CONTRIBUTION DE POWEO DIRECT ENERGIE A LA CONSULTATION DE LA COMMISSION EUROPEENNE :

“GENERATION ADEQUACY, CAPACITY MECHANISMS AND THE INTERNAL MARKET IN ELECTRICITY”

Février 2012

CONTRIBUTION DE POWEO DIRECT ENERGIE

Poweo Direct Energie est un membre actif de l'Union Française de l'Electricité (UFE) et soutient, à ce titre, les grandes orientations de la réponse ci-jointe.

Concernant le mécanisme de rémunération de la capacité, Poweo Direct Energie souhaite rappeler la nécessité de mettre en place un design de marché qui permette d'assurer, de manière efficace économiquement, les investissements nécessaires à la sécurité d'approvisionnement à la pointe. Pour atteindre cet objectif, il est nécessaire que les investisseurs puissent avoir de la visibilité sur le cadre réglementaire et sur les revenus associés à leurs investissements dans de nouvelles capacités.

Poweo Direct Energie partage avec l'UFE **la nécessité de mettre en place un mécanisme de rémunération de la capacité.** L'UFE préconise toutefois un market design qui conduit à un prix nul lorsque le parc de production est adapté à la demande et un prix élevé en période de sous-capacité. Poweo Direct Energie s'interroge sur la pertinence d'un tel market design qui conduit à une corrélation entre les périodes où il existe une tension sur les prix de l'énergie et celles où il existe une tension sur les prix de la capacité.

Pour que les investisseurs puissent avoir de la visibilité sur la rentabilité à long terme de leurs investissements, il semble, en effet, plus judicieux que **les périodes de tensions sur les prix de l'énergie et sur les prix de la capacité soient anti-corrélés:**

- **Lorsque le parc de production est adapté à la couverture des pointes de consommation : il n'existe aucune tension sur les prix de l'énergie, qui sont alors égaux aux coûts variables de production ; le prix de la capacité devrait alors être maximum, c'est-à-dire au niveau du missing money théorique (l'annuité d'investissement d'un moyen d'extrême pointe) ;**
- **En période de sous-capacité : le prix de l'énergie intègre une rente de rareté permettant de rentabiliser en partie les investissements de production d'extrême pointe ; le prix de la capacité devrait être moins élevé.**

De ce point de vue, tout marché de capacités devrait se comprendre comme un mécanisme « d'ajustement » en capacité, c'est-à-dire permettant d'établir le revenu complémentaire au marché de l'énergie qu'un producteur exigerait pour faire un nouvel investissement.

Un tel market design permettrait, dans le même temps, de réduire la volatilité des coûts complets de fourniture aux clients finaux.

Union Française de l'Électricité

UFE RESPONSE TO THE EUROPEAN COMMISSION CONSULTATION ON GENERATION ADEQUACY, CAPACITY MECHANISMS AND THE INTERNAL MARKET IN ELECTRICITY

7 February 2013

About UFE

The *Union Française de l'Electricité* (UFE) is the association of the French electricity industry. It represents the electricity sector employers within the electricity and gas branch of the French industry and promotes the interests of generators, TSO, DSOs and suppliers in the economic, industrial and social fields.

UFE is a member of MEDEF (the French Employers' Association) and of EURELECTRIC, the industrial association representing the electricity sector at pan-European level. UFE brings together directly or indirectly more than 500 enterprises, which employ more than 150,000 staff and account for more than 40 billion euros of total revenues every year.

UFE members include: BKW, CNR, Poweo Direct Energie, EDF, ENEL France, E.ON, ERDF, France Hydro-Electricité (FHE), GDF SUEZ, POWEO, RTE, SHEM-GDFSUEZ, Syndicat des Energies Renouvelables (SER), UNELEG, VATTENFALL.

UFE is a not-for-profit organisation under French law. We adhere to the code of conduct of the Joint Transparency Register and carry the identification number 30146663069-53.

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General comments

The Union Française de l'Electricité (UFE) welcomes the initiative of the European Commission to launch its consultation paper on generation adequacy, capacity mechanisms and the internal market in electricity on 15 November 2012.

UFE hopes that the consultation will help take another step forward to provide Europe with **security of supply**, as one of the three key objectives of European energy policy. The UFE does indeed agree with the statement in the consultation paper that "*The EU objective in the field of the energy policy is to deliver sustainable and secure energy and a competitive internal market for energy*".

UFE wishes to highlight several key points regarding the **link between investment and generation adequacy**. Further detailed comments are also available in our full response attached.

One of the leverages of competitiveness for energy lies in **pooling resources at EU level**. This pooling allows Europe to reduce the total capacity requirements and increase efficiency though cost savings from overall reduced Capex and Opex[1] related to installed generating units and further through reduced fuel cost savings (Opex).

This is achieved both through the existence of efficient wholesale markets and the development and optimization of exchanges between regions via interconnectors. Refining this optimization at the European level is the goal in the context of the Regional Initiatives through the integration of these wholesale markets via their coupling to different time horizons.

Developing interconnections allows for an increase in trade and an accrual of these savings which must be weighed against their cost of investment in order to identify those projects whose development improves European economic performance and should therefore be favoured.

Thus, **the achievement of the internal market and the development of competition on the wholesale and retail markets are not ends in themselves but are means to serve the objective of competitiveness**.

Several energy policy objectives have been added to that competitiveness target. Europe has set ambitious targets to be reached by 2020 in line with the fight against climate change: 20% reduction in emissions of greenhouse gases; 20% increase in energy efficiency, reaching a 20% share of renewables in the EU total energy consumption.

[1] Beyond the challenge of reduced/optimized costs, the European Union has from the start pursued the objective of an improved security of supply, which is reached both through a more secure operation of the synchronous interconnected system and through greater solidarity between Member States.

UFE fully supports the EU political ambition to fight against climate change and supports all measures to improve the economic performance of the European electricity system.

UFE notes, however, that the **overlapping of measures creates an increasingly complex framework, and leads to inconsistencies and difficulties that must be addressed**.

UFE would like to emphasize three main points of concern:

1) Successfully integrate renewable generation into the market.

Europe is undergoing a profound transformation of its energy mix as a result of energy policies from both the EU and its Member States. For example, older conventional thermal power plants are gradually being decommissioned, combined cycle gas turbines experienced a massive expansion in the early 2000s and nuclear power has been abandoned by some countries. But the most striking feature is undoubtedly the growth of renewable energy throughout Europe and especially in Germany, Spain, and Italy.

