TRANSNET BW

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TransnetBW's response to the European Commission's public consultation on the revision of State Aid Guidelines for Climate Energy and Environment (CEEAG)

On 7 June 2021, the European Commission opened a public consultation on its revised Climate, Energy and Environmental Aid Guidelines (CEEAG). TransnetBW welcomes the revision. It is essential that the current state aid framework is updated in light of the recent legislative, market and technology developments taking account of the EU's Climate Law and Green Deal objectives. Given the guideline's relevance for the power system, TransnetBW welcomes the opportunity to comment on the revision. Our comments largely focus on Chapter 4.8 related to aid for security of electricity supply.

Our main concern in this regard is that **the requirements of the CEEAG can be critical for system security** if existing reserve instruments fall under the requirement of state aid approval. As a result of the intended requirements of the CEEAG, Strategic Reserves that are not a capacity mechanism must also comply with the requirements of the Electricity Regulation (EU) 2019/943. In this context, additional emission requirements arise in particular for the network reserve as suggested by point 325 CEEAG. If the emission requirements were applied, the permissible operating hours per year and plant would be limited. **The resulting restrictions on operating hours could become an obstacle to the reasonable use of the grid reserve**. **It must be ensured that individual plants in the reserves also remain operational without further restrictions to ensure system security**. Emission requirements should not be extended to Strategic Reserves that are not a capacity mechanism. **It must continue to be possible for power plants to be designated as system-relevant and to be held and used as network reserves to maintain secure grid operation**.

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

Incentives to contribute to the stability of the grid (points 83, 102 and 104)

In order to strengthen the overall principle of energy system integration also within the CEEAG it should be ensured that beneficiaries of aid are incentivised to contribute to the stability of the grid or to security of supply issues, for instance by participating in re-dispatching measures. Against this background we welcome the proposal of adding "*issues related to network stability*" (point 83 lit. e) CEEAG) when assessing the eligibility of decarbonisation measures according to point 82 ff.

By the same token, TransnetBW supports 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*". It is important that support mechanisms are designed in such a way that supported units are incentivised to react to spot market price signals and to correctly forecast their feed-in. Going beyond that, we recommend adapting support schemes to incentivise awarded units to participate in frequency and non-frequency ancillary services. Flexibility is a key resource given the rising share of weather-dependent renewable energy sources (RES).

Chapter 4.8 aid for the security of electricity supply

Definition of Terms (Point 18 (47))

The draft CEEAG defines the term 'interruptibility scheme' for the first time. However, the proposed definition is not consistent with the nature of such services: interruptibility schemes, in fact, are aimed at guaranteeing the system security and not the security of supply and they are properly qualified as a defence system under the scope of the Regulation (EU) 2017/2196 establishing a network code on electricity emergency and restoration (see paragraph below). Moreover, the definition proposed in the draft CEEAG is broader in scope than used in forgoing state aid cases such as SA.43735 (related to interruptibility schemes in Germany) or SA.48780 (related to Interruptibility schemes in Greece). These cases employed the term much more narrowly, limiting it to demand side response. A broader definition of the term as proposed in the draft CEEAG would include *Special Network Operating Resources* used by TSOs to keep n-1 safety in events of actual failures of operating resources. If, in addition, Article 22 of Reg. (EU) 2019/943 applied to interruptibility schemes, as implied in point 325, it would impair TSOs capability to maintain system safety.

The definition of "interruptibility scheme" should therefore be adjusted as follows:

> *"interruptibility scheme' means a measure designed to contribute to defend the dynamic and static stability in the electricity system or address short term network security problems by interrupting load."*

Furthermore, when considering the applicability of criteria used for assessing the compatibility of adequacy measures, the distinction between adequacy and congestion management measures should be respected. In this regard, the following legal provisions should be taken into account:

- Article 2(22) of Regulation (EU) 2019/943 defines capacity mechanism as *a "temporary measure to ensure the achievement of the necessary level of* ***resource adequacy*** *by remunerating resources for their availability,* ***excluding measures relating*** *to ancillary services* ***or congestion management"***;
  - Thus, it is clear that network reserves, under which assets are kept online to ensure sufficient resources for congestion management, are not capacity mechanisms and should be treated separately;
  - Moreover, Chapter IV of Regulation (EU) 2019/943 is entitled 'Resource adequacy' and does not deal with congestion management, which is, in turn, covered by Chapter II, in particular by Article 13 - 'Redispatching';
- Article 3(68) of Regulation (EU) 2017/1485 (System Operation Guideline) defines 'adequacy' as *"the ability of in-feeds into an area to meet the load in that area"*, while network issues are covered by the wider term 'operational security' – defined in Article 3(1) as *the "transmission system's capability to retain a normal state or to return to a normal state as soon as possible, and which is characterised by operational security limits"*;
- Article 2(1) of Regulation (EU) 2019/941 (Risk Preparedness Regulation) defines 'security of electricity supply' as "*the ability of an electricity system to guarantee the supply of electricity to customers with a clearly established level of performance, as determined by the Member States concerned";* then, Article 4 of that Regulation refers to rules on adequacy, i.e., Chapter IV of Regulation (EU) 2019/943, which suggests that security of supply is understood with a focus on adequacy.

