

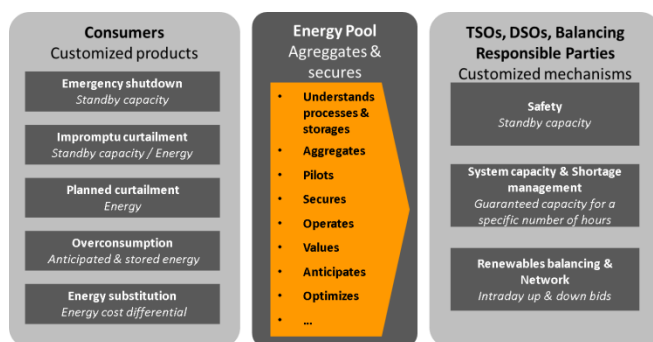
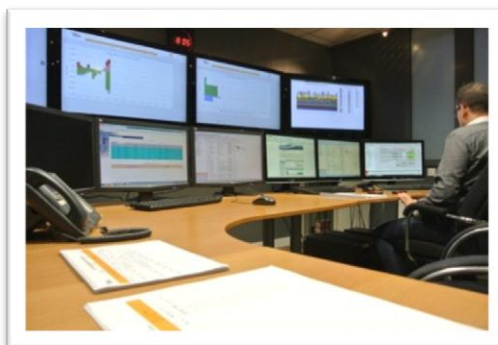
Energy Pool answers to the European Commission's consultation on generation adequacy, capacity mechanism and the internal market in electricity

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1. Energy Pool in short

Energy Pool is an active Demand Response aggregator, providing flexible demand-side management services to the electrical system (transmission and/or distribution network operators; energy suppliers) by operating more than 1000MW of Load capacities, mainly from industrial plants.

Energy Pool also helps not only consumers to become prosumers by assessing and improving the flexibility of their load, technically and economically improving



activations, but also TSOs and concerned stakeholders to improve the overall efficiency of system by implementing innovative market mechanisms (DR Programs for capacity, system operation or economical optimization) and services.

Founded in 2008, Energy Pool entered into a strategic partnership with Schneider Electric in 2010 and has more than 50 highly

trained employees. Energy Pool is active in France and currently develops new DR businesses in many other countries in Europe and worldwide.

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2. Position towards SEDC contribution

Energy Pool participates in the discussions within the SEDC through the membership of Schneider Electric. Energy Pool therefore largely contributed to the drafting of SEDC answer to EC consultation.

Yet, concerning some of the questions, Energy Pool has its own positions that are not all reflected in the SEDC paper.

That is why Energy Pool issues the present individual contribution.

3. Answers to the questions

Q1. *Do you consider that the current market prices prevent investments in needed generation capacity?*

Most markets in Europe today are Energy only market and scarcity rents (provided by high market prices in resource scarcity situations) are supposed to pay for the fixed costs of peak generation (mostly existing thermal assets). Unfortunately, it is well known that some regulatory constraints (price caps) and, most of the time, some market distortions (including subsidized generation, see below) prevent those situations to happen, since there is still a global and inefficient over-capacity in Europe. Moreover, even with a global over-capacity, networks constraints may limit the actual activation of these required and available capacities even if the prices are high enough.

These two effects create a strong uncertainty with regard to the revenue stream for some capacities. This uncertainty most probably prevents investment in new peaking capacities or even leads to the closure of existing power plants which profitability has dropped.

Moreover, as it is mentioned in the consultation document, resource adequacy may not be the only reason to invest in new capacities: the question of flexibility (mostly because of the introduction of more and more RES in the network) should be discussed (need for backup capacities that have to be very flexible, etc.).

Energy Pool position is that the markets currently lack a relevant signal for investment, either in terms of volume (additional capacity) or quality (flexibility, peak versus base, etc.). To define the appropriate signal, the first question to ask is: “what is the characteristic of the market needs?”

The rush in RES development together with the decrease of demand (linked to the crisis) has led to an oversupply in baseload/mid merit generation in some countries. Nevertheless the RES intermittency leads to specific needs – peak/flexibility needs that could be met by Demand Response for instance. In practice current market prices are not providing adequate signal for investment in appropriate capacity not being automatically generation.