UFE considers that **such rapid development of renewables needs to be undertaken without jeopardising the functioning of the electric system and of the internal market**. The challenge of a successful integration of RES therefore lies in bringing together the necessary conditions for both reaching the ambitious RES development targets and integrating them into the electrical system consistently with market rules/functioning. Integrating this mostly intermittent generation indeed presents many challenges, as evident from countries such as Germany or Spain in recent years.

- **Ensuring continuity of supply deploying intermittent renewable generation**. Wind and photovoltaic generation, which depend on weather conditions, add uncertainty and variability to the supply-demand balance, which becomes less predictable and harder to manage at local, national and European levels. To address this intermittency, the integration increases the need for flexibility (flexible thermal capacity, flexible storage,...).
- **Concentration of renewables in some specific locations can lead to massive locational spot energy flows**. This production being pooled at EU level like conventional generation, it contributes further to increase the use of networks and interconnections as well as congestion on transportation and distribution networks.
    - Strengthening transmission infrastructure appears often as an economically relevant response to curb these congestions but **it needs to take place when it is economically efficient** (an unconstrained European transmission system would be inefficient and the cost would be prohibitive). Furthermore **reinforcements can take a long time to build and hence planning procedures must be streamlined**.
    - Reinforcements are also needed on the **distribution networks**.

- **The current priority dispatch of renewable energy needs to be questioned when there is an excess of supply**. The emergence of negative market prices in certain hours, while renewable assets whose marginal generation cost is zero keep on being injected in the network, demonstrates the present economic inefficiencies.
- The very rapid development of renewable energy in several European countries has been driven by **public subsidies**, not by generation adequacy considerations. The existing generation portfolio has as a result been unable to adapt to this pace, causing an **oversupply situation**. **In addition to funding and network congestion issues, a further consequence is downward pressure on average wholesale prices and running hours, causing additional losses for existing conventional production investments (including recently built combined cycle gas turbines)**. This impact is not only local, as it spreads throughout Europe's interconnected markets.
- This phenomenon is added to the **severe economic crisis**, which has also reduced wholesale prices and running hours for some plants.

UFE, therefore, requests that:

- the objectives and pace of development of subsidised renewables is **proportionate** so that the electric system has time to adapt (networks, generation fleets, which may vary by country) and stranded costs are avoided.
- **the pace is respected**, so that investment is not discouraged through a lack of vision and certainty about the future.
- **the most competitive renewable energies are encouraged** and that ambitious **R&D programmes** for renewable technologies are deployed for those renewable technologies which are still far from being competitive.

2) **Predictability and consistency of the regulatory framework in order to promote investments.**

It is essential for the electricity industry to know in advance what to expect from the regulatory framework and market conditions over the **long term** for all the value chain investments: generation, networks, supply, energy efficiency activities. This is to enable the necessary and long term investments to come forward and is vital in safeguarding security of supply and allowing innovation. For example in relation to:

- **Market design** and subsequent changes to market design. The design must ensure that economically rational price signals are forthcoming and must ensure there is a level playing field among the actors in the market.
- The **prices ultimately paid by final customers** (through market offerings or regulated prices where they exist) must be sufficient to cover the overall costs of the industry. This is also necessary for the development of genuine competition and to stimulate operators' incentives to improve productivity.
- **Funding and development of networks, renewable energy, or energy efficiency** programs should also be planned and organized over the long term

under balanced and sustainable conditions for both the industry and electricity consumers.

- Improving the **consistency of and interaction of all the various regulations** in the market (for example including energy efficiency, RES support mechanisms and reduction of greenhouse gas emissions). Support policies implemented by the Member States to achieve the goals of renewable energy and energy efficiency lead to a reduction of CO_2 emissions, a lowered demand for CO_2 allowances in the EU ETS and therefore lowering the CO_2 price and weakening the effectiveness of the carbon price signal. However, this signal is supposed to incentivise investments in assets with low or no carbon in all sectors of the economy. **To give to market a relevant carbon price signal is crucial for investment in low carbon technologies –** especially important at present, with record quantities of coal and lignite being burnt in Europe.
- **Energy policy must take into consideration the overall economic outlook** : during a crisis, energy consumption and related CO_2 emissions decrease. This has an impact on the CO_2 price, as price goes down if the number of allowances remains the same.

3) Securing sufficient generation capacity can be achieved by adding a capacity mechanism component to the current energy only market.

Some countries are facing security of supply concerns from various technical challenges, for instance having sufficient capacity available in the future to meet demand. In France, these concerns are particularly high regarding peak demand in winter, which continuous growth over the past decade is threatening Security of Supply, revealing a form of **market failure of the "energy only" market**. Some countries would hence like to take action, which is legitimate given consumers and the economy may need such action and indeed that EU legislation requires Member States to secure electricity supplies[2].

In some countries, including in France, **there is a risk that total power available (including from neighbouring countries via interconnections) is insufficient to meet the demand under certain scenarios**. In France, for example, the requirement is that there should be sufficient capacity in all cases but for up to a maximum of 3 hours per year on average. To meet this criterion, the Government is currently planning to put in place a mechanism for capacity obligations.

The "energy only" markets have proven effective to optimize the cost of supply given a particular level of demand. However, it does not necessarily guarantee that enough installed capacity is available to achieve the desired quality standard – there is a missing money problem. In France, there is reason to believe that quality would be well below standard without special measures: indeed, **there does not seem to be any incentive for**

[2] Directive 2005/89/EC concerning measures to safeguard security of electricity supply and infrastructure investment

investing in new peak capacity whose earnings are based on price spikes which are rare and uncertain.

Of course actions that are economically efficient to reduce the need for capacity should also be pursued simultaneously (e.g. investment in interconnections, demand-side management, contribution of new technologies to the demand management). But such actions, which take time to develop, do still not mean that the energy only market can provide any guarantee that sufficient (albeit smaller) capacity will be available to meet the security of supply criteria. Investment projects will indeed face the same uncertainty as before.

Given that this is not a temporary problem **the solution must be structural and related to market design**. A **supplementary capacity mechanism** is requiring and should cover all capacity needs. It must incorporate all capacity without discrimination (whether generation or demand), be market based, and take into account the possibilities to import from neighbouring countries. **The mechanism should and can be introduced without distorting the energy market**, as it is the case with the French mechanism.

The French mechanism is not fixing remuneration for capacity, but instead requires market participants to have sufficient capacity available in proportion to their respective capacity needs. It is therefore a constraint on suppliers which will introduce costs, a secondary market to trade the capacities and therefore develop a market price of capacity for suppliers. This price will hence provide an incentive over time to add new capacity when needed. To estimate the need for capacity at minimum costs to consumers it is vital to take into account import possibilities that are bankable during periods of stress. To this end the supply-demand adequacy outlook for Europe as a whole is very important and the UFE considers that the work done by the TSOs in ENTSO-E highlights the challenges of security of supply and is a valuable tool in ensuring the market operates smoothly and that integration of renewable energies can take place efficiently.

