

# **BGE RESPONSE TO CRM CONSULTATION 3 AUCTION DESIGN**

**27<sup>TH</sup> APRIL 2016**

## **INTRODUCTION & SUMMARY**

There are a number of parameters and objectives to consider when designing a capacity auction – which is evident from the length and breadth of issues posed within this consultation. In drafting its responses to the various questions posed Bord Gáis Energy (BGE) has focused on achieving a balance between the objectives of ‘simplicity’ and ‘transparency’, as a means of supporting competitive market outcomes, with ‘efficiency’. When referencing efficiency we refer both to the efficient participation of parties to support competitive pressures as well as efficient market outcomes.

With this balance of objectives in mind, BGE’s preference for an auction design is premised on a downward sloping demand curve as an input into a descending clock auction, which is monitored actively by an Auction Monitor (from pre-qualification through to the auction). We believe the combination of a downward sloping demand curve with a well resourced independent Auction Monitor is an effective means of enabling competition through transparent price signals while also mitigating the risk of market power, without the need to impose extensive regulatory restrictions on the market.

A summary of our key high level positions in the various sections of the Consultation Paper are outlined below:

### **1. Market Power**

BGE shares the concerns relating to unilateral market power discussed in the consultation and notes that these concerns extend to the secondary capacity market as well as the primary market. BGE does not share the concern relating to collusion raised in the consultation paper. Firstly, the incentive for firms to break any collusive agreement (i.e. to ‘cheat’ collusion) in the annual auction is significant given the revenue risk of being unsuccessful in an auction. Secondly, the ability for other firms to punish parties who cheat is minimal as, outside of ESB, there are limited players with a portfolio of assets and therefore the capacity to react and punish ‘cheaters’. Finally, we believe that a transparent auction, with good information and monitoring, dis-incentivises collusion by way of applying competitive and monitoring pressures that can react to uncompetitive bidding behaviour.

*We believe that the market power concerns are best addressed by a combination of: a) mandatory participation; b) a downward sloping demand curve in the primary auction, and c) an independent Auction Monitor overseeing the prequalification and auction with the power to intervene where anti-competitive behaviour is suspected.* The suggestion to apply bid limits would in our view be difficult to implement given the nature of the variables that will be included in capacity market bids. Unlike the energy market, a capacity market bid will include a number of private variables (such as discount rates and unit and company specific risk factors), which will make it very difficult to strictly define the limits and monitor them accordingly.

### **2. Auction Design & Parameters**

When initially reviewing the auction proposals, BGE saw merit in applying a sealed bid auction to the smaller ISEM market as a way of minimising resource requirements and complications in the market. However, following further consideration of the auction process, including the analysis and variables involved in compiling bids, *BGE believes that a descending clock auction is a better solution for the ISEM market.*

A sealed bid auction essentially provides parties with only one chance to develop their bids and to clear the auction with limited feedback on how their bidding approach compared to the rest of the market. A descending clock auction at least provides parties with some level of feedback on how their bidding analysis and strategy compares with the rest of the market and provides an opportunity for parties to revise their bids in the event that they have mis-calculated or incorrectly valued key variables. We believe a descending clock auction will therefore give a level of comfort to participants of the auction. We also believe that avoiding the ‘winners curse’ through the descending clock auction is of greater benefit to the market than the risk of collusion. Or expressing it another way, we believe that the risk of inefficient and incorrect market outcomes from the sealed bid auction outweigh the benefits of a more simple market mechanism. As mentioned above, we do not believe that collusion is a significant concern in the ISEM, particularly where an independent Auction Monitor will oversee

bidding behaviour between rounds of the auction. On that basis, we support the implementation of a descending clock auction format both on a transitional and an enduring basis.

As part of the auction design, *BGE supports the inclusion of a downward sloping demand curve* as a means of providing a balance of signals<sup>1</sup> to the market, mitigating market power and providing flexibility to the capacity market administrator to over or under procure capacity in a given year depending on market prices.

Related to this last point, we also believe that *the downward sloping demand curve combined with a net welfare function (which accounts for both producer and consumer surplus) provides a transparent means of addressing the 'lumpiness problem' highlighted in the Consultation Paper*. BGE is strongly adverse to the proposal to pay 'out-of-merit' units their bid price in the event that the capacity of the marginal unit in the auction is greater than the residual capacity requirement from the auction. At a principled level awarding contracts to 'out-of-merit' units would in our view undermine the economic signals to the market and at a practical level it would introduce risks and uncertainty in the auction parameters for participants. The capacity market should provide clear signals to the market on the value of capacity and security of supply. On that basis, *there should be a single clearing price for the market*. BGE is strongly against a solution to lumpiness which awards contracts to out-of-merit bids. It both drives inefficient market outcomes and dilutes the market signals.

