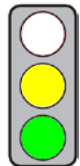


KEY ISSUES

Objective of the Guidelines: Measures by Member States to ensure electricity generation – in particular support for "capacity mechanisms" – should be designed so as not to damage the internal electricity market.

Affected parties: Electricity generating companies, private and commercial electricity consumers.



Pro: (1) Depending on their design, capacity mechanisms may run counter to the completion of the internal market. The Commission therefore rightly recommends conditions for their use.

(2) Where the use of capacity mechanisms is a policy choice, the recommended criteria at least reduce the risk of overly inefficient capacity mechanisms.

Contra: If there is to be state aid for generating "secure" energy as well as for generating renewables, there will be virtually no "market" left in the deregulated internal electricity market.

CONTENT

Title

Staff Working Document SWD(2013) 438 of 5 November 2013 relating to **Generation Adequacy in the internal electricity market – guidance on public interventions**

Communication C(2013) 7243 of 5 November 2013 on **Delivering the internal electricity market and making the most of public intervention**

Brief Summary

► **Overview: Four Guidelines and accompanying Communication on intervention by Member States in the internal electricity market.**

- In order to keep various types of intervention by Member States in the electricity market to a minimum, the Commission has drafted four non-binding guidelines in the form of recommendations for "best practice".
 - Guidance on generation adequacy in the internal electricity market (hereinafter: Capacity Guidelines) [SWD(2013) 438, see this [cepPolicyBrief](#)],
 - Guidance on the design of renewable energy support schemes [SWD(2013) 439, see [cepPolicyBrief](#)],
 - Guidance on the use of renewable energy cooperation mechanisms [SWD(2013) 440 and 441] and
 - Guidance on state intervention to increase demand side flexibility [SWD(2013) 442].
- The guidelines are explained in more detail in Communication C(2013) 7243.

► **Context and objectives**

- The capacity guidelines are intended to contribute to the completion of the internal electricity market and to achieving the EU's energy policy objectives. These objectives include [C(2013) 7243, p. 2]
 - a secure energy supply at "competitive" prices,
 - climate change targets by 2020 (see [cepAnalysis EU Energy Policy](#), p. 10 et seq.),
 - renewables development targets (Renewable Energy Directive 2009/28/EC, Art. 3 (1), Annex I, Part A, see [cepPolicy Brief](#)) and
 - increasing energy efficiency.
- Public intervention in the energy sector may be necessary to [C(2013) 7243, p. 5]
 - secure a "level playing field" in the EU,
 - overcome "market failures" and
 - foster technology and innovation.
- Public intervention should be designed so that [C(2013) 7243, p. 7]
 - interventions are coordinated EU-wide,
 - distortion of competition is largely avoided and
 - it is restricted in length to the period of the problem to be solved.

► **Problems relating to the provision of "adequate electricity generation"**

- According to the Commission, a secure electricity supply is fundamental to a functioning economy and therefore a significant policy objective. It includes
 - "generation adequacy" and
 - reliable transmission system stability.
- State intervention to achieve this objective should, however, remain limited. Instead, "first and foremost market forces" should be allowed to take effect [C(2013) 7243, p. 13].
- However, doubt exists as to whether there are sufficient market incentives to secure adequate electricity generation. This is due in part to
 - renewables taking up a growing share of the electricity supply and
 - regulated prices at the end-customer and wholesale level.
- This makes the operation of existing power plants and investment in new ones "more difficult" because the revenues of power plant operators fall and are less predictable [C(2013) 7243, p. 6–7].
- This is made worse by the fact that instruments enabling demand to be adapted to electricity supply ("demand-response services") are not yet widely available [C(2013) 7243, p. 6].

► **Capacity mechanisms (CMs) – Definition**

- In order to avoid an impending shortfall in generation, some Member States are considering state intervention in the electricity market in the form of "capacity mechanisms" [C(2013) 7243, p. 6].
 - "Capacity mechanisms" (CMs) are instruments which provide market players with incentives to hold so-called "secure" capacity available.
 - Capacity refers,
 - on the supply side, to power plants – both existing and new installations - and storage facilities,
 - on the demand side, in particular, to a reduction in the demand for electricity.
 - "Secure" capacity must be available on demand where necessary.

► **Types of capacity mechanisms (CMs)**

The Commission describes four different types of CM.