Of course **the target in the long term should be a coordinated definition at European level of capacity needs for each area of interconnection**, taking into account the solidarity permitted by the interconnections between these areas and the quality standards defined by each Member State, as well as the introduction of capacity mechanisms to fulfil these requirements.

As long as a capacity mechanism can operate without disturbing the local energy market and without disturbing the interconnected energy markets, there is no reason to prevent the development of such an initiative in Member States facing security of supply concerns in the short run.

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Detailed comments

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

Electricity generation investment decisions are not based on current market conditions, but on the expected evolution of a number of value drivers over the lifetime horizon of the investment (20 years and more), such as:

- Expected fundamentals in the market (supply/demand balance, power/fuel/CO2 prices, etc);
- Expected regulation stability (charges, taxes, levies, etc) and any other support schemes (RES subsidies, energy efficiency target, RES and CO2 objectives, etc);
- Expected evolution of the operating hours of new assets in competition with other existing and new expected assets, such as RES generation units;
- Expected impact of new technological evolutions (like smart meters on demand side, etc…).

Therefore current market prices are not the only relevant signal to trigger investments in needed generation capacity, but expected fundamentals (price spreads power/gas&CO2, power/coal&CO2), favourable and stable regulation in the market are important criteria. In our view, the current situation when there is no clarity about the key post 2020 policy goals and tools cannot persist as it strongly hampers investment decisions. Obtaining a clear idea about the key future policy choices, including what will be the RES support after 2020, what will be exactly the targets for CO2 reduction beyond 2020, will significantly increase investors' confidence in the future of the energy sector.

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. Introduction of support schemes distorts price formation in any market and leads to the situation when investment decisions are based primarily on the level of support, rather than on market price signals. This logic goes against market fundamentals and economic efficiency often resulting in expensive and complex solutions (design of support schemes is rather complex), which at the end of the day are paid by final consumers. In addition, if investments are triggered by support schemes it is questionable whether such investments will indeed be the ones needed to maintain generation adequacy in the system.

With regard to the RES support schemes we acknowledge their positive role in promoting the renewable technologies at a very early development stage when they represent only a small share of generation. However, as renewable technology becomes more and more mature and the feed-in of renewables becomes significant in the whole generation

portfolio, the distortive effect of RES support schemes is increasing, in particularly on the market of thermal generation. Poorly designed support schemes could entail excessive levels of remuneration, which will lead to excess of installed capacity (as it was the case of solar PV and CSP in Spain). They also might encourage the operation of these subsidized plants even when that energy is not needed, in a non-cost-effective way from the system perspective (negative prices). As a result, market functioning is disturbed and viability of conventional generation is threatened through reduction of the operating hours, which might endanger the security of supply of the system. Additionally, this could hinder decisions of new investments in generation, as well as maintenance of existing generation fleet.

An effective way to significantly reduce the distortive effect of the RES support schemes on the market is to integrate renewable generation into the market. This will mean that RES producers are incentivised to sell their own production in the market, as well as take system responsibility for meeting scheduling, nomination and balancing requirements on their portfolio.

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

The establishment of cross-border day-ahead, intraday and balancing markets, as well as development of a coordinated process for capacity calculation will contribute to ensuring security of supply. The development of a common grid model and increased cooperation of TSOs and DSOs, including better coordination of congestion management will play an important role in ensuring more optimal regionals and cross-border flows in the system. In this context, it is important to stress that in order to reap full benefits of more efficient cross-border capacity allocation, TSOs should avoid reducing interconnectors capacities between markets in case of system stress situations (e.g. large RES in-feed due to strong wind conditions). Finally, to promote security of supply it is crucial to do large scale investments into cross-border transmission capacity, new interconnectors, and development of distribution grids and their smart application.

With progressing market integration, member states will have to review their national perspectives to assessing security of supply, which normally implies overestimating security concerns, and move towards a more European approach.

The contribution of market integration to a higher level of security of supply is particularly large for markets with different characteristics. This is the case for the integration of the Nordic market, which is a hydro dominated system, with the Central-West European market, which is a thermal capacity constrained system.

The progress in introducing cross-border day-ahead, intraday and balancing markets remains limited, particularly in view of massive growth of RES generation. In its response

to the Internal Energy Market Communication published by the European Commission in November 2012, EURELECTRIC calls for urgent action from the side of the Commission, ACER and other key stakeholders to ensure progress in the NWE integration during 2013.

The establishment of cross-border day ahead, intra- day and balancing markets is needed, but will not solve all issues related to generation adequacy.

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?

Ensuring coherence in the internal market design, promoting convergence of RES support schemes and better use of cooperation mechanisms, as well as the suppress of regulated prices are clear examples of key tasks to be undertaken at European level by the EC. This will contribute to removing distortions, which significantly affect generation adequacy and security of supply.

European electricity utilities are fully exposed to a lack of consistent methodology in pursuing the three energy policy objectives of security of supply, sustainability and competitiveness.

Policies and regulation are well advised to take into account the time horizons of the electricity sector. Visibility on long-term trends and regulation, and policy consistency are crucial if generation adequacy and security of supply are to be guaranteed in the long run. In this context, we call on the Commission to publish the list of discretionary measures taken by regional or government authorities (introduction of distortions in market mechanisms; discretionary taxation; retroactive changes to support schemes), which are heavily impacting the sector. Only EU action on such random regulatory intervention will be able to maintain a decent investment climate in the sector and will avoid that risk premiums for energy projects skyrocket.

More concretely, the European Commission should strive to:

- Remove market distortions and taking a more European approach in supporting renewables, implying integration of RES into the wholesale market or at the very least, non-conflicting national approaches in supporting renewable generation should be consistent with the market; avoiding counteracting policy measures and defending the market-based mechanism of carbon price as the solely objective to reduce CO2 emissions
- Develop a reliable and clear roadmap with concrete deadlines for phasing out such supports as technologies reaches maturity
- Fully implement the 3rd energy package
- Put an end to distortive regulated end consumer prices

- Ensure a level playing field in the internal market by requesting Member States to stop penalizing the energy industry (burdensome tax initiatives, administrative requirements, etc.)
- Enforce the necessary interconnector capacity expansion
- Encourage the demand response

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

As mentioned in the answer to the question 4, Member States should stop various discretionary measures that are conflicting with the overall EU energy policies and endanger reaching the EU energy policy objectives. This is particularly crucial in the area of generation adequacy.