The above shows that the measures designed and implemented by transmission system operators (TSOs) are subject to a legal framework where terms must be used precisely to cover the right measures within the scope of the respective regulatory requirements. In order to ensure regulatory certainty, we invite the Commission to reconsider the terminology used in the draft CEEAG, so that appropriate compatibility criteria can be applied to the respective measures where they are considered to constitute state aid.

Extension of application of Capacity Mechanism rules to all Security of Supply measures (285, 321(a), (b), (c),)

According to point 285, the application of the guidelines is extended to cover interruptibility schemes and network reserves too, with the effect of enlarging the scope of application of Regulation (EU) 2019/943 to measures other than capacity mechanisms. Besides the fact that such a result should not be achieved through a State Aid Guidelines revision, this expansion is from our point of view critical especially with regards to points 321 and 324.

Network Reserves

As regards the differences between network reserves and strategic reserve related to balancing, these can be characterised based on two main criteria. With regards to the type of market failure being tackled, while network reserves address the lack of economic feasibility of resources needed in specific geographic parts of the system, strategic reserves on the other hand deal with the feasibility of resources that can in principle be placed anywhere in the system. Activation purposes should also be considered as a key source of difference, since the former aims primarily at solving congestions in the grid, while the latter covers demand not covered by resources available in the market.

Point 321 (a) reads: "*The resources of the measure are to be dispatched only if the transmission system operators are likely to exhaust their balancing resources to establish an equilibrium between demand and supply*". This requirement cannot be applied to any measure that aims to resolve grid congestions or ensure voltage stability. Balancing resources, in turn, are only activated to balance demand and supply but without considering the status of the grid loading and thus have a completely different purpose to network reserves.

The application of **point 321(a)** is even critical with regards to strategic reserves: it is doubtful whether it is appropriate to aim for full exhaustion of balancing reserves before activating capacity reserves. This would mean that there is no backup capacity left to cover unpredictable power shortages due to power plant outages or forecast errors of renewable energies or loads. In this context it is important not to overlook the fact that often for capacity reserves there may be longer lead times for activation (up to several hours before real-time), which is clearly longer than what is required for the more demanding balancing reserves (15 min timeframe or faster). Equally important is the fact that balancing reserves are dimensioned for the entire synchronous area and are thus a concern to more than just one TSO (while other SoS measures are national in scope). This mismatch, both with respect to timeframes and geographic scope, further highlights the need to distinguish between adequacy measures and other instruments ensuring security of supply in a shorter term.

Another limitation holds for **point 321 (b)** which aims to set a lower price limit "*at least at the value of lost load or at a higher value than the intraday technical price limit, whichever is higher*" for the imbalance price for periods with an activation of security of supply measures. This is reasonable for strategic reserves, which aim to achieve load coverage, but not for network reserves. There is no link between the amount of the system imbalance (which shall be addressed by high imbalance prices in critical situations) and the activation of network reserves, which is necessary to resolve grid congestions. In fact, resolving grid congestions is a TSO task and balancing responsible parties (BRPs) have no influence on the necessary measures. In this sense, it is not possible to allocate the activation costs to the market participants who contribute to the need for network reserves as **point 324** stipulates. The proposal "For example, this may be achieved by allocating the costs of a security of supply measure to electricity consumers in periods of peak electricity demand" cannot be applied to situations with grid congestions, as they can also occur in other situations. Likewise, it is not possible to attribute the output of network reserves to BRPs through the imbalance settlement mechanism as proposed in **point 321 (c)**.

Accordingly, we recommend not to apply points 321 and 324 to network reserves. Point 321(a) also must not be applicable to strategic reserves as it would limit the margin of error in critical situations.

Interruptibility Schemes

The purpose of interruptibility schemes in particular is to respond to unexpected events and severe emergency situations (failures of grid elements for instance, sudden generation trips, severe grid transient, transient overload on lines) and maintain n-1 security, regardless of generation adequacy conditions. As an example, this service has been activated in order to mitigate the consequences of the Continental Europe synchronous area system splitting occurred on 8th January 2021, when the transition to emergency state (drop of frequency below 49.8 Hz) was contrasted by tripping interruptible resources. Considering their characteristics, function and mode of application, interruptibility schemes are already governed within the scope of Regulation (EU) 2017/2196 establishing a network code on electricity emergency and restoration[1] and should therefore not fall within the scope of these Guidelines.