So we consider that there should be “capacity” payments for the capacities that are used very scarcely or provide extra flexibility. Such a value is not correctly provided by the energy market, usually based on the marginal cost of fungible blocks of energy.

Note that we used the term “capacity” instead of “generation”, because either new or even existing generation capacities might be replaced by Demand Response ones, as long as these are more competitive for a given expected level of service.

➔ **Energy Pool considers that current market prices (and lack of access to the energy market) prevent investment in needed Demand Response capacity.**

Q2. 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?

There have been many communications, mainly issued by producers and particularly by CCGT owners, to point out that subsidized renewables, as wind power, have two contradictory effects:

- They require more flexibility to balance their intermittency;
- They push flexible generation out of the money on the markets when they run, reducing revenues for those capacities, endangering their profitability and business plans.

More generally, subsidies for any type of generation, be it wind or fuels used in thermal peaking generation – such as coal and gas – distort the markets. They artificially lower energy prices and put at risk the ability of capacity resources to recover their costs through existing market structures.

This places zero-carbon demand side solutions – such as Demand Response – at a competitive disadvantage, and particularly the most efficient ones from a system point of view, the industrial one, because of their cost structure (very low investment, but significant activation cost).

➔ Energy Pool considers that subsidies of some energy inefficient resources prevent the good development of Demand Response capacities that may have a very positive impact on adequacy.

Q3. 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?

Establishing open and flexible “energy” markets both for economical optimization for BRPs and for operational security (balancing services) is the essential basis for the optimal activation of resources on the electrical system and the adequate valuation of the products to cover at least the variable costs of activation.

Unfortunately, this is clearly insufficient to make sure that enough capacity is available on the markets when required. So if we believe that the energy markets will tend to become really efficient in the next few years to cover activation costs, they will never provide the right economic signals for appropriate (quantitative and qualitative) investments in capacity.

We consider that only the implementation of well-designed capacity markets may contribute to both sufficient resources and flexible resources.

➔ Energy Pool considers that this work is a must have and has to come in the next few years, BUT is not sufficient.

Q4. 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?

As written earlier, we believe that the first step to reach a market design that ensures adequacy and security of supply is to define capacity markets that take into account (and consequently give a value to) the availability and flexibility characteristics of capacities and therefore accommodate the specific requirements of providers of Demand Response, as well as flexible generation resources. On such ideal capacity markets, those dormant existing capacities of flexible demand shall be able to deliver

their full potential at a reasonable cost compared to investment in new generation. Flexible demand is also a good complement to inflexible renewable generation that is required to win the climate challenge.

Capacity markets will cover the availability of capacities, including Demand Response, and optimal investment. Yet, capacity markets will not cover the relevant price signals to trigger activation of Demand Response, so a pre-requisite would be to make sure that Demand Response can participate on a level-playing field to balancing markets and energy markets, through specific Demand Response programs or even mechanisms allowing to convert a curtailment into a tradable energy block (see the NEBEF mechanism in France).

Finally, the question of subsidized energy resources and market distortions is to be considered deeply, to make sure that Demand Response development is not endangered by over subsidized environmentally-inefficient generation (e.g. some diesel generation that are sometimes required for peak-loads but would not get enough revenues on the energy market without subsidies).

European authorities should therefore try to harmonize or set up minimum standards (for instance in a dedicated regulation) for capacity markets implemented at national level. Since grids in Europe are highly interconnected and meshed, European authorities should also set forth an ambition planning and the corresponding steps towards an integrated capacity market in Europe.

We leave to the appreciation of the EC which legal tool at European level (communication, regulation, directive) is most appropriate to achieve these two objectives (common basis for capacity markets and planning for the implementation of an integrated European capacity market). In order to foster the implementation of capacity markets (and since some countries, e.g. France or UK, already started with the design and/or implementation of such capacity markets), we believe a communication (as a first step) and a regulation (binding and directly applicable) could be envisaged.

In any event (see below), an update of Directive 89/2005 is needed, in particular to precise how Demand Response shall be taken into account (and integrated in the relevant markets) while ensuring security of supply.