Firstly, among member states and even regions, there appears to be a trend of setting "energy independence/autonomy" objectives, in the belief that regions should become energy autonomous, attaching little value to the role of interconnection in security of supply issues. Investing in grid expansion, when socio-economically justified appears to be a way to hedge at lowest cost regional security of supply issues using complementary situations elsewhere in Europe.

Secondly, to support the effectiveness of the internal markets, Member States have a key role in removing distortions introduced in national regulations and reduce the degree of intervention in their energy policy actions. For example, generators should be allowed to withdraw plants and manage their generation portfolio solely based on economic principles.

Thirdly, market intervention through ad-hoc taxes further interferes with the development of the internal energy market and hampers investments in existing and new power plants. Harmonization of taxation in electricity is already defined in the Directive 2003/96/EC (restructuring the Community framework for the taxation of energy products and electricity); Member States can fix the level of taxation but not the structure, what in some cases has happened recently (new energy taxation Law in Spain implemented in 2013).

EURELECTRIC has investigated recent tax developments and found that numerous member states have established new or increased existing taxes raising concern about existing electricity generation infrastructure and, as a consequence, negatively impacting on new investments.

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?

Our belief is that security and availability of supply is by far the most important requirement for the majority of customers, although this only becomes apparent on the infrequent occasions when supplies are interrupted.

At present, public authorities themselves determine the degree of security of electricity supply by setting various reliability planning standards, including Loss of Load Expectation (LoLE), which reflects the expected number of days per year for which available generating capacity is insufficient to serve the daily peak demand (load).

There are limited practical means for customers to demonstrate their choice in the trade-off between security of supply and price, except for the largest industrial customers. Approaches need to be pragmatic:

- On one hand, we recognise that all customers have different needs, preferences and potential to be more flexible or to accept lower standards. Customers should have the option to offer their flexibility and benefit from the market value of this flexibility. Customers' preferences are only actually known once they buy a product or service, therefore the framework needs to be in place to enable companies to develop and offer innovative products.
- On the other hand, its is an utopia to believe that electricity demand could become fully elastic to price. Therefore, public authorities will always have a role to define the degree of security of supply.

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:

Generation adequacy must be measured against the level of system security that is decided upon legally or by regulators in each area. As such, a first action could be to develop benchmarks of these system security requirements. However, technically speaking, national geographical borders are not always the best scale to measure generation adequacy. So areas of assessment delimited by electrical infrastructure could be defined as sub-national, national, as well as transnational.

However, the current European regulatory framework, mainly based on national schemes and some coordination at European level, results in the situation when Member States are concerned predominantly about ensuring national generation adequacy. It is even more legitimate taking into account the fact that political impact of power shortages remains largely national.

Overall, UFE supports that generation adequacy takes into account contribution of cross border connections. This requires a firm commitment between involved countries by sharing interconnection resources, avoiding cuts of interconnection in case of scarcity, and so respecting trade agreements. Through the coupling of day-ahead, intraday and

balancing markets this contribution is becoming more efficient and should thus be fully acknowledged in the national assessments.

a. National Level

Generation adequacy assessments at national level should take into account the possible capacity closures also due to economic reasons and not only based on technical lifetime (see question 2 on the impact of support system on the economic lifetime of plants).

Based on electrical infrastructures, there are no systematic reasons to differ between national and regional levels, as cross border capacity needs to be accounted for. However, considering the diversity of situations of Member States' regulatory framework, political orientations, and considering that the current transport system is based on historical national approach, this scale is usually the most pertinent to assess generation adequacy, while taking into account the contribution of interconnections by reducing or increasing each Member State capacity needs.

Detailed national reviews are already made regularly in numerous countries.

b. Regional Level

Based on electrical infrastructure, there are no systematic reasons to differ between national and regional levels, as cross border capacity needs to be accounted for.

Regions where there are specific concerns about generation adequacy (either due to specific network constraints, or crucial synergies with neighbouring countries) increasingly assess their generation adequacy specifically, and find local agreements or coordination process to ensure that generation adequacy is guaranteed. The development of distribution grids and smart application can tellingly contribute to this goal.

c. European Level

Generation adequacy assessments at European level should take into account the possible capacity closures also due to economic reasons and not only based on technical lifetime (see question 2 on the impact of support system on the economic lifetime of plants).

The contribution from demand response resources should be also more clearly included. With increasing demand response, the total generation capacity level will be a result of economic optimisation by the market actors between the supply and demand-side resources.

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?

Yes, TSOs should develop a regional assessment about available flexibility in the system, including generation, demand and storage. The level of flexibility available through the interconnections should be properly taken into account through a regional analysis. The limitations to the dynamic use of interconnectors that are embedded in market-coupling algorithm (like ramp-up limits on DC cables in the NWE coupling algorithm) should be assessed and analysed at a regional level rather than a national one.

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

One of the drawbacks of the ENTSO-E generation adequacy outlook is related to the fact that it does not include the economic parameters of the existing and future generation. This might result in a too optimistic assessment of generation adequacy, especially in view of reducing running hours of back-up generation due to massively increasing in-feed of RES.

Furthermore, it is important to provide more complete data and better transparency of the ENTSO-E methodology used for the generation adequacy assessment. In the ENTSO-E TYNDP 2012, the general methodology justifiably includes variable RES into the 'non-usable capacity'. However, the fact that all TSOs are not using the established methodology in a consistent way requires better coordination of the work from the side of ENTSO-E.

In addition, we welcome more consistent application of probabilistic methodologies to assess the impact of RES, but want to stress that for the proper use of these techniques the accurate modelling of the variable sources, which is indeed not easy to do, is of paramount importance.

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

Yes. The Directive 2005/89/EC sets forth the general principles that Member States have to follow to ensure an adequate level of security of supply without creating excessive burden on final customers. Notwithstanding those principles, Member States still enjoy a certain amount of leeway to achieve the results dictated by the Directive. As a result, in the absence of specific regulations at European level, aiming to define common criteria to assess security of supply, Member States have adopted different approaches.
In general terms, UFE considers the Electricity Security of the Supply Directive to be adequate even if it acknowledges a lack of coordination at European level, to be improved in the future.

Although this is not really the purpose, the development of Network Codes (like Operational Security, Capacity allocation and Congestion management with its chapter on capacity calculation) will set out additional (but in many case already practiced) rules that should further ensure and harmonise the security of supply of the electricity system.

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?

No. One to one equivalency does not seem feasible since other factors intervene in security of supply in electricity that adds a different complexity than in the case of gas. Important differences exist in terms of security of gas and electricity supplies. Security of electricity supply is rooted in a short-term dimension, i.e. keeping the lights on by avoiding that imbalances in demand and supply create disturbances and a cascading effect on the grids that leads to black-outs.

