

DG Energy Consultation on generation adequacy, capacity mechanisms and the internal market in electricity

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Introduction

SSE is a leading energy company, operating mainly in the United Kingdom (UK) and Ireland. It is involved in the generation, transmission, distribution and supply of electricity and the storage, distribution and supply of gas.

SSE welcomes the opportunity to respond to this consultation on generation adequacy and the role of capacity mechanisms within the internal energy market. As a company that operates in and trades between the Irish and Great Britain (GB) electricity markets, SSE's experience demonstrates that cross border trade need not be hindered by the presence of a capacity mechanism.

Summary of main points:

- SSE believes some form of capacity mechanism will be needed in the GB market to rebalance the risk-reward relationship for generation by increasing the certainty associated with capacity value. This rebalancing is needed to ensure that GB maintains an adequate de-rated capacity margin in the face of significant closure of firm capacity and increasing penetration of renewables.
- SSE considers the Irish capacity payment as an integral design feature of the Single Electricity Market (SEM) targeted at ensuring capacity adequacy, reducing market uncertainty and providing signals for efficient entry and exit of long term capacity investments. Any attempt to fundamentally change the design would be detrimental both to security of supply, investor confidence in Ireland, and the achievement of 2020 renewables targets.
- The SEM design demonstrates that a capacity market can be implemented in a way that attracts the investment necessary to ensure generation adequacy and supports high penetration of renewables, while allowing for energy trade with other markets (without capacity mechanisms) to continue undistorted.
- Member State governments face different conditions that impact on generation adequacy, such as level of plant closures, penetration of renewables, geographical characteristics, indigenous energy resources, and degree of interconnection. SSE believes Member States must retain control over setting an appropriate national generation adequacy standard taking account of these factors.
- SSE would like to see a more clear distinction between the two components that comprise security of supply – generation adequacy and flexibility. Capacity markets should be designed to address generation adequacy in each Member State, ie to ensure there is adequate capacity available to meet demand. Flexibility must be recognised as separate and remunerated through different measures.

- Efforts to improve the internal energy market will contribute to ensuring security of supply, particularly once balancing markets are sufficiently integrated to deliver cross-border flexibility. However, SSE believes these improvements will not be sufficient to address generation adequacy and will not be in time to avoid capacity shortfalls in all Member States. GB in particular is facing unprecedented levels of closure, exacerbated by the Large Combustion Plant Directive, and generators need to make investment decisions now to replace the generation capacity that will disappear by the middle of this decade.
- Interconnectors should not be viewed as a panacea as they do not on their own contribute generation adequacy – they are simply a conduit. Increased interconnection will assist in improving cross-border trade within the internal energy market, but given their long lead times and capital intensive nature they cannot deliver this in the short-term for weakly interconnected Member States such as the UK and Ireland.

Responses to specific questions

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

In the GB context, SSE believes that although the energy market has been able to ensure generation adequacy in the past, a number of factors – in addition to market prices – mean that under current conditions the necessary investment won't come forward to reach the desired level of generation adequacy in GB. These include the following:

- The bilateral energy market doesn't reward generation reliability. The risk-reward profile for investments in the bilateral energy market will not provide an investment signal to build an economically efficient level of generation. Effectively the risks are such that generators are likely to build less capacity than customers need. There are several reasons for this, the most significant of which is the social nature of electricity reliability, ie an individual customer cannot contract for a differentiated level of reliability, thus there is no clear signal to generators to provide this reliability.
- Returns for new conventional plant will remain unattractive. Historically, the structure and dynamics of the current bilateral market in the UK has pushed spark spreads down. Whilst this does not prevent all investment it makes the business case to build unattractive. The required volume of generation to deliver generation adequacy is unlikely to come forward without a change in market conditions that increases the expected rate of return for generators.
- The risk of investment in gas generation is increasing significantly. Going forward, investors in both combined cycle gas turbines (CCGTs) (typically used to run baseload or mid-merit) and open-cycle gas turbines (OCGTs) (typically used to run at peak times), will face the potential problem of 'missing money' from their business cases, making investment riskier and therefore less attractive.

OCGTs rely on high prices (often known as 'scarcity rents') at times of high demand and low supply to cover their long-run marginal costs. With more low marginal cost, low carbon plant coming onto the system (i.e. wind and nuclear) these peaks in demand will become more difficult to predict and more infrequent, making the

business case for these plants challenging. Peaks in demand will coincide with peak wind, offering generators less opportunity to operate at these times.