### **3. Difference Payments Socialisation Arrangements**

BGE has supported the reliability option (RO) mechanism within the capacity market as a means of providing efficient exit signals within the market and ensuring that those in receipt of capacity payments are actually called on to perform at times of system stress. However, BGE has also highlighted that the corollary of the RO mechanism is that it limits liquidity for forward contracts for suppliers above the strike price. We understand that this risk is recognised by the provision of the socialisation arrangements for suppliers to cover the 'hole in the hedge' when payments back from generators are not sufficient to cover payments to suppliers. However we are concerned that these arrangements are being undermined by the proposals to delay payments or to apply charges to suppliers where the socialisation arrangements fail to provide enough revenues to cover the 'hole in the hedge'.

Given that the 'hole in the hedge' is most likely to occur when prices and demand are both high, suggesting that suppliers can either accept the cashflow shortfall or pay a charge overlooks the cashflow and bad debt risk facing suppliers. Both solutions proposed in the consultation result in the same outcome for suppliers, a significant gap between its costs to supply and its revenues. Suppliers generally avoid this outcome through prudent hedging strategies, however this is precluded by virtue of the design of the capacity market. We do not believe that suppliers should bear the risk associated with these potentially significant and unpredictable events, and BGE therefore strongly advocates for an alternative solution where the TSO holds an 'overdraft fund' to top up payments to suppliers where there is a shortfall from both the generator paybacks and the supplier contribution fund to fully cover the 'hole in the hedge'.

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<sup>1</sup> By balance of signals we mean allowing for different signals at different points of the demand curve reflective of the need for different pricing signals depending on the level of capacity surplus/deficit. BGE supports a steep demand curve where the demand curve is below the target requirement, to provide strong investment signals, and a flatter demand curve above the target requirement to provide stability in market outcomes year on year.

## CONSULTATION QUESTIONS

### 1. Auction Frequency and Volumes

#### 1) Do respondents agree with the proposed approach for transitional auctions, T-4 auctions and T-1 auctions? If not, please explain.

At a high level, the approach proposed in section 3 of the consultation appears reasonable as a starting point, Specifically the proposal to shift out the demand curve in the intervening years to avoid untimely and/or inefficient closures is in our view a sensible inclusion to manage the transition from the current capacity mechanism to the RO based capacity mechanism. BGE also suggests one amendment to the proposal outlined in the consultation document.

BGE is concerned that the transitional auction process will lock out the market to new entrants until 2021. It is our understanding from section 3.1.2 that if a new entrant is built and energised before 2021 that it will have an option to either only avail of a 10 year contract from 2021 or avail of one year contracts in advance but forgo the opportunity of winning a 10 year contract. In our view, this does not provide efficient and equitable entry signals to the market in the short term and we note the related concern raised in section 3.1.3 by the Regulatory Authorities. In our view, this could be addressed if new entrants who are successful in a T-4 auction but who can build in advance of the start date of that contract are allowed to participate in 'bridging contracts' between short term auctions and the start date of their long-term contract<sup>2</sup>.

We believe that this approach could be applied to the enduring design also, whereby parties successful in T-4 auctions would be allowed to participate in bridging T-1 auctions where they are able to demonstrate an ability to be commissioned and energised in line with the relevant timelines.

Finally, it would be useful if clarity could be given as to what the definition of 'existing' capacity is in the context of a capacity auction. Does it refer to any capacity that has been built and energised before the auction date or does it relate to parties who have received capacity payments/contracts at some previous date, or does it have any other definition?

#### 2) What is respondents view in relation to the flexibility around the timing of the T-1 and T-4 auctions?

We understand that due to unforeseen circumstances, the interim auctions may be needed in T-3 or T-2 where market and/or system outcomes and requirements change. BGE has strongly advocated for robust monitoring of new builds who receive long term contracts in T-4 auctions so that any failures or delays in project delivery are captured at an early stage to enable reasonable management of the system and the market outcomes. Where new entrants renege on their build-out obligations, we do not believe that the market should wait until T-1 to purchase the capacity shortfall, and on that basis, we do believe that auctions outside of the typical T-4 and T-1 windows should be considered.