- **Strategic reserves:** A central office – an authority or an organisation commissioned by the same – "procures" (SWD(2013) 438, p. 21) secured capacity. This can only be deployed in emergencies where the electricity market is unable to match supply and demand. Regular participation in the electricity market – sale of electricity on the wholesale market – is prohibited. Where there is no further need for it, the strategic reserve can be reversed without any negative reaction on the electricity market.
- **Capacity payments and markets:** A distinction is drawn between "capacity payments", "centralised capacity markets" and "decentralised capacity markets". By contrast with strategic reserves, in the case of these three types, the secure capacity continues to participate on the "regular" electricity market and, in addition to the electricity price, is subject to a further payment for the capacity:
 - Capacity payments: a central office determines the price of secure capacity. The amount of secure capacity is determined by the price.
 - Centralised capacity market: A central office determines the "required" amount of secured capacity and calls for tenders "market wide". The successful bidders receive a payment for their capacity.
 - Decentralised capacity market: Electricity suppliers are obliged to provide a "certain number" of certificates in respect of the secure capacity. These certificates can be traded so that a market price for secure capacity is derived from the supply and demand.
- **One-off tendering procedures:** In special cases, where there is an impending shortfall in supply, e.g. during a nuclear phase-out period, a central office determines the additional demand for secure capacity and offers it for tender, e.g. new plants which, unlike strategic reserves, then participate on the "regular" electricity market. The tender is only supposed to take place once otherwise there is a danger that investors will purposely wait for tenders in order to finance investments which they would have made in any case, without the tender.

► **Criteria for capacity mechanisms**

CMs should

- be technology-neutral – although the Commission recommends to the Member States that plants should support the long-term aim of a "low-carbon economy" ("decarbonisation objective"; COM(2011) 885 Energy Road Map 2050, see [cepPolicyBrief](#)),
- be available across borders,
- be regularly reviewed,
- have a reasonable lead time and
- have no negative impact on trade or the internal market.

► **Financing capacity mechanisms**

- The Commission assumes that there will be an increase of up to 20% in the wholesale price of electricity.
- Financing should be borne by all electricity consumers who benefit from the increased security of supply.

- The level of the contribution to financing to come from electricity consumers will be based on their consumption during periods of very high demand on the market ("peak load"). Electricity consumers with flexible consumption will therefore pay less.

► **Conditions for the deployment of capacity mechanisms**

- Where the market is unable to offer incentives for "adequate electricity generation", [C(2013) 7243, p. 15], Member States should be able to set up CMs, subject to specific conditions.
- Beforehand, however, the Member States should
 - firstly, assess whether there is in fact a shortfall in generation,
 - secondly, identify and remove the causes for the shortfall in generation,
 - thirdly, evaluate which alternatives to CMs could remove these shortfalls in generation, where appropriate.
- Member States will assess the shortfall in generation by estimating the future trend in electricity generation and in future demand for electricity. In doing so they will take account of:
 - EU energy and environment policy, e.g. the provisions of the Energy Efficiency Directive (2012/27/EU; see [cepPolicyBrief](#)), and
 - other factors, e.g. the general economic trend.
- Possible causes for a shortfall in generation include
 - regulated wholesale and retail prices,
 - limited participation and regulated prices on intraday, balancing and ancillary services markets,
 - support schemes for renewables and fossil fuels,
 - market concentration and market power.
- Possible alternatives to CMs are
 - greater use of "demand-response services", e.g. by speeding up the introduction of smart electricity meters, and
 - increased development of cross-border interconnectors which link up the networks of the Member States and thus their electricity networks.

Policy Context

The Directive on security of supply (2005/89/EC) requires Member States to carry out regular assessments of the security of supply which also has to include cross-border trends. Member States can impose, on the electricity companies, "obligations which are in the general economic interest" in order to guarantee security of supply (Art. 3 (2) Internal Electricity Market Directive 2009/72/EC, see [cepPolicyBrief](#)). Member States have to award new capacity in order to guarantee security of supply, on the basis of specific conditions, by way of competitive tendering or equivalent procedure (Art. 8 (1) Internal Electricity Market Directive).

On 18 December 2013, the Commission's Directorate General for Competition published an outline for "Guidelines on State Environment and Energy Subsidies 2014-2020" which it wants to adopt in summer 2014 (see [cepStudy](#)). This will, inter alia, determine criteria for the design of CMs which comply with the law on state aid.

Options for Influencing the Political Process

Directorate General: DG Energy

ASSESSMENT

Economic Impact Assessment

Ordoliberal Assessment

If there is to be state aid for generating "secure" energy as well as for generating renewables, in the end, there will be virtually no "market" left in the deregulated internal electricity market.