In addition, this risk of 'missing money' is exacerbated by the possibility of regulatory intervention if prices rise to a point which is deemed politically unacceptable, thus reducing these necessary scarcity rents. Therefore, even if peaks in demand were predictable there is a risk that the prices needed to provide peaking plant with an adequate return would not be allowed to materialise.

For CCGTs the problem is similar. With more low marginal cost low carbon plant coming onto the system CCGTs will run only when this plant is not generating or to make up the shortfall in the capacity needed to meet demand. They will run less than they do today, making their revenues less predictable and more volatile. With fewer running hours CCGTs will rely more heavily on scarcity rents to make a return. However, as noted above, these rents may not be available due to regulatory intervention to cap prices.

In Ireland, a capacity payment exists as an inherent design feature of the Single Electricity Market (SEM). Concerns about capacity adequacy in Ireland in the early 2000s led to the creation in 2005 of a support scheme to attract new generation.¹ The SEM design structure was implemented in 2007. It includes three revenue streams for generators: energy, capacity and ancillary services. These streams have been present since the inception of the SEM and each is integral to its functioning. Energy market prices are based on bids reflecting the short run marginal costs of generators (generators are obliged to reflect short run marginal costs under market rules) whereas the capacity payment contributes towards generators' fixed costs and was designed to provide a degree of financial certainty to generators.

The design principles of the capacity payment mechanism within the SEM and the management of the mechanism by the Regulatory Authorities, aim to achieve the following objectives: (1) ensure capacity adequacy; (2) reduce market uncertainty and (3) signal efficient and timely entry and exit of long term capacity investments. The introduction of the SEM has proved successful, resulting in investment in new generation capacity. The Irish Transmission System Operator's Generation Capacity Statement assessment finds that the generation adequacy standard will be met 2013-2022², subject to the alleviation of network constraints between Ireland and Northern Ireland.

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?

As described above, RES investments have the potential to affect the market signal for capacity that provides adequacy, and therefore mechanisms that incentivise adequacy could be required. Since RES investments are critical to achieving binding targets and are in line with broader EU policy, it is important that markets are designed to facilitate both RES support and mechanisms to address generation adequacy.

¹ See State Aid clearance for scheme: http://ec.europa.eu/eu_law/state_aids/comp-2003/n475-03.pdf

² http://www.eirgrid.com/media/All-Ireland_GCS_2013-2022.pdf

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, intra-day and balancing markets will contribute to ensuring security of supply, but SSE believes this will not be sufficient and will not be in time to avoid capacity shortfalls in all Member States. The UK is facing unprecedented levels of closure, exacerbated by the Large Combustion Plant Directive, and generators need to make investment decisions now to replace the generation capacity that will disappear by the middle of this decade.

Cross-border day ahead, intra-day and balancing markets will not provide the necessary market signals to make investments to secure generation adequacy. Moreover, the UK and Ireland have relatively low levels of interconnection, and due to the significant investment and long lead times involved in new subsea interconnectors, they will be unable to contribute to play a role in ensuring generation adequacy until the longer term.

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?

When complete, the internal energy market could play an important role in contributing to ensuring generation adequacy and security of supply; however, there are a number of factors that will remain a barrier to its ability to deliver generation adequacy and security of supply. While the integration of day-ahead and cross-border markets appears achievable in the short-term, considerable work is required to achieve integration of cross-border balancing markets. As stated above, increased interconnection is at the core of the UK and Ireland's ability to effectively integrate into the internal market.

Furthermore, there remain a number of factors that impact on investment in generation adequacy that are not harmonised across Member States, for example, transmission charging, and these would need to be addressed before there can be a level playing field between Member States.

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

Additional steps Member States could take include increasing their efforts to build interconnection and realising the roll-out of effective demand side response systems, including stimulating the development of storage opportunities, like Smart Electric Thermal Storage (SETS).

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?

Until smart meters are prevalent there is no means of individual customers expressing a preference for their desired level of security of supply. Government must set an acceptable Loss of Load Expectation (LOLE) and Value of Lost Load (VOLL) on behalf of customers and ensure the electricity system has sufficient capacity to deliver this level of reliability.

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

a. National Level

The UK and Ireland already have statutory requirements to carry out annual generation adequacy assessments. It is most appropriate to carry out these assessments at national level since the causes of and impacts resulting from generation inadequacy (eg power outages) will be felt most strongly at this level. Any assessment beyond national level must factor in differences in national circumstances, particularly generation plant mix, geography, and transmission systems. Assessments at all levels must be improved to take into account specific conditions, eg anti-cyclones (for the purposes of analysing wind generation), seasonality (for hydro and solar), and periods where interconnectors are exporting.