In terms of flexibility of the actual dates of the auctions, it is our view that a structured timetable for all auctions within a certain window of each year should be provided. This timetable, in conjunction with the auctions for DS3, should consider the interactions between the various auctions, delivery dates and the implications of these interactions for the sequencing of auctions. Given the number of auctions and the considerations and inputs for each we believe that a structured timetable will allow for better resource and commercial planning amongst participants. Specifically, with respect to T-1 auctions, we do not believe that it is appropriate to wait to hold the auction any later than 6 months before the delivery year. From a planning and budgeting perspective, we believe that businesses will need at least 6 months notice of the auction outcome and therefore, we would

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<sup>2</sup> To be clear, it may be that a new entrant enters a T-4 auction in 2017 and received a 10 year capacity contract. If that new entrant can build and energise ahead of 2021. In BGE's view, if that party can be available to provide capacity in 2019 or 2020, it should be allowed to participate in the related T-1 auctions and receive a bridging-contract up until the start date of it's 10-year contract.

strongly advocate for a 'flexible trading window' between 13 months to 6 months in advance of the delivery year.

## 2. Market Power

### **3) Do respondents agree that market power is a material concern in the I-SEM CRM? If no, why not? Should the SEM committee be concerned with unilateral market power, the potential for collusion or both?**

BGE agrees that there is potential to exercise market power in the capacity market, but in both the primary **and** secondary markets. BGE believes that managing the market power concerns in the primary market may be more straight-forward than that of the secondary market. Specifically, BGE supports the proposals for mandatory participation, a downward sloping demand curve and an independent Auction Monitor as a means of limiting market power in the primary capacity market. However, these will likely not be part of the secondary market and in specifically competition will be much more limited. As BGE has outlined previously, we believe that a liquid secondary market, as a means of managing RO risk, will be an important input into the primary capacity auction. We would therefore welcome more discussion on how market power in the secondary market could be addressed.

Also, noting the concern that ESB may use this position to price up in the auction, we are also concerned that they may use this market power to under-price the auction to win contracts for all if its units and to disincentivise new entry. This type of behaviour is notoriously much more difficult to detect or prevent but nevertheless concerning from the point of view of competition and new entry.

Although BGE recognises that the ISEM wholesale market is a relatively concentrated market, given the size of the non-incumbents and the fact that a large proportion of them do not hold generation portfolios, the ability of participants other than ESB to exercise unilateral market power is limited. Furthermore, we do not believe that collusion is a realistic concern within the market. Given the size and capacity of the non-incumbents, and therefore their inability to 'punish' counterparts, and the annual nature of auctions, and therefore the incentive of parties to cheat, BGE does not believe that collusion is a real risk within the CRM auction.

### **4) Do respondents think that the overall market power control framework and package of mitigation measures set out in this section is comprehensive and proportionate? Are there any additional market power concerns that the SEM Committee should be focussing on? Should the SEM Committee bar any existing firm transmission access intermittent generator which has opted out of an auction (on grounds of retiral) from bidding in subsequent auctions, if it subsequently does not retire and/or apply other sanctions?**

When seeking to implement market power mitigation measures, the measures should be targeted to only address the real concerns of the market. An over prescriptive market power mitigation framework could hamper innovation and competitive dynamics within the market.

BGE believes that a well designed downward sloping demand curve applied to the market as a whole coupled with mandatory participation and an independent market monitor will provide the most appropriate means of addressing these market power concerns in the capacity market.

Although we are concerned about parties' under-pricing in the market, we do not believe that further bid limits would be appropriate for the auction. Firstly, if applied to the market as a whole it would be overly interventionist but also and in reality, it would be very difficult to apply bid limits in the capacity market given the number of variables that will be included in a parties bid formation. We believe that a well resourced Auction Monitor will be critical in ensuring that bids are reasonable by reference to in-market and out-of-market benchmarks, as well as bidding behaviour between and within auctions (including pre-qualification).

In terms of information sharing, a balance must be struck between enabling parties to make good and efficient trading decisions based on the relevant information (i.e. retirees, availability, requirements etc.), while not allowing parties to use this information to manipulate the market outcome in their favour. As will be discussed in section 3 below, BGE favours a descending clock auction for the information that it provides to the market, allowing the market to test and right itself and avoid ‘the winners curse’. Other markets, PJM and GB, have designed the auction such that the information shared between auction rounds is sufficient in allowing parties to understand if they are pricing correctly but not sufficient to identify pivotal parties for the next round. We believe that information will be important to provide confidence in the market and to encourage new entrants. Recognising that information may be manipulated, we think that this is for the Auction Monitor to observe and to take action where necessary. The structure of, the role of and the sanctions available to the Auction Monitor should be consulted on separately once the design of the market is concluded.