→ The EU should push for a market model including participation of DR to any electricity markets, including capacity markets that have to be designed and deployed.

Q5. *What additional steps could Member States take to support the effectiveness of the internal market in delivering generation adequacy?*

The efforts of the EU to harmonize the markets are essential, but as they concern a lot of countries and different energy mix situations, these efforts have to be considered on relatively long timeframes.

Member States have the opportunity to anticipate the global plan of the EU and start to build some elements of the future European-wide market design. Hence, all member states may make sure that the development of Demand Response is encouraged, as this might be one of the key competitive resources that will strengthen our electrical system, at relatively low cost.

This can be delivered by :

- Making sure that Demand Response can participate on a level-playing field to the existing markets (Spot, Intraday, Balancing, etc.);
- Installing capacity payments for Demand Response, either by setting a national capacity market for all capacities, limited to the peak capacities or even define some specific volume attributed to Demand Response;
- Assessing the Demand Response potential and the opportunity of defining products or programs specific to Demand Response (e.g. assessing the cost-benefit analysis of interruptible loads and define the optimal contribution of such a mechanism in the electrical system, notably defining the “Loss Of Load Expectation” indicator and have a target that is relevant for EU harmonization);
- Making sure that Demand Response participation is not restrained by the energy suppliers that supply the sites. And that these energy suppliers are fairly paid for the energy they still feed in the grid during a Demand Response operation when it is structured as an exchange of energy.
- etc.

➔ **Member States shall anticipate the EU efforts and setup the basis of a market where Demand Response can earn revenues proportionated to the value it creates.**

Q6. 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?

Standards even within each consumer are different at different times of the day and for each individual piece of equipment. That’s what makes Demand Response resources so effectively pin-point, not just for the grid with respect to locale and duration, but also for the individual with respect to reservation price for each kWh. Overall standards are a dicey subject and will need to address not just the willingness of some to endure black-outs but the ability to pay for reliability and the impact on economic opportunity and social equity that unreliability will generate.

This complexity and interaction between causation, long-term impact and willingness creates a social issue that, in our view, should be explored well in advance of assessing market design choices to address the issue. Market design is best applied to achieve resolved social goals, rather than to create social equity or inequity, by default.

The key to successful Demand Response contribution to overall security of supply is the equal treatment of demand side resources within the markets. This means consumer participation in Demand Response should be voluntary and paid, and market access should be made a priority by national regulatory authorities. Security of supply should not be used as an excuse for mandating the use of consumer goods as an ‘emergency resource’.

Moreover, the assessment of the Demand Response capacity of a consumer site often requires an expertise that can be provided by an energy service provider or a Demand Response aggregator. During the energy audit that is conducted, not only flexibility of the load is assessed, but also energy efficiency opportunities. So, there should be incentives to foster the synergies between DR potential audits and EE audits.

→ Consumers alone will not be active participants to the electricity markets : they have to be accompanied.

Q7. 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**

Adequacy (Energy Pool does not feel happy with the term “generation adequacy” because it does not include Demand-Side resources correctly) should be reviewed at every level, even beyond the regional and national levels to regions within a nation and at each transmission/distribution area. Hence, these reviews could take into account adequate reserves for local issues (e.g. spare dynamic power must be available for unforeseen outages or consumption, potentially limiting the capacity that could be sold across regions) and long-term cost effectiveness (e.g. can we avoid transmission upgrades by requiring procurement of very substantial percentages of capacity locally and is that distribution of extra generation and demand side resources more or less expensive and more or less reliable than more centralized solutions?).

We have explored some thoughts on who is best positioned to provide consumption and generation projections but market structure (e.g. local buying requirements) can drive the geographical distribution of supply toward an optimal mix. However, some capacity that is available cross border is quite valuable because different countries face peak issues and opportunities, in different years.

Regional adequacy reviews might be rare but relevant for some specific zones where the network topology and/or the structure of the generation mix may create recurring network constraints (e.g. Brittany that lack generation in France; geographical distribution of wind and loads in Germany). As a regional network collapse may endanger the overall stability of the European network, ENTSO-E may be allowed to initiate directed adequacy reviews at regional or national level, triggered by:

- identification of geographical network topology constraints
- concentration of capacity increasing risks of failure

Depending on the needs, these regional reviews might be conducted on a regular basis for a given period of time (e.g. 3 years). National and EU reviews might be conducted at least on an annual basis for long term vision, with potential in-deep reviews when some constraints are identified (such as the ENTSO-E summer and winter outlooks).