UFE believes that risk assessment is a good tool to enhance the level of security of supply, but at the same time recognizes that the existing non-binding TYNDP performed by ENTSO-E, already embeds the concept of security of supply (Regulation 714/2009). As a first step, it would be preferable to enhance the transparency of the TYNDP in terms of regional planning (see also EURELECTRIC response to ENTSO-E Ten-Year Network Development Plan 2012 Package) and to perform an additional focus on the s ability of the system to integrate variable resources. The drafting process of Network Codes, in particular Operational Security and (Cross-border) Balancing will give additional instruments to organise more harmonised approach and actually bring elements that are similar to those in the Gas Security of Supply Regulation.

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?

Yes. The development of harmonised generation adequacy standards across the EU seems to be the way forward in an integrated market. In this situation, it is not possible to assume that capacity located in one country only contributes to that country's security of supply. Moreover, this would avoid any risk of distortions of cross-border trade. Furthermore, it is hard to imagine in an integrated market how one member state aiming for a higher standard than a neighbouring member state will be able to avoid that this higher standard is crumbled by energy exports to the neighbouring member state in times of scarcity. However, it may easily result in a situation in which consumers in the country with a higher standard are subsidising consumers in another country where consumers are faced with a lower level of reliability.

At the same time, security of power supply is of key importance to member states and while a specific regulation at European level remains absent, the only regulation to this respect, i.e. Directive 2005/89/EC empowers each Member State to tackle its own security of supply. Besides, the structures of the power system (like generation mix, presence of hydro reservoirs etc.) vary widely among the different member states. Therefore it seems quite difficult to really obtain such harmonisation in the short term.

A pragmatic way forward would be that the European Commission outlines harmonized general principles that member states shall comply with at the same time that member states start cooperating at regional level to gradually move towards European adequacy standards, taking also into account cross-border network capacities. Having the same generation adequacy standards, however, is not enough to ensure the same level of investments across Member States. Other conditions already mentioned in previous questions should be fulfilled, in particular when it comes to creating a level-playing field between Member States and between technologies (RES and conventional generation).

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

To enhance electricity markets' ability to deliver generation adequacy, governments and regulators must first of all allow energy-only markets to function properly. To this end, distortions, which hinder the balance of demand and supply, must be removed. Such distortions include regulated end-user prices, restrictions on plant operations, price caps, and other regulatory or administrative measures, which unnecessarily hinder wholesale market outcomes.

At the same time, integration of wholesale markets and strengthening of transmission and distribution capacities (both domestic and cross-border) must remain a top priority for EU and national policymakers. In view of enhancing and speeding up the integration of renewables into the EU system, RES generators must be incentivised to progressively enter into the market on a level playing field with all other generators. In particular they should be incentivised to sell their own production into the market as well as to meet scheduling, nomination and balancing requirements as other generators do. In addition, there should be progress towards converging market-based support mechanisms across Europe. Enabling market-based industrial demand to participate in wholesale market spot price formation will be fundamental for a well-functioning electricity market, although very difficult to achieve. It would considerably decrease not only peak capacity demand, but also the need for "back-up" plants. Enabling demand response must therefore be one of the core elements of current energy policies.

All abovementioned improvements will undoubtedly be necessary in all EU markets to minimise the system costs of ensuring generation adequacy. They should therefore be pursued by policymakers in parallel with the increased penetration of RES generation. Yet their full implementation will take time and might not be implemented timely, that is before

the moment when key decisions about future generation investment plans (expected closures and new builds) could start jeopardising the future level of generation adequacy. Obviously this moment varies from market to market, depending on current conditions and future scenarios. Due to the fact that the starting point and the speed of implementation of the abovementioned measures is largely different across Member States, in some EU markets it appears unlikely that all market improvements will indeed be implemented in due time.

In those markets, and in particular, in the situation when generation adequacy is endangered (through a lack of investments, for instance in peaking units), policymakers should consider introducing a capacity remuneration mechanism – ideally at a regional level or at least in coordination with neighbouring markets. In any case, consistency with the process of EU market integration should be ensured. Taking into account the imports capacity through cross border interconnections to evaluate the capacity residual needs of each system should ensure this consistency.

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

a. to ensure that new flexible resources are delivered?

Ability of the market to ensure that flexible resources are delivered is endangered by various national interventions, which are penalising the energy industry. Only in case authorities do not intervene in the market and accept price signals such as price spikes and price volatility, energy and balancing market will be able to deliver the necessary price signals for flexibility.

If introduced, CRM should remain technology neutral and be open to all types of generation, demand and storage.

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

Markets will function properly (but still will not give right incentive to invest) only if regulation allows revealing appropriate price signals. Ability of the market to ensure sufficient capacity is available to meet demand of the system can be endangered by various national interventions, which are penalising the energy industry. Such distortions include regulated end-user prices, restrictions on plant operations, price caps and other regulatory or administrative measures, which unnecessarily hinder wholesale market outcomes. In addition, various energy taxes, , etc. also imply large differences in market attractiveness for energy investors across Member States.

There is also a large uncertainty about how RES, CO2 and Energy Efficiency targets will be set after 2020, while investments in conventional plants have to remain competitive in

that future unknown market environment. Sudden, discretionary and not sustainable market interventions have already destabilised investors' confidence and postponed investment in new and existing reliable power generating capacity. Therefore, as a first fundamental step, energy-only markets must be allowed to function properly by removing distortions, which hinder the demand and supply balance.

At the same time, integration of wholesale energy markets must remain a top priority. Also, RES generators must be incentivized to progressively enter into the market on a level playing field with all other generators. This means that they should be balance responsible, should be directly exposed to the market prices (and not be hedged with support schemes that are not linked to market prices). Finally, enabling market-based industrial demand to participate in wholesale market spot price formation is fundamental for a well-functioning electricity market, although difficult to achieve.

However, if pure-energy markets are the most efficient tool to ensure that in real time, the demand is supplied at the lowest possible cost, they do not explicitly ensure that, on the long-term, enough capacity are built or kept into the system. Therefore, it is legitimate and pragmatic to have for the long-term (typically four years and more), mechanisms that will ensure that enough capacity are operating into the market.

The two orientations :

- improving energy markets,
- getting capacity mechanisms to ensure generation adequacy will be meet at all time,

are both complementary and necessary.

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?

The concept of a strategic reserve has a number of positive features as a transitory measure to ensure the system can cope with peak demand. It can be easily implemented and easily abolished. The strategic reserve has a limited disturbing effect on the internal market as long as it is used in exceptional situations only.