There is a great deal of disagreement among electricity consumers, authorities, policy-makers and academics as to whether the current electricity market design – involving, inter alia, a large proportion of renewables and regulated prices – will be able to guarantee "adequate electricity generation" in the long term. The assessment of the deployment of CMs is, however, dependent on the answer to this question and is therefore also the subject of heated debate. Policy-makers are far from eager to take responsibility for "adequate electricity generation". Therefore, a decision on the introduction of CMs at this point of time is motivated more by a political desire to safeguard against the possible interruption of supply and its consequences than by clear evidence of a failure of the current design of the electricity market.

Capacity mechanisms represent additional public intervention in the electricity market and **may** also, **depending on the arrangement, run counter to the completion of the internal market. The Commission therefore rightly recommends attaching conditions to their use** because, by making assessments of the future generation situation, which go beyond a purely national view and include alternative measures, e.g. the development of cross-border interconnectors to ensure the provision of adequate generation, the possibilities

existing in the EU internal market can be exploited. A Member State may, e.g. due to natural geographical or weather-related differences between Member States, obtain electricity from other Member States on less windy days.

Impact on Efficiency and Individual Freedom of Choice

Market intervention, such as regulated wholesale and retail prices, can damage the functioning of the internal energy market. The ban on such intervention may result in an improvement in the functioning of the internal energy market and should therefore take place irrespective of the decision for or against CMs.

Where the deployment of capacity mechanisms is a policy choice, the Commission's recommended criteria – in particular technology-neutral design and cross-border availability – **at least reduce the risk of overly inefficient capacity mechanisms.**

A technology-neutral design prevents the exclusion of certain installations and innovative approaches. Market participants thus decide on the type of capacity instead of certain technologies being imposed by the state. However, the Commission, for no just reason, has limited the criteria of technological neutrality by recommending as a requirement that the plants should promote the aim of decarbonisation. This limitation is not necessary because all plants taking part in a CM are subject to the European Emissions Trading System (ETS) and thus have to comply with the mandatory upper limit of the ETS.

It is appropriate that CMs should be available across borders so that capacity can be held available where it is cheapest.

An assessment as to which of the various CMs should take precedence is not possible on the basis of the guidelines at hand. Although all CMs are an intervention in the electricity market, the size of the intervention and its impact depend to a large extent on the energy-management conditions in the Member States and on the actual form of the intervention.

Impact on growth and employment and on Europe as a business location

Not yet apparent. On the one hand, a secure electricity supply is a basic requirement for growth and employment and for the attractiveness of Europe as a business location. On the other hand, the Commission is expecting an increase in the wholesale price of up to 20% as a result of CMs. This will have a detrimental effect on growth, employment and on Europe's attractiveness as a business location. The Commission's recommendations should therefore be heeded by the Member States in order to avoid isolated and unnecessarily expensive national solutions within the internal market.

Legal Assessment

Legislative Competency

The EU can take measures to ensure the functioning of the energy market, to support renewable energy sources and to ensure security of energy supply (Art. 194 (1) (a), (b) and (c) TFEU). In particular, it can publish non-binding capacity guidelines in the form of "best practice" recommendations.

Subsidiarity

Unproblematic.

Proportionality

Unproblematic.

Compatibility with EU Law in other Respects

Unproblematic.

Impact on German Law

In Germany, there is as yet no legislation on the introduction of CMs. In this regard, the Coalition Agreement between CDU/CSU and SPD of 27 November 2013 (p. 41) specifies that Germany currently has enough power plants available. "This situation could change by the end of the year. In the medium term, a capacity mechanism will be developed with a view to cost-effectiveness, compliance with European regulations and delivering competitive solutions which are open to new technology." Although this sort of CM would not necessarily have to take account of the criteria in the non-binding guidelines, it would have to comply with the requirements of EU law on state aid (Art. 107 et seq. TFEU).

Conclusion

If there is to be state aid for generating "secure" energy as well as for generating renewables, there will be virtually no "market" left in the deregulated internal electricity market. Depending on how they are set up, capacity mechanisms may run counter to the completion of the internal market. The Commission therefore rightly recommends attaching conditions to their use. Where the use of capacity mechanisms is a policy choice, the recommended criteria at least reduce the risk of overly inefficient capacity mechanisms. An assessment as to which of the various capacity mechanisms should take precedence is not possible on the basis of the guidelines at hand.