

## **UNESA COMMENTS TO THE: CEER Call for Evidence on Generation Adequacy Treatment in Electricity**

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

We believe that, the main key element for ensuring generation adequacy in the long, term facilitating the necessary investment in new generation, is a clear, consistent and stable in time regulatory framework. Such stable regulatory framework is vital to avoid unnecessary uncertainties to the investors, instead of adding regulatory risks that cannot be managed by them.

A the same time, a well designed and efficient competitive market provides the most efficient price to the customer, considering the available capacity, the fuel costs, the level of competitiveness, etc. This price would indicate the scarcity of capacity and would send the adequate price signal to new investments in the most appropriate technology.

An electricity markets without regulatory distortions together with a clear, consistent and stable regulatory framework would always deliver an appropriate level of generation adequacy through a balanced generation mix.

When the aim of the Government or Regulators differs from this, because of environmental goals or social or political reasons, we will face different market distortions which ultimately will lead to a change in the investments opportunities/decisions: there will be more investments in the supported technologies that will imply a change in the generation mix. In other words, when Governments or/and Regulators interfere in the market, the "market-equilibrium" is altered (and so the generation mix), and regulatory intervention could be needed to re-establish it.

In the case of renewables target, the introduction of RES objectives beyond a normal market outcome might force a rebalance of the generation mix, leading to unsustainably high penetration of RES. As a natural consequence, more RES means less generation from "conventional" thermal technologies. Investment in thermal technologies become less profitable and attractive; however the intermittent nature of most RES (i.e. wind and solar) requires an adequate level of back up capacity and flexible generation which cannot be provided without such thermal technologies (mostly CCGT gas fired plants).

The integration of renewables must be planned carefully to be consistent with the aim to get the generation adequacy. The integration of these supported technologies due to political decisions, instead of being the result of a robust plan generates inconsistencies since they take part in the formation of market price, when, paradoxically, in many cases they do not receive this market price (they are not exposed to it) 1.

 $\label{eq:miscalculated} \mbox{miscalculated support schemes are in place.}$ 

<sup>&</sup>lt;sup>1</sup> As an example, the Spanish photovoltaic capacity target for 2010 is 482 MW, which compared to the 3.200 MW of installed PV capacity in 2008 (as a consequence of a very generous Feed in Tariff), gives a magnitude of how the development of certain generation technologies can follow inconsistent trends if inefficient or

Other distortions, that alter the generation mix by artificially limiting price signals for investments, that should be removed:

- Price caps/floors in wholesale markets distorting the incentives for investment in peak plants and storage facilities.
- Electricity import bans across European borders hampering the European market integration, mainly when there are interconnections with hours in which we can see capacity non allocated, and high price spreads between both markets.
- Some compulsory VPPs that oblige some companies to sell their products at a price, which is non-related to the market.

An adequate level of interconnections is a key driver to get competitive electricity markets. To increase investments in interconnections is necessary to reach the goal of the European internal electricity market. Markets agents should have the possibility to access to these infrastructures in a not discriminatory and fair way.

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

Large unforeseeable penetration of RES alters the generation mix and the market equilibrium, making investment in conventional technologies riskier and less attractive.

The increasing share of intermittent RES generation will probably lead to more frequent price spikes. However, it is uncertain if these spikes will be sufficient in number and in magnitude to cover the fixed costs of the plants (in particular "peak plants") needed for generation adequacy (if not sufficient demand response is developed in the meantime). CCGT plants need a certain market spread to cover their fixed costs if they run 5000 hours per year. In several countries, intermittent renewables growth is likely to reduce the number of running hours to somewhere 2500 hours, or less. This means that during peak hours the equilibrium price should include a market spread twice as high; if not, such CCGT plants will not longer be viable.

There may be more barriers:

- a) Caps on the market price that prevents to recover part of the investment costs (or even all investment costs to plants running few hours);
- b) not allowing the demand to set the prices, which is necessary in the hours where the price tends to be very high.

The CEER/ERGEG paper gives for granted that markets participants hold the decisions to invest or decommission plants. In general, this assert is correct in respect to the investment decisions, but it is not so in cases where there is an obligation to get a permission from the government and/or the authorization from the SO to decommission a plant.

Grids and power plants authorisation procedures should be harmonised at European level as well as environmental regulation requirements, avoiding distortions and barrier to investments.

It should be stressed that the profitability expected by investors, the ones who actually assume the risk of any investment, it is based on the existing regulatory framework when FID is taken. One more time, it is of special importance to emphasize that regulatory uncertainties should be minimized, and that necessarily requires a clear, consistent and stable in time regulatory framework.

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

UNESA supports the view that the well-functioning electricity market should be able to deliver security of supply and generation adequacy by itself in a fair, transparent and not discriminatory framework, guaranteeing sufficient revenues to the generators. Moreover, as CEER also states, any additional mechanisms must be introduced only after a careful considerations to avoid any barrier to investment and possible adverse effects of such additional mechanisms. Otherwise, if sufficient revenues cannot be recovered in the energy market to achieve generation adequacy, a fall back solution such as capacity remuneration mechanisms may be required.

These mechanisms are generally based on the concept of a two-part price, with one set of revenues paying for energy on a €/MWh basis and another rewarding capacity needed on a €/MW-period basis. In theory, these mechanisms allow (depending on its design) the primary energy market to operate undisturbed while recovering the 'missing money' needed to support new investments through capacity payments outside of the energy market (these may assume the form of competitive capacity mechanisms or auctions).

These mechanisms should be designed in such a way that the payment amount is directly linked to the need the system has for capacity or flexibility and valued by the market at the time of the investment.

Different capacity incentive models might be considered. Careful analysis is required to assess in which cases, under which conditions and at what geographical scale it may be advisable to introduce such models. Otherwise, distortions among the different countries might appear which will pose additional difficulties to market integration.