

European Commission Consultation Paper on generation adequacy, capacity mechanisms and the internal market in electricity

A2A Trading response

Milano 05/02/2013

A2A, the largest Italian multi-utility, is active in four main sectors: energy (electricity and gas), waste and waste to energy, distribution networks and cogeneration & district heating (www.a2a.eu). A2A Trading, totally owned by A2A, is the company of A2A Group managing the power generation assets (concentrated in Italy where A2A is the second producer after Enel) and the energy portfolio. A2A Trading is responsible for all the trading activities in Italy and abroad, mainly in the CWE countries.

A2A Trading welcomes the European Commission consultation on generation adequacy, capacity mechanism and the internal market in electricity as an opportunity to express its considerations related to very actual and discussed topics also in Italy.

Below our answers and comments to the EC consultation.

(1) Do you consider that the current market prices prevent investments in needed generation capacity?

Yes, at least considering investment in “clean” technology like gas-fired generation. At present there is no possibility to recover fix cost for investment. In most part of the hours Clean Spark Spread are deeply negative.

(2) Do you consider that support (e.g. direct financial support, priority dispatch or special network fees) for specific energy sources (renewables, coal, nuclear) undermines investments needed to ensure generation adequacy? If yes, how and to what extent?

Yes. In Italy, for example, great part of generation investment in CCGT plants has been planned and started before the definition and application of the new incentivisation scheme. Incentives for renewable have brought a “non-market” component in a “market oriented” system. Incentives were supportive in reaching the goal for RES at 2020, nevertheless in a few years the lack of competition for RES generation, both for financial support, disproportionate compared to the ever-reduced investment costs, dispatching priorities on energy market and no -or very low - unbalance costs have brought RES to exploit, modifying in a deep way the electricity market. We think RES should be treated as all the other generation sources and be sold on energy markets.

The incentives should be studied for reducing the generation price gap for new technologies, bringing them towards the grid parity.

(3) Do you consider that work on the establishment of cross-border day ahead, intraday and balancing markets will contribute to ensuring security of supply? Within what timeframe do you see this happening?

We think all these enhancements will contribute to use in a better way existing capacity and implicitly will improve adequacy and system security. We think it will not be sufficient to substitute new generation capacity in case of plant closure and to guarantee the higher and higher flexibility that the grid is asking to cope with RES production swings.

(4) What additional steps, if any, should be taken at European level to ensure that internal market rules fully contribute to ensuring generation adequacy and security of supply?

First of all the different technologies should be at the same level playing field using the same rules. Dispatching codes should be revised in order to adopt at least the same principles, as ETSO-E is doing. Nevertheless, considering the still strong differences among Member States markets, it seems still far the possibility to adopt one common dispatching code.

For adequacy and security, in our opinion, should be considered in a different way generation which can supply firm energy from that interruptible as well as the flexible generation versus “must run” technology which can’t do regulation.

(5) What additional steps could Member States take to support the effectiveness of the internal market in delivering generation adequacy?

They should do a mid-long term analysis of capacity and flexibility needs for the next 10-20 years in order to check whether they should act to support existing capacity or not. They should consider the possibility to have the closure (or stand-by) of non-profitable generation asset. In this case the analysis should take into consideration the time-lag necessary to start again the investment process when capacity level will become insufficient or critical for system adequacy and security.

(6) How should public authorities reflect the preferences of consumers in relation to security of supply? How can they reflect preferences for lower standards on the part of some consumers?

Consumers ready to stop their consumption or to be interrupted without advice should be allowed to participate in some dispatching services. In any case it must be understood that, also if at the end the effect of disconnecting load or load-shaving of consumer could be the same of increasing generation, there is still a fundamental difference related to modulation or energy balancing, which is not replicable by consumers. Consumer could participate to tertiary reserve

but they should be “used” as generation plant are used. It means that they must be ready to be disconnected in the same way a generator is asked to produce, only based on price which they are ready to receive and not only as last resource like it happens today.

In our opinion there are very few big consumers who are able to do that, in any case not comparable to flexible generation.