With respect to information being communicated by parties before, during or after an auction as a means of manipulating market outcomes, this too can be monitored by the Auction Monitor but sanctions for this type of behavior likely fall under competition law and should be reported accordingly.

Finally, the second part of the question refers to an “existing firm transmission access intermittent generator” who has opted out of a T-4 auction but being able to access subsequent auctions where retirement plans have changed. BGE is unsure as to why this question is only directed at firm intermittent generators, and would have thought that it was equally applicable to all generators? Notwithstanding that point, BGE understands that business plans may change within a 4 year window and to the extent that a party has opted out of a T-4 auction on the basis that it is to retire but subsequently reverses that decision on the back of changes in the market signals, this may be perfectly legitimate and it may be in the consumers interest to allow this capacity to compete again. On that basis, BGE does not believe that this type of behaviour should be precluded per se, however any such decision should be backed up with detailed commercial and technical information and it should be closely monitored in the pre-qualification stage by the Auction Monitor.

**5) Do you think that firm transmission access plant which has bid at a certain point within the tolerance band in the T-4 auction (below the maximum) should be allowed to bid more capacity (up to the top of the tolerance band) in the T-1 auction?**

As BGE has noted previously, we are concerned that there may not be sufficient liquidity in the secondary market for capacity. This coupled with our market power concern, in our view can negatively impact new entry incentives and increase the risks (and therefore bids) of other non-portfolio players.

To mitigate these risks and in particular to support liquidity to allow parties to manage outage risks, BGE believes that capacity not committed in the T-4 auction<sup>3</sup> and capacity beyond the de-rated capacity should be used to support the secondary market. We are firmly of the view that the secondary market will be important in facilitating new entry, general competition and price pressure in the capacity market and therefore we believe that it warrants taking measures to facilitate liquidity in the secondary market (and to address the potential for market power abuse in the market).

**6) What metrics should be used to assess whether a capacity provider is dominant, for the purpose of either applying other Bid Limits and/or controls on aggregation (the approach to setting the level of bid controls is discussed in section 6)?**

There is merit in using all of the metrics (market share, HHI and PSI) outlined in the consultation paper as a means of understanding the structure of the capacity market and the nature of competition between participants in the market. No one metric can give a complete picture of competition and the ability of parties to circumvent or control competition.

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<sup>3</sup> Please note that ‘not committed’ refers both to capacity that did not receive a capacity contract to the auction and capacity that opted out of the auction. As noted above, the latter of these should be subject to market monitoring to ensure that they are not manipulating the market/market outcomes.

However, for the purposes of identifying who specifically holds market power and has the potential to manipulate prices and market outcomes, the Pivotal Supplier Indicator is in our view the most appropriate measure. This future proofs the mechanism and ensures that regardless of changing market shares or concentration, a party who is pivotal and therefore knows it can manipulate the market outcome can be identified and that market monitoring can be focused accordingly.

As outlined in answer to questions 26 – 29 below, BGE does not believe that it will be appropriate to apply bid limits to the capacity market. There are a number of interacting variables which will affect individual participants bid structures and inputs and we do not think it will be possible to design and implement a set of limits that would be appropriate either commercially for participants or from a practical point of view for an Auction Monitor. We support the combination of a mandatory participation, a downward sloping demand curve **and** a well resourced independent Auction Monitor as the best means of addressing market power in the capacity market.

Notwithstanding that viewpoint, if the RAs were to decide to implement a set of bid limits as a means of mitigating market power, BGE does not believe that they should be applied on a market wide basis. Instead, they should be targeted at those who hold market power only while allowing competition and the market design to drive price pressure on all other participants and the market outcome.

**7) Do you agree that dominant /pivotal generators should be prohibited from acting as Capacity Aggregators? Should associated businesses of dominant / pivotal generators (e.g. their Supply arms) also be prohibited from acting as Capacity Aggregators too?**

This question is part of two wider policy questions relating to; 1) how to incentivize greater competition in the generation market and 2) whether the ring-fencing in ESB is effective in mitigating market power. This question is therefore wider than this capacity market, and is something that should be considered in the context of whether dominant players should be allowed to increase their generation market share by building new generation assets. In BGE's view, there is some merit in limiting the activities of the dominant incumbent to enable **efficient** new entrants to grow and compete in the market. However, this needs further debate and would need a robust framework to ensure that any such action only facilitates efficient new entry and is not seen as a mechanism of protecting 'competitors' as opposed to 'competition'.