However, strategic reserves do not represent an appropriate tool to incentivise investments in new generation. Depending on detailed design, the strategic reserve would rather be suitable to keep in operation existing plants (independently of their emission

performance and ramp-rates), delay decommissioning in the situation of over-capacity and incentivise demand response.

Furthermore, strategic reserves do not appear to be an effective instrument for a transition from a “fossil fuel” to a “low carbon” system where the transition passes via a massive introduction of intermittent renewable. Strategic reserves consist mainly of “out of the money” plants with lower flexibility and higher CO2 emission rate. Therefore these plants should not be dispatched on a “regular” basis.

A stable regulatory framework, long-term envisaged energy policy and e.g. a strong EU ETS are significantly more effective tools to achieve the climate objectives. At the same time, in some countries, strategic reserves could prove to be necessary to serve as insurance in disruptive periods with high uncertainties, for example during a short term “winter peak” problem in the market.

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?

As long as the strategic reserve is controlled by the TSO, used as a last resort measure and never interfere with the price formation it would not deteriorate competition. Not to interfere with long term investment signals it must not in any way decrease wholesale prices. It should only be used to as a last resort to in real time help supply meet demand.

To ensure that normal market dynamics are allowed to work, any strategic reserve should preferably be dispatched at VOLL alternatively at the technical max price used. This technical max price must be considerably higher than normal scarcity prices so to ensure that no competitive adjustments are crowded out.

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?

Capacity mechanisms should only be introduced in order to ensure investment in generation capacity needed to meet peak demand and provide sufficient back-up for variable generation,), and not solely to provide additional revenue streams to some generation or demand response capacities. They should therefore be assessed not solely based on their impact on the internal market, but rather on the combination of their efficiency at achieving the target they were set-up for and their compatibility with efficient competition and functioning of the internal market.

The capacity mechanisms should be market-based in order to avoid any discrimination between technologies or participants and in order to reveal the scarcity value of capacity. Any mechanism that discriminates between different technologies, different type of companies, existing or new built and between generation, demand response or storage would be distortive to the energy market. The CRM should ensure that all capacities (be it generation, demand or storage) contributing to security of supply deliver the same service (i.e. availability) and therefore receive the same remuneration.

The mechanisms should be forward looking. They should rely on an analysis of future system needs performed by TSOs in order to ensure that enough capacity is kept in operation and built on time to ensure security of supply while avoid at the same time inducing overcapacities. These analyses should ideally be performed in a coordinated way at European level in order to reveal the level of need in every country while taking into consideration the existing and anticipated interactions between markets. They should not impact the way capacity is offered on the energy markets, including the existing and anticipated cross-border transmission capacity.

Finally, they should not impact the way (forward, spot, intraday, balancing) power is offered on the energy markets. [3]

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?

Flexibility should be incentivised by the energy and balancing markets and not by capacity markets. This is important to achieve competitive capacity markets where all capacities contributing to security of supply receive remuneration proportionate to their contribution.

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

It is not the existence of the mechanism in itself that should be reversible, but rather its impact on the market.. Market-based mechanism might therefore remain active without producing an impact (minor overall costs) on the market, and therefore being ready when needs appear again. Any retroactive change must be avoided. A strategic reserve could be designed as reversible.

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

Market-based approaches with as few parameters as possible, and leaving as much room for the market as possible, will create fewer costs compared to models with numerous

[3] In this response, UFE does not take a position with regard to particular CRM models and formulates only the key important features of CRM design.

targets and administratively set parameters. In assessing the total costs for end-consumers, not only the very short-term but also the long-term effects should be taken into account. Selective approaches might be less expensive in the very short-term, but more expensive in the long run. However, the costs for end-consumer will strongly depend on the determined level of required capacity, including the determined reserve margin and interconnection capacity. In this context, it is important to stress that while by setting the reserve margin member states will be setting the level of capacity required in the system, they should not intervene with regulatory measures to determine the capacity volumes by technology (coal, gas etc.).

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

Not at all. Capacity mechanisms should aim at ensuring that enough capacity is in place and available. Using capacity mechanisms to encourage flexibility would imply some type of technology discrimination that, in UFE's opinion should not exist. Mixing the objectives may result in discriminatory, complex and less transparent mechanisms.

In fact, technological characteristics like ramp-up rates have a natural demand and its encouragement can be adequately made through the ancillary services/balancing market. Balancing markets are mainly tailored to provide flexible solutions in real-time or near real-time timeframes in order to support the stable (short term) operation of power systems. They typically cover the provision of online primary, secondary and tertiary power and energy reserves, the settlement of network congestions and also local voltage support. The services contracted in these markets must be provided from real-time to a few hours following real-time and are technically related with and dependent on the availability of specific technologies, on operational decisions and on market conditions.

Through balancing markets, market participants are able to explore the benefits of specific advantages of different generation technologies (min/max technical generation, ramp up /down times, regulating reserve capability, voltage support capability, etc.) that may be best suited to supply one or more of those system services thus complementing their participation in wholesale markets whilst maximizing their revenues. Therefore, balancing markets also intrinsically discriminate between generation technologies.

Participation in the day-ahead markets is often a prerequisite to enable market agents to participate in balancing markets. Participation in balancing markets is therefore closely attached to and indeed mostly dependent on the operational dispatch that results from participating in wholesale markets. More often, balancing markets give market agents an opportunity to explore predominantly temporary and technically specific intraday market inefficiencies with recourse to already committed assets. Furthermore, price caps are often also in place preventing the expansion and a greater depth of services that market agents could be incentivized to provide thereby hindering further generation investment.

CRMs have been designed to meet an entirely different problem, which is to tackle concerns of security of supply reflected by the availability of sufficient generation to meet peak load demand and backup capacity for intermittent RES whilst ensuring an adequate security margin. Traditionally, this margin has been measured against generation and transmission adequacy standards (whether they are deterministically or probabilistically driven in each Member State) considering planned and unplanned outages of these assets. More recently, the integration of variable RES has introduced further complexity. The problem of meeting yearly or seasonal peak loads has been complemented by the challenge of continuously meeting system load with varying RES intake at relatively short notice from the system operator point of view.

CRM address fundamentally different system needs than balancing markets. Balancing market regimes can hardly be expected to meet these needs as the flexibility they enable, important to and dependent on the normal operation of power systems as it is, does not care with maintaining the security margins in the medium run (having enough existing capacity to meet peak demand). CRM, unlike balancing markets, are designed to incentivize sufficient generation assets, as well as demand response and storages to back up the intermittency of RES. CRM, unlike balancing markets, are also more suited to promote technology non-discriminatory competitiveness in procuring the services which are required to maintain adequate security margins, including from technologies such as Storage and DSR.

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

No, developing the blueprint for a EU-wide capacity mechanism is too premature.