(7) Do you consider that there is a need for review of how generation adequacy assessments are carried out in the internal market? In particular, is there a need for more in depth generation adequacy reviews at:

a. National level

b. Regional Level

c. European Level

Generation adequacy is performed by different TSO taking into consideration the peculiar characteristic of its internal system, how they can manage and use flexible resources based on internal market rules etc. Imposing same criteria to all TSO could be sensible but not efficient.

A first step could be to make adequacy assessment more transparent.

Passing from National to Regional and to European level it means take into consideration cross border effects which, in our opinion, is already happening.

(8) Looking forward, is the generation adequacy outlook produced by ENTSO-E sufficiently detailed? In particular,

a. Is there a need for a regional or European assessment of the availability of flexible capacity?

b. Are there other areas where this generation adequacy assessment should be made more detailed?

We think generation adequacy should take into consideration not only installed and spare capacity compared to peak of consumption but also the generation typology with its ability to follow the load shape and non-regulated generation behavior. More and more often in these last two years we are facing not only some difficulties in following high load spike but more often in reducing production when RES can't be modulated. Negative prices during this Christmas' period are a clear signal that flexibility should be considered as a “precious” resource and rewarded properly. For this reason generation adequacy should be taken into consideration the capacity of generation to “support” maximum excursion both of load and RES.

(9) Do you consider the Electricity Security of Supply Directive to be adequate? If it should be revised, on which points?

Principles mentioned in the Electricity Security of Supply Directive are still valid. Nevertheless it has been released in a very different environment (2005). There is the necessity of a revision of security criteria taking into consideration RES impact on generation.

(10) Would you support the introduction of mandatory risk assessments or generation adequacy plans at national and regional level similar to those required under the Gas Security of Supply Regulation?

From our point of view the two commodities are quite different, mainly from a generation point of view. Electricity is generated on a distributed level while gas is produced in few regions and it makes critical its final delivery.

(11) Should generation adequacy standards be harmonised across the EU? What should be that standard or how could it be developed taking into account potentially diverging preference regarding security of supply?

It seems TSOs have had more problem for regulation in this period of over-capacity than in past years. This as demonstration that security is not just linked to available capacity but also to the possibility to use it properly respecting grid constrains. That said it is hard to find common standard for countries with different generation typologies , grid connections, physical constraints etc. It seems more feasible to define guidelines at which TSOs should refer and follow as far as it is possible.

(12) Do you consider that capacity mechanisms should be introduced only if and when steps to improve market functioning are clearly insufficient?

Yes. It must be considered that some of these steps are not easy to implement nor they can be done in a short time or with timing comparable each other. For example if we think how long it takes to implement demand participation to dispatching services or to increase cross border capacity (at present it is very hard to realize any new line) we can easily see that it is far longer than the time needed to close an old and non-economic plant. In the same way the growing of RES generation is not comparable with the time needed to build a new plant for increase flexibility and adequacy. This is to say that also for capacity mechanisms, which takes very long time for discussion and regulation, it is necessary to start on time, without waiting for all possible steps being concluded.

(13) Under what circumstances would you consider market functioning to be insufficient:

a. to ensure that new *flexible* resources are delivered?

b. to ensure *sufficient* capacity is available to meet demand on the system at times of highest system stress?

On one side the huge increase in RES has reduced peak/offpeak spread and prices as well, on the other side RES have increased flexibility demand and needs for capacity reserve. The current electricity prices don't give any signal to new investments in generation nor in flexible resources. If market is working properly it should mean that both capacity and flexibility are enough and that for the next 5 years there should be no needs for new generation. The real problem is that at present adequacy has been reached with plants which are no more economical and nobody knows what could happen after their closure. Investments can't be done relying only on possible spikes, but this is the only signal that current market can give, in our opinion it's not sufficient.