→ Reviews have to be done at all levels, the regional ones only for the zones that really require it.

Q8. 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? Yes there is a need for more detailed information on flexible capacity – especially that of the Demand Side, which has been ignored so far.**

b. Are there other areas where this generation adequacy assessment should be made more detailed? As stated in the Energy Efficiency Directive, both generation and demand side resources should be included in adequacy assessments. Demand Side resources have been largely ignored by ENTSO-E in their market assessments.

We very strongly believe that regional and national assessments of the availability and potential availability of flexible capacity are essential. What is critically lacking, in our view, is an assessment of the potential that can be brought by Demand Response in each nation and region by the industry and the commercial segments.

Demand Response potential to provide flexibility is high but has not been exploited or with products that were incorrectly designed to reveal the flexibility value of this resource. Hence, the EJP program in France requires long activations (16 hours a day), which is not adapted to an “evening peak” event.

So Demand Response potential and even flexible capacity assessments should be reviewed with a specific granularity that is not to be found in the existing studies, or incompletely.

Assessing flexibility would require to determine how much of the demand side resources could be available on two-second call, one-minute call, ten-minute call, half hour call, and for what duration or for how many total hours, before eroding from over-utilization. This information would be extremely valuable in assessing the most cost-effective market structures going forward.

To come back to ENTSO-E outlooks, we must stress that those reports are based on heterogeneous data coming from the different TSOs reports by control areas. Those reports should be harmonized (e.g. the LOLE parameter mentioned before, or the Value Of Lost Load, VOLL), so that the variables and KPIs might be additive and/or comparable. ENTSO-E may then sum up those data to get a sharp view on Europe’s situation.

The ENTSO-E reports focus on the availability of enough capacity (generation or transmission) to manage peaks, but does not consider the situations when there is an **excess of power**: this should be assessed in more details, with an assessment of the available storage or Demand Response (increase the load).

➔ **ENTSO-E’s reviews have to be more aligned and provide comparable and consistent information.**

Q9. Do you consider the Electricity Security of Supply Directive to be adequate? If it should be revised, on which points?

The Electricity Security of Supply Directive is a very good piece of law, setting forth important provisions regarding a common approach of a security of supply concept in the Member States. Although this text was drafted around eight years ago, it already insisted on the need to integrate Demand Response solutions to warranty security of supply (see article 3.2 c) and 5.2 a).

Considering the very slow development of Demand Response (and the still very DR-hostile conditions on energy markets), we can easily deduce that the provisions of this directive were not sufficient to ensure a proper development of Demand Response. Member States thus need more direct or precise provisions to integrate Demand Response resources and make full benefit of those resources.

As explained earlier, an update of this directive might be needed to:

- Rectify certain provisions :
 - which were far too “generation”-oriented (see for instance article 5.2 a);
 - which were well intended but absolutely not implemented (see for instance provisions of Whereas 1) ***“those public service obligations should be defined as precisely and strictly as possible, and should not result in the creation of generation capacity that goes beyond what is necessary to prevent undue interruption of distribution of electricity to final customers”***: to our knowledge, no member state in Europe makes sure that its market design or regulatory framework avoid the development of overcapacity.
- Pave the way for the implementation of an integrated capacity market in Europe (and this in addition to the adoption of a dedicated communication and regulation as suggested in our answer to question 4).

➔ **The Directive has to be reviewed and be added some prescriptive language on capacity markets and more open to active Demand.**

Q10. 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?

Energy Pool is not very familiar with the Gas Regulation mentioned, but we believe that such risk assessment and adequacy plans can be useful as long as the market design is not complete and not stabilized. So introducing mandatory risk assessment can be a good thing on the short term, to make sure that the different countries use a common methodology for that. These reviews could be lightweight so that countries spend more time solving the issues, notably by building efficient and complete markets, than assessing the issues. Yet, the “standards output” of such studies – if they are relevant and provide a good assessment of the adequacy and lack of flexibility - are essential for the actors and particularly new entrants, to assess the opportunities they have to invest in capacities (generation or demand response) and which.