First of all, there is currently no specific regulation that tackles security of supply at European level. Security of supply under the Directive 2005/89/EC falls on the different National jurisdictions, therefore Member States may decide to set up their own national capacity remuneration mechanisms.

Furthermore, a single EU-wide capacity mechanism might not be feasible, as differences among Member States, as far as specificities of their electricity systems (e.g. penetration of RES, conventional mix, level of interconnection, level of reserve margins etc) are concerned, make it currently difficult to use “one-size-fits-all” solutions.

Finally, the starting point is different in different countries. In some countries introduction of the CRM is already on the way, while other countries do not at all envisage this concept.

The implementation of the Target Model and new Network Codes, including reliability criteria and relevant operational procedures, are key elements to be in place before a roadmap for an EU-wide capacity mechanism could be implemented. Any other market

distortions (impacting investment decisions, like taxes, injection tariffs etc) should also be addressed properly.

What is more important is that ACER and the European Commission (in cooperation with all relevant EU and national stakeholders including Transmission System Operators) develop a set of minimum EU harmonization requirements. Practically speaking, these requirements could be coordinated methods to assess the cross-border contributions to the security of supply of each zone and common European sets of scenarios for intermittent generations and random events. This should ensure the well-functioning of regional markets and compatibility under the framework of the Internal Electricity Market.

In addition, developments in national markets should be closely monitored to prevent CRM, as well as other security-driven mechanisms, distorting the internal energy market and its competitive dynamics. Therefore criteria should be agreed in order both to identify and quantify the created distortions coming from lack of CRM harmonization as well as to facilitate MS cooperation in these issues and to prevent the emergence of nationalistic industrial policies. The key requirements as discussed under question 20 are a very good starting point for this process.

Such European Guidelines shall be the first step and serve as an input to amend the Directive 2005/89/EC in view that provides a harmonized European regulatory framework in terms of security of supply.

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

Yes, the European Commission has to ensure full compatibility between the regulatory framework and the internal energy market and put all necessary measures and tools to remedy possible incompatibilities or design mistakes. In this sense it would be advisable that the Commission focuses not solely on a forthcoming regulation, but also on the current situation. Regulatory mistakes that have led to an excessive share of electricity production decoupled from market prices at the expense of unbearable costs to final consumers need to be tackled with the utmost sense of urgency.

If an impact assessment indicates that capacity remuneration mechanisms are necessary, they must be designed in accordance with market principles. Therefore, UFE believes that the European Commission should develop a set of minimum EU harmonisation requirements for CRMs. in order to avoid market distortions. Moreover, attention will have to be paid to implementation modalities of national CRM to ensure their adequacy.

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

Several criteria developed by the European Commission seem appropriate. However, several others that consider implementation of capacity mechanism to be temporary and limited in time, should be adjusted. If introduced, it should be a sustainable mechanism would ensure that, if there is no risk on capacity adequacy, the cost of the mechanism should be negligible. For example, this implies that, if more interconnections are built towards a neighbouring country with over-capacity, if energy efficiency measures effectively succeed in lowering demand, the capacity mechanism should signal a lower need for capacity in the system.

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.

Yes. However, increased interconnection capacity between bidding zones doesn't prevent that certain amount of generation will be necessary at local level for internal congestions, dynamic stability and variable RES backup.
Besides, development of interconnections has to be combined with increased transmission and distribution capacity within each bidding zone to prevent any new or increasing internal congestion problems.

We also need to be aware that the pace of development of RES and grids is completely different, which could lead to local system integrity issues arising. Local generation capacity might be needed for grid stability or until congestions are removed and interconnection capacities allow imports from another Member State.

The deep evolution of the electric system that is forecasted, and its tendency towards more decentralization pushes the DSO towards a new evolved role of local system operator, to keep good command of electric flows: 95% of new RES generators are connected to the DSOs networks. By developing new tools and being at the crossroads of stakeholders on the distribution networks, the DSO has to secure the availability of all resources connected to the grids, and plays a role of market facilitator for flexibilities offered to the national system and connected to its network.

ii) steps to encourage effective competition by addressing the position of dominant undertakings.

Effective competition and market integrity should be ensured by existing regulation and legislation including REMIT.

b) Alternative, less distortionary measures, which could be taken, for example steps to improve energy efficiency or reduce electricity demand.

Yes, demand response is important for generation adequacy and should be put on equal footing with generation and storage. Energy efficiency is very important and should be encouraged, but it is very different to demand response. However, energy efficiency and reduction of electricity demand are not "alternatives" for a capacity mechanism, but they are important drivers for a sustainable power system. A lower electricity demand would not change the fundamental situation for generation adequacy. Short term it might lead to closure of some more existing generation units and no need for new investments in conventional generation, storage and demand response solutions. Therefore, investors need a clear view on energy efficiency and demand reduction policies in order to be able to take the right investment decisions. It should be noted that increasing energy efficiency can lead to higher electricity demand, for example by introducing electric cars. It could as well be questioned if some of the current energy efficiency measures can be considered to be less distortionary.

c) Removing barriers to the effective participation of demand in the electricity market.

Yes. Participation of demand is fundamental for an electricity market to function properly. It is important to keep in mind that price cap levels in some markets or regulated tariffs are hampering effective demand side participation. To enable end consumers participation in the electricity market, prices need to be fully liberalized. Demand should participate in CRM on equal (not better) footing with other technologies.

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.

Yes. However, a comparison of a possible new situation (with CRM) with a theoretical situation (without CRM) will be difficult as once additional generation capacity investments are achieved, energy prices will by definition be affected. Furthermore, in the meantime many other fundamental parameters will also be evolving (fuel prices, economic situation etc.

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

This might be difficult to implement, but the same effect could be achieved by having the capacity price determined in a competitive market-based way, which gives a self-regulated instrument that will lead to very low capacity prices when there is overcapacity and sufficient earnings in the energy market. The mechanism might therefore remain active without producing any effect on the market having minor overall costs, and could be

reused again when a need for capacity reappears. It is important that no retroactive changes are made to the introduced CRMs.

a) The impact on the market of the introduction of capacity mechanisms should not make it difficult to reverse that decision in the future.

A market-based capacity mechanism will lead to an automatic adjustment of the capacity paymentwhen balance between capacity offer and demand is reached.

b) The necessity of retaining reinstating a capacity mechanism should be subject to review.

Yes, but one should take care of the risks of 'spill-overs' due to regulatory readjustments. A continuous adjustment of the capacity mechanism leads to additional risks for investors and existing operators and to investors' reluctance.

The more self-regulated elements a mechanism offers, the less regulatory interventions are necessary. Therefore it should be clear for investors under what circumstances and in what way the mechanism might be reviewed.