(14) In relation to strategic reserves:

- a. Do you consider that the introduction of a strategic reserve can support the transition from a fossil fuel based electricity system or during a nuclear phase out?**
- b. What risks, if any, to effective competition and the functioning of the internal market do you consider being associated with the introduction of strategic reserves?**

We do not think Strategic Reserve could be used as "support" for new generation investment nor for incrementing flexibility. It can be used instead as a temporary instrument to maintain capacity (and reduce risk of curtailment) using old plants managed by TSO. It can't be a solution for generation adequacy.

(15) In relation to capacity markets and/or payments:

- a. Which models of capacity market and /or payments do you consider to be most and least distortionary and most compatible with the effective competition and the functioning of the internal market, and why?**
- b. Which models of capacity market and /or payments do you consider to be most compatible with ensuring flexibility in a low carbon electricity system?**
- c. Are there any models of capacity mechanism the introduction of which would be irreversible, or reversible only with great difficulty?**

- a) A Capacity Mechanism based on competitive auctions done by TSO, considering a time horizon of 3 to 5 years. It keeps competition among the auction participants without affecting internal market. It gives the possibility to secure one part of fixed cost to generators assuring to TSO capacity for a certain period. TSO can "modulate" the auctioned capacity based on load forecast and generation growth for the next 5 to 10 years.
- b) The same model implicitly contracts the use of capacity for ancillary services and not only for day-ahead market. Once capacity is sold to TSO, it must be available in day-ahead market and, for the non-committed capacity, also on the dispatching market, of course with a different remuneration in order to take into consideration the different service required by balancing market.

c) All the models which do not apply a market mechanism for capacity allocation but distribute capacity payment to all generators. In this case spot market will be affected and cross border exchanges will be affected as well. TSO can't modulate the capacity required.

(16) Which models of capacity mechanisms do you consider to have the least impact on costs for final consumers?

A mechanism which is based on auction usually tends to minimize the cost; a mechanism which compensates only the required capacity and not all the capacity available reduces the cost and has also a lower impact on the market functioning.

(17) To what extent do you consider capacity mechanisms could build on balancing market regimes to encourage flexibility in all its forms?

Of course capacity mechanism can't substitute balancing market but it could contribute to increase also the capacity available for flexible services and not just stop at day-ahead availability (as could be the case of capacity payment based only on suppliers obligation). For this reason we think capacity mechanism should include dispatching service availability for all the capacity not used in day-ahead market, with a different price scheme.

(18) Should the Commission set out to provide the blueprint for an EU-wide capacity mechanism?

As expressed in other considerations, the current markets are not yet harmonized enough to allow general and common rules at EU level in such a critical matter as capacity mechanism. This could be a goal to reach after single market and common dispatching rules will be adopted.

(19) Do you consider that the European Commission should develop detailed criteria to assess the compatibility of capacity mechanisms with the internal energy market?

We think more correct for the European Commission to define **general** criteria and to evaluate each case considering the different environment and market behavior which are present in that country.

(20) Do you consider the detailed criteria set out above to be appropriate?

a. Should any criteria be added to this list?

b. Which, if any, criteria should be given most weight?

COMMENTARLI TUTTI VIENE LUNGA !

We agree in principle with the criteria exposed. Some comments about points:

1) *The necessity for a capacity mechanisms should be clearly established in the context of:*

- a) *The potential of the identified needs being met in the normal operation of the internal energy market, in particular:*
 - i) *increased interconnection and in particular the completion of identified projects of Common interest.*
 - ii) *steps to encourage effective competition by addressing the position of dominant undertakings.*
- b) *Alternative, less distortionary measures, which could be taken, for example steps to improve energy efficiency or reduce electricity demand.*
- c) *Removing barriers to the effective participation of demand in the electricity market.*

(1) the alternatives proposed are not immediately achievable we think that for some of them it should be taken into consideration the real feasibility (for example the increase of interconnections) and a realistic timing (active participation of demand).

2) *The effectiveness of the capacity mechanism addressing the identified market failure should be demonstrated and that it is additional to what would have occurred under normal market rules.*

(2) the demonstration of market behavior with and without a capacity mechanism is subject to so many hypothesis on cause-effect that makes the result very unreliable.