In the long term, such reviews may not be required anymore, the regulators and TSOs being able to monitor adequacy with the appropriate capacity market indicators.

➔ **Energy Pool considers that mandatory assessments could be a good thing to boost the adoption of relevant indicators and then it will not be required anymore.**

Q11. 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?

As mentioned before, Energy Pool thinks that a common indicator and target should be defined to measure adequacy. This indicator could be the LOLE (Loss Of Load Expectation), that is defined in France as the average number of hours of failure per year and that is set to 3 hours.

But this indicator is nothing without a common methodology to assess it (could be some kind of operational research tool that models the electrical system, the risks and impacts; tools that are already used by the TSO and BRPs, but all with different models).

Different ‘test scenarios’ (sets of hypothesis and parameters) could be built to integrate the “potentially diverging preference regarding security of supply”. The different outputs could then provide a vision on the sensitivity of the different parameters (and so of the different actions that could be launched, such as favoring DR or CHP or RES, etc.)

There also is a benefit to harmonization to the extent that processes and products could be standardized, but these standards could be oriented toward achieving tradable products and cost-effective and diverse resources. Standards with respect to reliability and resource adequacy could be a minimum, ensuring against free-ridership and the economic impacts of grid collapse.

However, movement to entirely harmonize standards could freeze efforts of some nations to introduce markets that would advantage those countries by building demand side capacity resources available for export, to the ultimate economic advantage of that nation (more in the response to the next question). Harmonized standards could incorporate the step-by-step procedures with general freedom to incorporate capacity markets based on minimal standards and ultimate freedom to structure within them.

➔ **Energy Pool strongly recommends at least an alignment of the indicators and targets. Methodologies should be aligned, too.**

Q12. *Do you consider that capacity mechanisms should be introduced only if and when steps to improve market functioning are clearly insufficient?*

Capacity market should be put in place in anticipation to the market need in order to ensure sufficient development of Demand Response. In practice, while a CCGT takes about 4 years to be built with first delivery at the commissioning date, ramping up DR capacity might take a couple of years with a delivery from day one. Making the right investment decisions require forward capacity markets with a timing that matches with all the competing technologies. A 3-year forward capacity market has proved to be relevant in the US.

➔ **Energy Pool considers that capacity markets should be introduced and deployed as soon as possible, even if the “energy only” markets seem to work well.**

Q13. *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?***

Energy Pool has identified two main circumstances, under which we should consider the market to fail to provide the right signals:

- Price spikes happen too often, whereas there is enough capacity (because the available capacity is not flexible enough),
- Existing peak capacities cannot get enough revenues on the energy market to be profitable, whereas there is a lack of capacity (because of price caps or because of the market dynamics).

The value of flexibility is currently not sufficiently reflected in European Energy markets. This issue becomes particularly acute in markets with high levels of intermittent renewables. Energy prices drop and the spikes in price do not provide sufficient investment security for flexible resources used only a few hours a year.

The low, unstable value of flexibility is particularly difficult for Demand Response resources whose main contribution is fast acting, dependable, short duration and flexibility. The current markets structures lack the mechanisms to provide sufficient and long-term investment stability.

➔ Energy Pool thinks that price spikes and insufficient revenues for some types of capacities that are needed by the system are good indicators of the failure of the concept of “energy only” markets to provide adequacy and flexibility.

Q14. 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?*

Strategic reserve may ensure the system security of supply during a nuclear phase out by most probably keeping old thermal units in the system. Thus it might not achieve security of supply and decarbonisation at the same time.

It might also depend on the design of the strategic reserve: Old amortized fuel units might take the benefit of such system and prevent the entry of DR or new CO₂ free generations.

➔ So we recommend that strategic reserves may be transitional mechanisms and that they should be open to any kind of capacity, so that they distort neither the capacity market to be nor the energy markets.

