, this assessment should at least rely on several delivery periods to be relevant. Therefore, the regulatory framework of the French capacity mechanism foresees that RTE will lead such an analysis in 2020, which will notably include an assessment on the functioning of the market during four delivery periods. This assessment will result in a comprehensive report which will be published and broadly shared once achieved. Hence, RTE emphasizes that the current consultation takes place too soon to enable such a broad analysis on the efficiency of capacity mechanisms, all the more since the French capacity mechanism was the first capacity-wide mechanism to be implemented in the EU – 2017 being its first delivery period.

***** On the need to adapt the design of the competitive bidding processes for the development of RES, taking into account criteria linked to the overall impact of the awarded technologies on the power system: *****

Technology-neutral auctions, open to all generators producing electricity from renewable energy sources, have been advocated in the guidelines as a way of fostering competitions among different technologies and ensuring minimum subsidies.

The drawback of such auctions is that they come with a risk of reducing the diversity of the energy mix by selecting only the cheapest technology. Recent cases of multi-technology auctions in Europe are quite illustrative: in France and Germany for instance, only bids for solar power stations have been accepted out of the joint auctions for onshore wind energy and solar power installations organised in 2018 and 2019. In Finland, only bids for wind farm projects have been selected.

Yet, when it comes to power system resilience and security of supply, technology-neutrality is a misconception and a dangerous illusion. Diversification is indeed crucial:

- The contribution of solar PV to peak demand during the winter will be quite limited, while wind production is higher in winter than the rest of the year.
In France, from 2015 to 2017, the annual average load factor of solar PV installations during winter peaks (from 17:00 to 19:00 in January and February) was between 2% and 3%. The annual average load factor of wind farms at that time was between 27% and 39%.
- Inversely, the contribution of solar PV to peak demand during the summer is likely to be significant (e.g. PV produced 10% of the electricity in France during the peak caused by the heat wave on June 27th 2019).
In France, from 2015 to 2017, the annual average load factor of solar PV installations during summer peaks (from 12:00 to 13:30 in June, July and August) was between 53% and 55%. The average load factor of wind farms at that time was between 13% and 16%.

Technology-specific auctions will hence be required to ensure diversification, but also to give access to the market to some more expensive technologies that will have positive system-wide impacts. This could be the case tomorrow for installations featuring storage capacities such as Concentrated Solar Power installation using molten salts, or wind and solar PV combined with batteries or hydrogen production facilities.

The current guidelines recognize the value of specific technologies and diversification : *“the bidding process can be limited to specific technologies where a process open to all generators would lead to a suboptimal result which cannot be addressed in the process design in view of, in particular:*

1. *the longer-term potential of a given new and innovative technology; or*
2. *the need to achieve diversification; or*
3. *network constraints and grid stability; or*
4. *system (integration) costs; or*
5. *the need to avoid distortions on the raw material markets from biomass support.”*

It is essential for future guidelines to conserve these principles and ensure through explicit or non-exhaustive criteria that the contribution of specific technologies to security of supply and safe grid operation will be taken into account in future market mechanisms.

Explanations to answers to question 16

***** With regards to the scope of the consultation on the State Aid Guidelines: *****

The guidelines or the consultation do not include a section dedicated to market-based mechanisms incentivising the development of active consumers (demand-side response, interruptibility). As a result, the general guidelines have been applied to such cases.

Yet, these application cases feature technological specificities that require adequate treatment. The lack of dedicated guidelines hence entailed a case-by-case approach, which contributed to reducing the transparency on the criteria that such flexibility mechanisms should meet to be approved.

As the main goal of these Guidelines is precisely to provide a transparent framework built through a broad public consultation, and as consumers are to play an increasingly more active role in power systems, any evolution of the guidelines should include a dedicated section.

In the future, other technologies (power-to-gas, power-to-heat or more generally power-to-X) or new services (for instance new ways to ensure frequency stability in complement of inertia from spinning synchronous generators) might need support schemes as well, which cannot always be foreseen by Guidelines covering a 7-year period. Adequate regulatory flexibility would be helpful to accommodate efficiently the on-going technological changes of the power system.

As a stable framework is however useful in order to provide the visibility needed to foster investment in new technologies, RTE calls for maintaining a stable framework during 7 years, while including in the Guidelines the possibility to amend them so as to foresee a transparent approval framework for new technologies. Such a provision should be limited to detail the approval procedures of technologies which are not yet mentioned in the Guidelines and should foresee a broad public consultation.

Explanations to answers question 18

***** On the need to ensure coherency between the State Aid guidelines and the provisions of the CEP: *****

The European Commission had considered in its first version of the Clean Energy Package (CEP) making technology-neutral bidding process mandatory.

However, the possibility of using technology-specific calls for tenders and of organizing calls by sector to ensure an efficient and balanced development of renewable energy sources was eventually maintained in the CEP, in line with the current State Aid guidelines.

It is very important that the future guidelines be fully consistent with the provisions adopted in the energy package in order to avoid any ambiguity in the interpretation of the texts.