In any case, measures designed not to address adequacy issues, but emergency situations, such as interruptibility schemes as described above, should explicitly be exempted from the application of these guidelines and references to those measures should be removed from the guidelines.

Additional constraints on Gas, other fossil fuels (320, 325, 326)

As previously mentioned, according to **points 320 and 325** the CO2-emission requirements as defined by Art. 22 of Regulation (EU) 2019/943 would be applied to network reserves and interruptibility schemes. This proposal would limit TSOs' ability to cope with grid congestions as it would limit the running hours of network reserves used for congestion management.

If the emission requirements were applied, the permissible operating hours per year and plant would be limited for existing plants in the grid reserve from 2025. The resulting restrictions on operating hours may prevent the reasonable use of the grid reserve beginning in July 2025.

It must be ensured that individual plants in the grid reserve also remain operational without further restrictions to ensure system security. The emission requirements should therefore not be extended beyond capacity mechanisms pursuant to Art. 22 of Regulation (EU) 2019/943.

In view of **point 326,** notwithstanding the importance of avoiding a lock-in of gas-fired energy generation as far as possible in view of achieving the EU's climate targets, all kinds of capacities respecting the specific emission limits set by Regulation (EU) 2019/943 should be eligible for support if needed to ensure security of supply at a reasonable cost coherently with the technological neutrality principle contained in the

[1] For example, Article 15 mandates that the System Defence Plan contains a scheme for automatic low frequency demand disconnection (LFDD).

Regulation. In fact, the criteria introduced by the Regulation were already aimed at ensuring that possible negative environmental externalities are adequately addressed.

Cost allocation for Security of Supply measures (324)

In addition, **point 324 states:** "*To avoid undermining incentives for demand response and exacerbating the market failures that lead to the need for security of supply measures, and to ensure the security of supply intervention is as limited in size as possible, the costs of a security of supply measure should be borne by the market participants who contribute to the need for the measure. For example, this may be achieved by allocating the costs of a security of supply measure to electricity consumers in periods of peak electricity demand*".

This requirement is also impossible to implement in practice with regard to congestion management measures or emergency measures aiming at guaranteeing the security of the system. According to this requirement, those generators or consumers would have to bear the costs of the measure that cause the congestion. This would contradict the intention of the zonal market model, according to which generation and consumption are only allocated on the basis of their price bids without taking the network condition into account. In fact, market actors usually cannot know that they are causing congestions due to their lack of knowledge of the network condition. Therefore, the proposed solution does not make sense in the area of congestion management or grid safety emergency measures

Transferability of CRM obligations (322)

According to point 322, '*Member States must ensure that capacity obligations are transferable between eligible* capacity providers'. This requirement is already included in Regulation (EU) 2019/943, but the regulation excludes strategic reserves. Article 22 (3) reads "*In addition to the requirements set out in paragraph 1, capacity mechanisms other than strategic reserves:(...) (c) must ensure that capacity obligations are transferable between eligible capacity providers*."

From a regulatory point of view, Regulation (EU) 2019/943 governs precisely under what conditions capacity mechanisms can be implemented, including specific requirements on the transferability of capacity obligations as referred to above. Changes in the CEAAG should therefore be aligned with this regulation to avoid legal ambiguities.

Also from a market perspective, "out-of-market mechanisms" should be excluded from the scope of this requirement as foreseen in Regulation (EU) 2019/943, as the number of authorized market participants is too small to organize, for example, a secondary market or other transferability mechanism for out-of-market capacity. In addition, there would be disproportionate operational complexity to implement a transfer mechanism. What is more, in the case of network reserves, the location of a plant is relevant, so that capacity obligations cannot be transferred at will with regards to the geographic location.

Chapter 4.11 Aid in the form of reductions from electricity levies for energy-intensive users

According to **point 357**, aid should be limited to sectors that are at a significant competitive disadvantage due to the charges eligible for aid and are in danger of relocating outside the Union. In addition to energy intensity, the system efficiency of companies should also be taken into account and a reduction in network charges and surcharges should also be possible for these companies or operators of storage facilities.

Chapter 4.12 Aid for coal, peat and oil shale closure

The closure of the coal and oil power plants could induce constraints on the network. It shall continue to be possible for the TSOs to assess the relevance of the power plants for the operation of the system and held the power plant in a grid reserve to ensure the secure operation of the grid if necessary.

About TransnetBW

TransnetBW is a certified electricity transmission system operator (TSO), operating the transmission grid in the German state of Baden-Württemberg. Through this grid, we ensure that electricity is supplied to the region, Germany and throughout Europe with interconnections to control areas within Germany as well as to Austria, France and Switzerland. TransnetBW is a member TSO of, among others, the European Network of Transmission System Operators (ENTSO-E) and the Renewables Grid Initiative (RGI).

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