Q15. 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?*

Energy Pool supports a **decentralized 3-year forward capacity market with pay-as-cleared auctions every month**. Capacity owners may have their capacity certified by a central authority then sell these capacity certificates to energy retailers that may be incentivized to collect enough capacity to be able to match with the needs created by their customers. Energy Pool has been and is still a very active contributor to the design of the French capacity mechanism and we see many advantages to that design, if it is coupled with a strong regulation of the market and if the liquidity of the market manages to rise from the existing absence of a capacity market.

We believe that one of the advantages of such a model is that if it fails to start correctly, some kind of transitory auctions/call for tender can introduce the necessary centralized control that may be required to launch correctly the market.

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?

Rewarding flexibility supposes to take the dynamics of a capacity into account when issuing a capacity certificate, not only the power in MWs it can provide, but when and how (delay for notification, duration, ramp rate, repeatability, maximum energy in a day/week/year, etc.). This changes the way capacity is procured and brings a complexity to the mechanism that may:

- Decrease liquidity of the product(s)
- Create barriers for new entrants
- Makes the notion of capacity more difficult for end-customers to understand

BUT this complexity can be reduced by using some “templates” to model capacities and then simplify certification and decrease the number of capacity types (as every power plant is different but can be sorted in half a dozen types).

c. Are there any models of capacity mechanism the introduction of which would be irreversible, or reversible only with great difficulty?

Capacity markets will prove to be efficient if most of the generation capacities get significant revenues from this market, so that capacities that are not needed do not get payments and so are not competitive / profitable. Then if the capacity mechanism provides significant payments, then capacity owners will need it and it may be difficult to go back to the initial situation. In the end, capacity markets HAVE to be irreversible, otherwise they are not efficient. Energy Pool does not consider that being reversible is an important feature because capacity markets are needed and have to be designed to be durable.

➔ Energy Pool suggests to use the benchmark of existing capacity markets to define a market that will be efficient AND might be merged in an EU-wide market on the long term.

Q16. Which models of capacity mechanisms do you consider to have the least impact on costs for final consumers?

Theoretically, if the markets were perfectly designed, the revenues of the capacity owners would come from a transfer of revenues from the energy market (mainly from the infra-marginal rents) and the only additional costs would come from the “missing money” that would be paid to the peak capacity as a reward to the reduction of the Loss Of Load Expectation that, given the Value Of Lost Load, might be a good trade. There may also be some “administrative/transactional costs” that argue for a mechanism that is simple.

From a more practical point of view, we should assess the pros and cons of different options: centralized or decentralized market, immediate or forward procurement and pay-as-bid or pay-as-cleared payments.

Energy Pool favors a **decentralized** market (responsibility held by the energy retailers who procure capacity certificates themselves with respect to the capacity needs of their consumers) because we believe that :

- The responsibility is held by those who “initiate” the Demand for security of supply.

- After a “Test & Learn” period, the assessment of the need may be more accurate, each supplier being able
- It may be easier to share offers than even organize the fusion of two decentralized markets that two centralized markets, to build a EU-wide capacity market.
- Only the level of security may be lower than with a centralized market, but this may be explained by less over-capacity.
- A control of the TSO on the well-functioning of the market could give a little taste of “centralization” to a decentralized market, the TSO being able to procure some extra capacity if it considers that the energy retailers are failing.

Yet a centralized market may have some advantages:

- It is simpler to design: A central authority defines the most optimal need, procures capacity through one or more auction then redispatches the costs to the appropriate actors.
- It is more transparent and may reduce risks for new entrants or smaller players.

Energy Pool favors a **3-year forward** market so the price signal delivered by the capacity market may be used to arbitrate between investments and give visibility to the actors, notably avoiding prices that would be too much binary. Monthly immediate capacity markets have proved to fail to provide good price signals in the USA.

The question for the pricing method is delicate: a pay-as-cleared method may provide some better incentives to capacities to participate and to bid at their “marginal” cost. So it might be more efficient for security of supply, but with a higher cost. A pay-as-bid may favor some gaming behaviors, capacity owners guessing the market price and placing bids near that price: it may create inefficient volatility, but maybe with lower prices. So Energy Pool suggests a **pay-as-cleared** method, with a control of the regulators that the extra revenues on the capacity market decrease the prices on the energy market so that the overall revenues do not rise too much for base generation.