Capacity generation adequacy assessments in both the UK and Ireland have been important tools in highlighting forthcoming capacity adequacy issues.

b. Regional Level

c. European Level

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

- a. Is there a need for regional or European assessment of the availability of flexible capacity?**
- b. Are there other areas where this generation adequacy assessment should be made more detailed?**

System studies examining generation adequacy must take into account scenarios where scarcity will be most severe, ie when there is no wind generation during anti-cyclonic conditions and when all interconnectors are exporting. The system must be robust to this combination when assessing security of supply.

9. 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 requires Member States to establish policies to safeguard security of supply within the framework of the single market for energy. This reflects the fact that security of electricity supply is of strong national concern but acknowledges there are also implications for other Member States and the European market.

SSE believes the Directive provides an adequate framework for market-based policies on electricity security. The current initiative to review Network Codes is addressing the fact that the European electricity system is becoming more integrated. For instance, the Codes on Operational Security will require TSOs to operate transmission systems in a more coordinated way. The newly established Electricity Coordination Group should also provide a forum for discussion of security of supply and other issues.

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, there are significant differences between gas security of supply and electricity generation adequacy such that it is not appropriate to introduce measures from the Gas Security of Supply Regulation into the electricity market.

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

No, different Member States have different security values; hence they will naturally have different adequacy standards. Member State governments face different conditions in terms of plant closures, penetration of renewables, geographical characteristics, indigenous energy resources, degree of interconnection, and must be able to take account of these factors when setting an appropriate generation adequacy standard.

Cross border trade in energy does not have to be compromised by differing adequacy standards other than as regards investment. There are many issues that impact on investment that are not harmonised. Imposing the same generation standards between Member States will itself not create a level playing field across Member States or across different generation technologies.

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

SSE considers the Irish capacity payment as an inherent design feature of the Single Electricity Market and that any attempt to fundamentally change the design would be detrimental both to security of supply, investor confidence in Ireland and the achievement of 2020 renewables targets. The SEM design demonstrates that a capacity market can be implemented in a way that attracts the investment necessary to ensure generation adequacy and supports high penetration of renewables, while allowing for energy trade to continue without distortion with other markets without capacity mechanisms (namely the BETTA³ market).

With respect to the GB market, SSE believes some form of capacity mechanism will be needed to rebalance the risk-reward relationship for generation by increasing the certainty associated with capacity value. This rebalancing is needed to ensure that GB maintains an adequate de-rated capacity margin.

Member State level capacity mechanisms will be essential to providing generation adequacy in particular markets where generation adequacy is endangered. The UK needs to take action now to address the upcoming capacity shortage in GB by means of a capacity mechanism.

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

a. to ensure that new flexible resources are delivered?

³ British Electricity Trading and Transmission Arrangements

There is a clear case that the current market is deficient to incentivise new flexible resources, especially where there is limited intervention, as it has become clear that the risk-reward balance in energy only markets where customers have limited direct sight of energy spot price tend not to deliver a price response that will remunerate generators.

However capacity mechanisms should focus on addressing generation adequacy and leave other measures to address flexibility.

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

In theory, energy-only markets would send an appropriate price signal in times of system stress. But these signals are clouded by various regulatory interventions. However the main problem is the non-physical, socialised aspect of electricity supply, and the absence of tariffs which allow users to indicate their security value and allow generators to respond in a commercial fashion – this is the missing money problem which is most acute in liberalised markets.

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?

SSE firmly believes that the introduction of a strategic reserve would not achieve the desired outcomes of a capacity mechanism and has a number of undesirable consequences which could jeopardise generation adequacy. The fundamental flaw with the strategic reserve is that it does not mitigate the risks that generators are currently facing in the energy-only market. Its primary purpose would appear to be to provide capacity for use in exceptional circumstances eg extremely high load or situations where energy market plant availability falls outside the expected range.

The existence of the strategic reserve does not change the underlying mismatch of risk and reward in the main energy market, which is where new generation should be expected to operate, other than by providing a route for some existing capacity to exit the market. The likelihood of a new entrant into the energy market covering its investment costs will therefore not change materially.