Related to this, the role of ring-fencing should also be reviewed and it absolutely should not be used as a means of circumventing any market power restrictions. Both of these issues should, in our view, be considered as part of the Market Power work-stream but BGE does not believe that it has been part of the debate to-date.

**8) Should there be a prohibition on ESB and other dominant generators providing aggregation services?**

Please see our response to question 7 above.

3. Auction Design

**9) Which auction format (simple sealed bid, multiple round descending clock, combinatorial format, i.e. Option 1 to 3 in Section 5.2) do you think is most appropriate for the transitional auctions, T-4 and T-1 auctions, and why?**

BGE was initially in favour of a sealed bid auction from the point of view of simplicity and recognising the RAs concern of market manipulation between auction rounds of a descending clock auction. However, on reflection, we believe that the descending clock auction is a better mechanism to ensure efficient market outcomes for all parties.



When determining a bid into a capacity auction, parties will need to consider a wide range of variables – common values such as forward wholesale prices and RO paybacks and private values such as discount rates and risk appetite. Where a party, in particular a new entrant, is entering an auction on a sealed bid basis there is a considerable risk of the ‘winners curse’ whereby a party has incorrectly valued costs, in particular common costs, relative to the rest of the market and put themselves in an uneconomic commercial position. A descending clock auction at least provides information feedback to allow parties to sense check their trading strategy and valuations before they are contractually committed. This in our view should better support new entry and competition in the capacity market.

We believe the descending clock auction will be particularly useful in the transitional auctions when there is considerable uncertainty in the market in terms of valuing RO risk, forward energy market liquidity and secondary capacity market liquidity.

Recognising the regulatory concern that information between rounds may be used by some parties to manipulate bids, we believe this concern will be addressed by both the downward sloping demand curve and an effectively resourced Market Monitor with sufficient powers to sanction parties in a timely manner where behaviour is deemed to be anti-competitive and/or manipulative. It is also worth noting that the descending clock auction design in GB addressed this information concern by binding and aggregating the information shared between auction rounds. This may also be worth considering as part of the detailed rules.

In short, whereby there are market manipulation risks with a descending clock auction, we believe that this risk can be addressed more effectively<sup>4</sup> than the ‘winners curse’ risk that is implicit in the sealed bid auction. In the interest of supporting competition, new entry and efficient market outcomes, BGE therefore believes that a descending clock auction is a better auction format both on a transitional and enduring basis.

**10) Do you have any preference for the structure of bids for the auctions? Explain your rationale.**

Noting our preference for a descending clock auction format, BGE’s preference for bid format is Option 2 as outlined in Appendix H of the Consultation Paper. This format where parties are allowed, but not obliged, to vary both volumes and prices between auction rounds allows parties to respond to market dynamics, allowing for the benefits of the descending clock format to be realised. As there is not an obligation to change bids between rounds, this option also gives optimal flexibility to smaller parties who do not wish to actively monitor and participate in rounds.

Although not our preference, BGE would just like to highlight that if the RAs were minded to proceed with a more restrictive market approach, BGE would prefer a more restricted bid structure within a descending clock auction than a sealed bid auction.

**11) Do stakeholders agree with the proposed approach of adopting Option 3b to deal with the lumpiness/discrete bid problem? If not, please explain why not, and your preferred alternative approach.**

Firstly, BGE agrees with the proposal to adopt a ‘pay-as-clear’ auction. In our view this provides a clear market signal on the value of security of supply, irrespective of whether the capacity providing that security of supply is new or existing capacity. It is a price signal for all parties to make their capacity available at times of system stress. In that regard, it provides an efficient market outcome and an efficient market signal.

With that in mind, BGE is not comfortable with the prospect of paying ‘out of merit bids’ as part of the market design.

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<sup>4</sup> A combination of aggregating the information shared between auction rounds (within a pre-determined volume band) with a well resourced Market Monitor who can take actions during auctions will be an effective form of mitigating the identified risks of descending clock auctions in our view.



The downward sloping demand curve within the market – which we will revert to again in section 4 below – provides an economic signal for either over or under procuring capacity. It will also provide a transparent benchmark for the auctioneer to calculate the **total** net welfare function and to decide on whether it should over or under procure in the event of a ‘lumpy’ marginal bid.