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.

As far as there are no long-term access right to interconnections, and that this is a necessary statement for well-functioning energy markets, a pragmatic and efficient approach is to consider capacity offers at Member State level and to take into account the contribution of interconnections by reducing or increasing each Member State capacity needs.

The idea stating that any generator in Europe should be able to forget network constraints and sell all its services and products everywhere else in Europe does not take into account the reality of the network infrastructure, and, in the long-term, is not economically sustainable considering network costs. Generators investing in network areas where there are capacity needs should get a better remuneration than generators investing abroad and needing additional network investments or reservations to offer capacity in the best area.

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).

Yes it is important that cross-border competition is ensured. A capacity mechanism shouldn't directly interfere with energy markets functioning. Development of cross-border Day-Ahead, Intraday and balancing markets will ensure efficient cross-border trading.

However, different capacity mechanisms will not lead to a fair cross-border competition, in the same way that existing national regulations are disturbing the level playing field leading to less efficient generation.

ii) distorting the commercial behaviour of generators in the day ahead and intraday markets.

Yes it is important that day-ahead and intra-day markets are not disturbed. Capacity mechanisms should be complementary and should not interfere with energy markets functioning.
CRM is only remunerating "availability", not "the effective generation". For that purpose, specific rules to verify the availability are needed in order to pay for the reliability, not for "imaginary" capacity. But these rules should not lead to "must run" situations of the plants to prove availability, in particular if the plant is "out of money".

iii) distorting investment signals in the internal market leading to inefficient locational choices.

Yes. It is one of the key features of a CRM that is should attract investments in a certain market. In order to minimise inefficient locational investment choices, it is important to coordinate the CRM with neighbouring markets, taking into account cross-border capacities, by setting appropriate "needed" reserve margins, etc.

iv) distorting investment signals in the internal market leading to the displacement of new investment from one Member State to another.

OK. See also iii)

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.

Yes, demand response to price signal should be an integral part of the design. This means that there should be no regulated end user prices. The mirrored reaction should hold true in periods of very low electricity prices

ii) The mechanism should not undermine incentives on the electricity market to deploy new techniques for demand reduction or electricity storage and generation.

OK. Please note that UFE would prefer to use the term “demand participation” than “demand reduction” in order to reflect better the reality (i.e.: demand is responding to price signals like generators).

c) creating market power or exclusionary practices;

Equal treatment of all market participants, consumers, storage operators, existing and new generators irrespectively of technology has to be ensured.

i) The mechanism should not strengthen or maintain the market power of incumbent firms.

. If implemented, a capacity market should be on a level playing field for all actors and without competitive distortions. UFE considers that with one instrument only one target should be achieved. By putting too many different targets into one instrument the instrument becomes less efficient. Effective competition and market integrity should be ensured by national cartel authorities and the European Commission.

ii) The mechanism should not act to maintain inefficient market structures or undertakings, acting to deter new entry.

Yes. If implemented, a capacity market should be on a level playing field for all actors and without competitive distortions.

6) To be non-discriminatory a capacity mechanisms should

a) be allocated after an open competitive bidding process.

Yes, the capacity price should be determined in a competitive way (e.g. auction, traded certificates).

b) allow demand response and energy efficiency solutions to bid into capacity markets on an equal basis to generation.

As stated under question 20, 1,b) energy efficiency is not an “alternative” for a capacity mechanism, but it is an important drivers for a sustainable energy system. A lower electricity demand would not change the fundamental question of generation adequacy.

Short term it might lead to closure of some more existing generation units and no need for new investments in conventional generation, storage and demand response solutions. Therefore, investors need a clear view on energy efficiency policies in order to be able to take the right investment decisions. It should be noted that increasing energy efficiency can lead to higher electricity demand for example by introducing electric cars.

The European Commission should make a careful distinction between “energy efficiency” and “demand response”. Energy efficiency should be a “permanent” elimination of energy need, while demand response is a “short term” reaction. Abuse of capacity mechanisms offered for energy efficiency should be avoided.

There should be no discrimination between comparable capacities. A capacity mechanism must respect free market rules in an environment based on a level playing field for all actors, but to obtain this level playing field, availability criteria for generators, demand response and storage should reflect market needs. Some market participants might offer secure generation for long periods and other market participants might offer short term demand reduction. This has to be reflected in the CRM based on the capacity needs in the market.

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).

Yes, there should be no discrimination between capacities.

UFE considers that with one instrument only one target should be achieved. By putting too many different targets into one instrument the instrument becomes less efficient. Carbon emissions should be incentivized by emission trading and flexibility should be ensured by energy and reserve/balancing markets. Existing units should not be discriminated and there should as well be no discrimination between different market participants.

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.

Yes. A capacity mechanism must aim for the most cost effective solution for the whole power system, taking into account both the CRM cost and the energy cost. However, the cost of a capacity mechanism depends on how the parameters (reserve margin, possible strike price, ..) have been set. Therefore those parameters will have to be defined on a regional/European level (see point 4 on cross-border capacity coupling), or at least be taken into account in the evaluation of the needs the possible import capacity provided by cross border interconnections.

b) Persons providing capacity under the obligation must not be overcompensated.

OK. A well implemented capacity mechanism, respecting free market rules in an environment based on a level playing field for all actors and solely pursuing security of supply, will not lead to overcompensation but will lead to – efficient – market prices both for the CRM as for the energy. It is therefore important to involve electricity consumers, as well as cross-border generation assets in order to have sufficient competition in these markets. When both CRM and energy prices are market based, it should give both generators and customers sufficient confidence in price setting.

c) Any selection process in the mechanism should be conducted in a transparent, open and non-discriminatory way which is market based.

OK.

d) The duration of any compensation to generators under the mechanism should be clearly justified.

OK. A well implemented capacity mechanism must offer sufficient predictability and stability to all actors, investors and customers (they should be associated with a predefined time horizon to offer sufficient predictability and stability to all actors, investors and customers.. Please see our response to question 20, 3 a).

9) *Costs associated with capacity mechanisms should be allocated to the beneficiaries of secure energy supply with different classes of consumers being treated in a non-discriminatory way*.

OK. However, customers could also participate in the secure energy supply via demand response. Therefore a well-designed capacity mechanism should avoid “overcompensation” for generators as well as “double discount” for customers.

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

No, the list of criteria seems to be complete.

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

It is most important that any capacity mechanism is properly rewarding capacity and no other policy objectives are pursued with this mechanism. The capacity mechanism should be market based and not discriminating between new and existing units, different technologies or between generation, storage and demand response. Otherwise costs to consumers will be higher than necessary.