Even if the despatch price of a strategic reserve was set at a level close to a theoretical VOLL this would have a limited impact on existing plant on the system. It is also difficult to see how it will encourage the investment required in new generation in this market. Investors and generators will not believe that Government will never intervene to use the strategic reserve because of short-term political pressure due to high energy prices. This would result in the capacity value of new plant falling to zero, leading to these plant being unable to cover their ongoing costs or repay their capital. Thus the existence of the strategic reserve will add risks into the market, thereby acting as an additional barrier to investment.

In addition it will be extremely difficult for DSR, storage or interconnectors to participate in a strategic reserve. For example, a storage or interconnector

investor would not want to limit their ability to use their asset to perhaps one hour a year or less as this would negatively impact on its ability to earn revenue from non-generation services.

- 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?**

See response to Q14a.

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?**

A market-wide model that allows all forms of generation and non-generation capacity to compete on a level playing field would be the most compatible.

SSE's experience operating in both the Irish and GB markets and trading between these markets has demonstrated that the presence of a capacity mechanism in one does not hinder trading energy between the two markets. As such, SSE believes it is possible to allow Member States to take different actions appropriate to their national circumstances to address generation adequacy without distorting market coupling.

A capacity market model where the capacity payment is known in advance (such as the proposed forward capacity market design for GB) would facilitate trading across interconnectors as it would allow for the direction of flow to account for capacity and energy costs.

- 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?**

The objective of a capacity market should be to ensure generation adequacy, not flexibility. Flexibility is a different product to generation adequacy and accordingly should be recognised and remunerated separately. In both Ireland and GB flexibility of backup generation will become more critical as the levels of renewables in the system increase, and this challenge must be addressed separately through the balancing market and/or specific ancillary services.

In the near term in GB, new gas generation capacity will be needed to replace retiring baseload capacity. Without a workable capacity mechanism there is not a sufficient investment case to build these new gas plant, which will be critical for generation adequacy given the projected capacity shortfall in GB. Later in the 2020s and into the 2030s, when there is higher penetration of low carbon generation, this gas generation capacity will be required to run flexibly. Thus a capacity mechanism that focuses on generation adequacy in the near term will in fact support flexibility in a future low carbon electricity system.

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

The price of capacity in a market-based model should reflect the need for capacity; therefore, it need not be designed as reversible. However, investments in generation capacity are long-term, and capacity mechanism should not be responsive to short term demand reductions.

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

A market-based approach where the price of capacity reflects need for capacity in the system (eg determined through a transparent methodology or an auction process) would have the lowest impact on consumers. In years where capacity is not needed the price will be correspondingly lower. The SEM capacity mechanism sets the total amount of capacity payment (the 'capacity pot') by calculating the cost of a best new entrant and determining the capacity requirement for the market (this includes demand forecast). The capacity pot is then divided between capacity providers (both generation and non-generation capacity) on the basis of their availability. This approach reflects the changing costs of developing capacity and reflects system demand. Therefore, if there is a deficit of capacity providers the pot is shared between a smaller quantity of providers and payments to each are higher, incentivising new entry. Where there is a surplus of capacity the opposite is the case and the pot is spread more thinly. The limited nature of overall capacity revenues results in competition for payments, which creates an effective signal for investment decisions.

Modelling carried out by the UK Department of Energy and Climate Change (DECC) indicates that a capacity market model should have a modest impact on bills and that this increase would effectively be an insurance premium against the risk of blackouts. Previous modelling had indicated a small reduction in bills, indicating the effect of the capacity market on reducing the frequency and magnitude of high electricity prices during scarcity. DECC notes a capacity market could have a lower impact on bills, or even reduce bills, depending on the degree to which it reduces the financing costs for investment in new capacity and dampens wholesale electricity prices.⁴

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

SSE believes capacity mechanisms should not be the tool of choice to address flexibility as flexibility and capacity are distinct characteristics which should be remunerated separately. Flexibility is better handled through the balancing market and through remuneration of the ancillary services identified to be required by the system.

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

No, it is not feasible to design an EU-wide mechanism. Member States must be able to design and implement their own mechanisms as appropriate to their national circumstances, keeping in mind compatibility with the internal energy market.

⁴ UK Department of Energy and Climate Change. Capacity Market Impact Assessment, November 2012. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/66039/7103-energy-bill-capacity-market-impact-assessment.pdf

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. It is important that capacity mechanisms do not act as a barrier to integration of the EU market and that market-based approaches are encouraged as far as possible. The Commission nevertheless needs to consider the different characteristics of national and regional systems across Europe and the overall policy framework, much of which is not market-oriented.