3) *The duration of the application of the capacity mechanism should be clearly limited and clearly specified,*

- a) *The impact on the market of the introduction of capacity mechanisms should not make it difficult to reverse that decision in the future.*
- b) *The necessity of retaining reinstating a capacity mechanism should be subject to review.*

(3) in our opinion the capacity mechanism should be designed in order to be able to control the duration of its effect; we don't think it is wise to establish "a priori" the duration of the mechanism if not after seeing its real effect on the market. A well designed mechanism should be able to stay active forever. In case of necessity the capacity will be well paid and will give the right economical signal to investment in new generation; in case of no risk for the system capacity will be assigned at low price without producing economical effect on the market.

4) *Any capacity mechanism should be open to electricity undertakings operating in other Member States, to the extent they are able to make the electricity available in markets to which the capacity mechanism is established.*

(4) It could be feasible in theory because at present it's not possible to guarantee capacity from one country to another without having firm cross border capacity which is auctioned on yearly basis.

5) *Any capacity mechanism should not act as a barrier to cross border trade or competition in the internal market by:*

- a) *artificially altering trade flows or the location of production, in particular by:*

- i) *restricting the ability of electricity undertakings in the Member State to sell their electricity to customers elsewhere in the internal market, (i.e. capacity physically located in a Member State should not be reserved for that Member State).*
- ii) *distorting the commercial behaviour of generators in the day ahead and intraday markets*
- iii) *distorting investment signals in the internal market leading to inefficient locational choices*
- iv) *distorting investment signals in the internal market leading to the displacement of new investment from one Member State to another*
- b) *distorting dynamic incentives/crowding out;*
 - i) *The incentive on consumers or generators to respond to high prices at periods of scarce capacity should not be diminished.*
 - ii) *The mechanism should not undermine incentives on the electricity market to deploy new techniques for demand reduction or electricity storage and generation.*
- c) *creating market power or exclusionary practices;*
 - i) *The mechanism should not strengthen or maintain the market power of incumbent firms.*
 - ii) *The mechanism should not act to maintain inefficient market structures or undertakings, acting to deter new entry.*

(5) We agree with the criteria mentioned. We think the capacity mechanism must be available to all the actors on the market without discrimination. It means that each company, incumbent or new player, must have the same opportunity to participate. Nevertheless we do not think incumbents will change their “status” thanks to capacity mechanisms.

- 6) *To be non-discriminatory a capacity mechanisms should*
 - a) *be allocated after an open competitive bidding process.*
 - b) *allow demand response and energy efficiency solutions to bid into capacity markets on an equal basis to generation.*

(6) We agree that the best way of allocation is a bidding process. We think energy efficiency is a EU target that should be pursued in any case, without considering the generation adequacy level. About the active demand, as already stated, we think it will have a role once the rules are settled but it will not be able to guarantee the same service level as generation can do.

- 7) *Not be confined to any particular generation technology, i.e. being tech. Neutral (insofar as the mechanism is directed towards security of supply concerns – this may not apply if other objectives are also being pursued).*

(7) We agree there must not be discrimination between generation technology. The capacity mechanism must define the “product” and how it must be “delivered”; all the auction winners will be paid at the price offered, with explicit penalties in case of “non delivery”.

8) *Capacity mechanism should be at least cost:*

- a) The direct costs imposed on suppliers or others electricity undertakings must be kept to the minimum necessary.*
- b) Persons providing capacity under the obligation must not be overcompensated.*
- c) Any selection process in the mechanism should be conducted in a transparent, open and non-discriminatory way which is market based.*
- d) The duration of any compensation to generators under the mechanism should be clearly justified.*

(8) We think a well designed capacity mechanism will respect all the criteria. About duration, as already stated, it will be affected more by market behavior than by pre-defined rules.

20 a. Should any criteria be added to this list?

20 b. Which, if any, criteria should be given most weight?

We think the list of criteria is exhaustive and we do not see other criteria to be added.
We think the most important criteria are those related to non-discriminatory allocation and market based auction mechanism.