

Q&A – Consultation paper on generation adequacy, capacity mechanisms and the internal market in electricity

Why are you consulting now on generation adequacy, capacity mechanisms and the internal market in electricity?

This Consultation paper is being published in the context of the Commission Communication on the Internal Energy market. One key message of that Communication is the importance of allowing the market to work and ensuring that any interventions are well designed and effective.

There are plans in some Member States to take steps to secure new generation capacity to ensure security of supply. If this happens in an uncoordinated manner with only national interests being taken into account, we could end up with inefficient and incompatible market designs in different Member States, undermining the internal market.

This Public Consultation addresses how to deliver a more coordinated approach to generation adequacy and security of supply in the internal electricity market and ensure that any state interventions in this regard are well designed and effective.

What do you mean by generation adequacy and security of electricity supply?

One element of generation adequacy is the need to ensure that new *flexible* resources are delivered to complement variable wind and solar power generation in particular. The other element of the discussion is the need to ensure that *sufficient* capacity is available to meet demand on the system at times of highest system stress, as was experienced in February 2012.

Ensuring generation adequacy does not just mean building new generation facilities. Energy efficiency measures and demand side participation in the market are equally important for ensuring the balance between supply and demand.

How does the internal market help ensure generation adequacy and security of supply?

A fully functioning internal electricity market means open and competitive markets in all time frames, that is both long term and short term. Market participants use these markets to make their investment, production and consumption decisions.

Long term markets provide crucial investment signals; Short term and close to real time markets drive the efficient use of both generation capacity and networks.

What is the impact of the economic crisis and the decarbonisation of the energy system on generation adequacy and security of supply?

The economic crisis and the need to transform our system have increased the importance of questions in the academic and policy discussion about how and when investments will be made, based on market prices. Some in the energy industry say they cannot justify making investments as a result of low prices and reduced running hours.

However, careful study is needed before concluding that the market will not deliver generation adequacy and security of supply. Even in extremely critical times during the last number of winters the market has functioned well, and ENTSO-E studies suggest that generation adequacy will be secured to beyond 2020.

Who is responsible for assessing generation adequacy and security of supply?

Each Member State assesses generation adequacy as part of the bi-annual security of supply reports which they complete in line with the security of supply directive. ENTSO-E produces EU-wide generation adequacy assessments based on national reports.

In this consultation we ask whether and how we can work better together to ensure a more coordinated approach to the estimation of required and available capacity in the internal market.

What steps can governments take to ensure generation adequacy and security of supply?

Facilitating new interconnection capacity can support both market integration and increase security of supply. It allows local peaks in demand and variable wind generation to be managed across a wider area. Also, removing barriers so wholesale prices respond to scarcity during periods of high demand would make it economic to invest in the generation capacity needed to meet demand. Equally important is removing barriers to energy efficiency solutions and demand side participation which prevent the market from matching supply and demand in the most efficient way.

Only if these steps are not sufficient to ensure generation adequacy and security of supply, should more interventionist measures, such as the introduction of capacity mechanisms, be implemented.

What is a capacity mechanism?

A capacity mechanism is a measure designed to ensure that there is sufficient capacity to meet the demand for electricity. Capacity mechanisms ensure revenue for (selected) generators who commit to making capacity available and commit consumers to pay for the capacity provided. There are many different varieties of capacity mechanism. However, in all capacity mechanisms, required capacity is directly or indirectly centrally determined rather than being left to the decisions of investors based on market prices.

What are the risks of poorly designed capacity mechanisms in the internal market?

Poorly designed capacity mechanisms can undermine demand side participation and measures to support energy efficiency, and instead act as a crutch for inefficient fossil fuel generators. Even Member States who do not see the need for intervention will be affected by the capacity mechanisms implemented by their neighbours, as they can distort market behaviour and investment decisions across the internal market.

It is important that any capacity mechanisms or other interventions to ensure generation adequacy and security of supply meet the principles of necessity and proportionality – principles that are firmly anchored in European law. In this Consultation paper we ask for views on different types of capacity mechanism and more detailed criteria which could be applied to capacity mechanisms and other interventions based on these principles of necessity and proportionality.