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

- a. Should any criteria be added to this list?
- b. Which, if any, criteria should be given most weight?

Potential detailed criteria to apply to capacity mechanisms

- 1) *The necessity for a capacity mechanism 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.*

Interconnectors do not provide generation adequacy on their own as they rely on sufficient generation capacity being available. As such, they do not remove the need for other measures to address generation adequacy, particularly given their long lead times and capital intensive nature.
 - ii. *steps to encourage effective competition by addressing the position of dominant undertakings.*

Effective competition and market integrity should be addressed outside a capacity mechanism through existing regulation.
 - b. *Alternative, less distortionary measures which could be taken, for example steps to improve energy efficiency or reduce electricity demand.*

Reducing demand alone does not address the generation adequacy problem as it does not address the barriers preventing necessary investment in reliable capacity. Demand-side measures should be integrated into a capacity mechanism instead of being viewed as an alternative capacity mechanism. Energy efficiency measures will not impact on generation adequacy unless they can target peak demand.
 - c. *Removing barriers to the effective participation of demand in the electricity market.*

Yes, but as above this does not remove the imperative for a capacity mechanism.
- 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.*

The impacts of a capacity mechanism can be modelled to demonstrate its impact on replacing the missing money, but it will be difficult to prove ex ante the additionality of this impact. In its capacity market impact assessment, DECC notes that the impacts on bills from the introduction of a capacity market are uncertain given the difficulties of predicting future capacity margins and resultant costs in the absence of a capacity market.

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

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

No, investments in generation capacity require a stable, long-term framework. The best solution is to introduce a market-based model where the capacity price will reflect the need for capacity in the system and does not overreward unnecessary capacity in the long-term. A capacity mechanism must be robust to short-term fluctuations in demand as the cost to consumers will be less in a situation of slight oversupply than if there is a capacity shortage.

- b. *the necessity of retaining reinstating a capacity mechanism should be subject to review.*

Yes, reviews of the impact of capacity mechanisms are reasonable, but safeguards must be in place to protect the mechanism from retrospective change and political interference.

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.*

Including capacity providers from one Member State in another's capacity market is difficult in practice as it is challenging to consider this capacity as reliable, ie will the capacity from another Member State be available during times of scarcity or will the capacity be committed under another Member State's capacity mechanism. Experience of developing the UK capacity mechanism has highlighted the difficulty in practice of including capacity from other Member States, particularly as the direction of flow over an interconnector would be outside the control of the capacity provider. If a penalty regime is to be in place for non-availability of capacity, it is not clear how the System Operator in one Member State could impose such a penalty on a provider in another Member State.

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:*

- *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).*

Agree, but as described in relation to criteria #4 a capacity mechanism should not have to allow participation from providers from other Member States if this is not practicable.

- *distorting the commercial behaviour of generators in the day ahead and intraday markets.*
- *distorting investment signals in the internal market leading to inefficient locational choices.*
- *distorting investment signals in the internal market leading to the displacement of new investment from one Member State to another.*

Agree. Distortions of this type should be minimized, but experience in trading between the Irish and GB markets shows that signals in the energy market can continue in the presence of a capacity mechanism.

b. distorting dynamic incentives/crowding out;

- *The incentive on consumers or generators to respond to high prices at periods of scarce capacity should not be diminished.*

Agree. The scarcity signals in the energy market should remain as these are important to discourage demand at peak times.

The SEM demonstrates that scarcity signals can be preserved within a market with a capacity mechanism. The SEM's capacity payment allocates a certain percentage of overall capacity pot payments ex ante, weighting these payments towards expected periods of scarcity whilst an ex post percentage reflects actual outturn scarcity on the system. The energy price in the SEM will also rise with scarcity as the market schedules the lowest price generators necessary to meet demand, followed by higher priced generators further up the merit order curve as demand increases.

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

Agree.

c. Creating market power or exclusionary practices;

- *The mechanism should not strengthen or maintain the market power of incumbent firms.*

Agree; however, if there are concerns about market power these should be addressed through other means.

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

Agree.

6) To be non-discriminatory a capacity mechanisms should

- a. be allocated after an open competitive bidding process.*

Disagree. As long as the capacity remuneration is determined in accordance with a stable and transparent methodology there need not be a competitive bidding process. This is particularly true for mechanisms where participation is mandatory.

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

Agree.

- 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).*

Agree.

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

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

Agree.

- 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.*

Agree.