➔ **A well-designed market will have a very low inflationary impact on the electricity prices.**

Q17. To what extent do you consider capacity mechanisms could build on balancing market regimes to encourage flexibility in all its forms?

If designed correctly, capacity mechanisms will spur the growth of a significant amount of demand response resources that may reveal to the markets some capacities that were not available before. The control for the availability of a capacity could be done by having this capacity activated OR by having this capacity offered on a balancing market.

Another option would be to require information to assess the “balancing parameters” of a capacity when this capacity is registered into the capacity mechanism (and get some capacity certificates or the right to bid into a capacity auction).

➔ **Energy Pool suggests that more capacity will mean more offers available for the balancing markets and if the extra capacities are Demand Response, they will provide flexibility through Balancing markets easily.**

Q18. Should the Commission set out to provide the blueprint for an EU-wide capacity mechanism?

Energy Pool is very enthusiastic about an EU-wide capacity market as:

- The main adequacy issue is to be considered at the appropriate level : most of the time the European level (actually the interconnected zones),
- Capacity should be tradable in the internal market as well as energy, so that the optimization of investments is done at a global level
- We believe that some countries like France have a huge potential for flexibility (notably because of electrical heating that can store energy and provide load-shifting products easily) that may be required by other countries that lack flexibility (e.g. Denmark with the huge wind portfolio of the country).

Yet, targeting a global market may slow down the design and deployment of Capacity Markets if the Member States wait for the global design to be defined. So Energy Pool thinks that the EU should build step-by-step some recommendations on the design on a global decentralized market, based capacity certificates that could be traded all-over Europe, without limiting the possibility for some countries to procure the correct amount of capacity for their nation's need with a centralized auction, first only with national capacities, then afterwards with cross-border capacities, making sure that a capacity engaged in one mechanism is exclusive (not to double-count a capacity at European level).

→ Energy Pool supports an EU-wide mechanism as a target, but this target should be open and make sure not to delay any positive initiative from the Member States.

Q19. Do you consider that the European Commission should develop detailed criteria to assess the compatibility of capacity mechanisms with the internal energy market?

Consistency between capacity mechanisms and energy markets is essential. Yet, Energy Pool does not share the concern of the Commission that capacity markets may distort energy markets. We prefer to see capacity markets as an opportunity to deliver the appropriate price signal to the markets while the existing price signal is mixing up two contradictory objectives: activating the most efficient power plants at every moment but also to inform on the opportunity of new investments on the long term.

If the prices on the energy market currently already reflect the marginal cost of the most efficient available power plant (that is the case most of the time, price spikes excluded), then the introduction of a capacity market may not be changing the prices a lot, because those who benefit most of infra-marginal rents often sign long term contracts that may be changed either to include capacity or to incorporate the impact of the extra revenues the capacity owner gets.

There might be some bigger issues where the market is dominated by one single player, but the problem may not come from the market design but from this situation.

→ Energy Pool considers that such criteria might be useful but may not a reason to curb design or deployment of capacity markets.

Q20. 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?

We believe the criteria, with one exception, provide a solid framework for developing capacity markets that do not discriminate against demand side solutions.

Criteria (3) does not seem relevant to Energy Pool, because we believe that – except if the capacity market is designed as a strategic reserve – the introduction of the capacity market is a fundamental change in market design and should be introduced in a long lasting mindset. A well designed capacity market should have the ability to reduced boom and bust of the electricity market.

➔ The criteria are OK, except the one that suggests we could design non-durable capacity markets (except some transitory strategic reserves).

4. Conclusion

Energy Pool would like to stress the point that the introduction of Capacity Mechanisms is fundamental to foster the development of Demand Response in Europe. Indeed, Capacity Mechanisms may generate appropriate price signals for the “power” value of electricity assets (signals that may be used to arbitrate between different investment opportunities, say between generation and DR) and Demand Response capacities are particularly competitive for assets that are required to run very few hours a year or to be very flexible.

As a consequence, among the different stakeholders, Demand Response Aggregators are very much concerned by the design of Capacity Markets and push for their introduction and so we ask the Commission to make sure that Aggregators and/or their representative organizations are included in the correlated discussions as soon as possible.