

Generation Adequacy Treatment in Electricity A CEER Call for Evidence

Statement of RWE

1.) What are the key elements for ensuring generation adequacy in the competitive electricity market in EU MS and the EU as a whole?

RWE believes that the market will work without the need for fundamental reforms, and that it will establish a suitable equilibrium market price. This is dependent on prices being allowed to change freely without policy makers' interventions distorting market equilibrium, and governments and competition authorities accepting the "price spikes" that result from this process. At the same time, negative prices on the wholesale markets must also be allowed without restriction as otherwise customers will not have sufficient incentives to manage their load and investors will not have sufficient incentives to provide for flexible or storage capacity. With the advent of smart meters and grids the demand side has increasing potential to contribute to supply security through voluntary demand management.

In this context, the definition of "generation adequacy" in the Call for Evidence is not complete since it implies that "demand" is a fixed variable that must (always) be met. There needs to be more emphasis on the balance between supply and demand and the need to avoid *enforced* or *involuntary* interruptions. Directive 2005/89 gives a definition with respect to the "balance between supply and demand" ("the satisfaction of foreseeable demands of consumers to use electricity without the need to enforce measures to reduce consumption.") which is relevant here.

Large parts of the current European market structures have demonstrated their ability to build new plants in good time and to maintain healthy capacity margins under energy-only markets. In any case, such markets already have some kind of capacity element either via TSO actions or via the way balancing markets are set up. What differs is whether this is placed at the centre of the market or at the edge. RWE strongly supports that these elements should stay at the edge of the market.

Many of the problems and uncertainties that have emerged in some energy-only markets have arisen where price and bid caps have been introduced. These artificial limits weaken the scarcity pricing signals and rents on which energy-only market design is based. The Spanish market, for example, has a cap of 180€/MWh. With such a cap in place, the long-term investment incentives provided by an "energy-only" model are very likely to be insufficient. In such cases it is also doubtful that revenue from balancing prices or ancillary services will be enough to offset lower operating revenue for conventional plants from the energy market.

The traditional energy policy focus on allegedly too-high price levels fails to address the key question of who will invest in the energy infrastructure that we need for converting the current energy supply to a low carbon world. Security of supply, including a diversified energy mix, has a value that will only be reflected in the market if prices spikes are allowed to emerge. A more integrated and competitive EU market with an active demand side and a high level of transparency will remove the possibility for companies to benefit from withdrawing capacity and creating "bad" price spikes.

CEER is right in stating that a diversified electricity generation mix is a prerequisite for ensuring generation adequacy in Europe. This is true for all segments of the market, in particular with a view to a better integration of cross-border balancing markets.

2.) Do you observe any barriers for investing in new generation capacity? If yes, please list and explain them.

RWE largely agrees with the list of barriers to invest in new generation capacity that is offered in the consultation document. In fact, the uncertainty about the CO₂ regime post 2020 and the current discussion about the IED directive, substantially increase the risk of any investor, thereby making the investment more expensive and reducing margins. The same applies to regulated energy prices in still many EU Member States as well as the well known problems related to complex authorisation procedures and local opposition to energy infrastructure projects.

It should be noted that, although organised markets do not give transparent prices for very long term sales of generation capacity, it is possible in markets to manage such risks on the basis of one-off tolling contracts between generators and other parties in order to manage risks. Such contracts do not need to be with suppliers but may be with other financial intermediaries.

However CEER is right in asserting that “any such measures in the market like price caps or other similar measures need to be minimised in order to ensure maximum possible effectiveness of the market for ensuring generation adequacy.”

As far as the impact of renewables is concerned, the ambitious targets for electricity penetration will result in reduced load factors for conventional generation, as the renewable technologies will replace a growing section of the electricity supply curve. Therefore, the ability of existing conventional plants to recover their fixed costs may be affected. This may lead to earlier decommissioning decisions. Similarly, prospective investors in new traditional generation capacity will face increasing price variability, which has implications for investment in conventional technologies in future.

However RWE considers that, provided that prices are allowed to develop without intervention, generation companies should be capable of dealing with the impact on market prices of additional renewable development. Better real-time management of station operations will allow companies to extract the maximum value from the market from existing and new generation assets as the share of renewables gradually grows.

Finally, when it comes to support for investment in low-carbon (in particular nuclear) generation (e.g. in the UK), there might be a need for some level of targeted support, at least in the short term. Otherwise there is a great danger that new nuclear power plants will not be built.

3.) In case of additional measures for ensuring generation adequacy, what would be the key issues to take into account?

Energy only markets are closest to the concept of liberalised energy markets. Prices – if not capped - provide all players, including the demand side, with the correct incentives for new investment or decommissioning. This basic idea of competitive energy markets will be put at danger if the market design is blurred by administratively-determined elements like capacity incentive schemes. It is worth recalling that Directive 2005/89 requires Member States to encourage a wholesale market framework with regard to balancing supply and demand before turning to any additional measures.

Therefore, RWE does not believe that broad-based capacity mechanisms are suitable for incentivising investment in flexible generation and that price signals from the market are more relevant. In particular, even within the “energy-only” design, balancing markets usually offer the possibility to introduce capacity elements, in that prices close to real-time can typically go to very high levels and give flexible generation a premium. This means that if, at a particular moment of time, the supply demand balance is very tight, the balancing market will provide for the missing capacity. The costs of this can either be socialised, or allocated to market participants which are out of balance. In this sense, the balancing market, too, can offer appropriate incentives for investments in new capacity or for keeping capacity as reserve. Finally, there are also some specific ancillary service products procured by the TSO on a longer term basis, e.g. seasonally, which pay for specific amounts of fast response capacity.

Capacity incentive schemes, in theory, allow (depending on its design) the primary energy market to operate “undisturbed” while recovering the ‘missing money’ needed to support additional capacity through capacity payments outside of the energy market. At the same time however, market designs with capacity mechanisms often require generators to bid in to the energy market at short-run variable costs in order to avoid the potential for generators to benefit twice for the provision of capacity.

Capacity mechanisms may also mitigate price spikes, which are usually a source of worry for governments and competition authorities. In addition, a remuneration for capacity would increase the predictability for investors on the expected revenues which may reduce the reluctance to provide additional capacity. On the other hand, they would represent, by definition, a market distortion, if they favour only new investments on the expense of existing plants or if they are introduced on a national level without being co-ordinated EU-wide. They may not support the right kind of capacity (i.e. flexible) which is needed as renewable penetration increases. As other forms of market distortions, they imply the risk of necessitating additional distortions in case the originally targeted result does not materialize or the intervention turns out to be more costly to consumers than expected.