Lastly, in terms of the net welfare function proposed in 3b, there are a number of factors that must be considered within this function and we would welcome further consultation (perhaps as market of the Capacity Market Rules consultation). Firstly, given that the objective of the capacity market is to ensure security of supply and that this is a function of both the price parties are willing to provide this security at and the price consumers are willing to pay for this security, the welfare function must take both consumer and producer welfare into account (i.e. it needs to account for total welfare and not just consumer welfare). Secondly, although the welfare function will essentially be a function of the downward sloping demand curve within an auction, given that the auction will be procuring both 1 year and longer term contracts, the function may need to look beyond a 1 year demand curve. Although we recognise that this may over-complicate the calculation, there may be a means of accounting for longer term contracts and longer term demand through the shape and positioning of the demand curve. Again, we suggest that this is something that should be considered as part of a more detailed consultation on the specifics of the total welfare function calculation.

**12) Do stakeholders agree with the approach of setting the clearing price based on the highest accepted in-merit winner, and paying any out-of-merit winners based on a pay-as-bid basis? If not, please explain why not, and your preferred alternative approach.**

For the reasons outlined in answer to question 11 above, BGE agrees with a pay as clear auction price for the market as a whole. BGE does not agree with the proposal to pay ‘out of merit’ capacity contracts on a pay-as-bid basis. The market will hinge on a number of parameters which will make up the demand curve. This demand curve will form the basis of parties bidding strategies. To allow out of merit bids to win contracts is firstly undermining this design and sends the wrong signals to the market of the value of capacity providing security of supply to the system.

In the interests of transparency and efficiency, BGE is in favour of a market clearing function that is premised on a net total welfare function which pays all parties who clear the auction a single bid based on the bid of the marginal unit to clear the auction.

**13) Should the SEM Committee introduce a sloped demand curve, either as a market power control, or for other reasons?**

Please refer to questions 22 to 24 below for a more complete answer, but in short, BGE agrees with the imposition of a downward sloping demand curve based on a number of principle criteria to provide the right signals given the capacity surplus/deficit at a point in time.

**14) Winner determination. Do you agree with winners being determined purely on price offered for each Capacity Delivery Year?**

In short, yes, BGE agrees with winners being determined purely on a price offer.

At a principled level, it is difficult to reconcile that an equal value is placed on contracts of varying lengths between 1 to 10 years. However, given the difficulties in discounting longer term contracts on an equitable basis it is difficult to see another way of allowing existing and new capacity to compete on an equal footing.

BGE would not support separating auctions for new and existing capacity. As mentioned earlier in answer to question 11 above, we believe that the capacity market provides a value and therefore a price signal for all capacity to make itself available, regardless of whether it is new or existing capacity. We also believe that from a competition point of view, given the small size of the Irish market and to best ensure an efficient outcome, new and existing capacity should compete for capacity contracts.

Therefore, BGE agrees that winners should be determined purely on a price offered basis.

**15) Winner determination. Do you agree that the auctioneer should be able to accept “out-of-merit” bids to manage the lumpiness problem or should only in-merit bid be accepted? What rules should be used to determine whether the marginal bidder is accepted (if only in-merit bids can be accepted) or to determine which out-of-merit bid should be accepted?**

As outlined in more detail in answer to questions 11 and 12 above, BGE is not in favour of ‘out-of-merit’ bids being accepted. We believe that a well designed demand curve, with a clear total welfare function calculation will be sufficient to address any lumpiness concern. In our view, it provides a pricing reference point to either over or under-procure at different capacity points and will provide a market based, transparent signal to the market.

**16) Price determination. Do you agree that it appropriate to pay auction winners on a “pay-as-clear” basis, with this uniform clearing price being based on the highest accepted in-merit bid price? Should any out-of-merit winners be paid a different price to in-merit winners?**

Please refer again to our answer to question 11 and 12 above for more detailed commentary. In short, BGE believes that a pay-as-clear auction with a uniform price for the market is the most transparent and efficient outcome for the market. We are not in favour of ‘out-of-merit winners’ receiving contracts and believe that it will add uncertainty and remove transparency from the market process and outcome.

**17) How do you think the lumpiness / discrete bid issue should be dealt with?**

In answer to questions 11 and 15 above we outlined our concern that in trying to mitigate against a ‘lumpiness problem’ the proposed solution may create bigger issues in terms of market transparency and efficiency of market outcome. This in turn would dilute the price signals from the market. In our view a total welfare function, which uses the slope of the demand curve as a benchmark to calculate both consumer and producer surplus, is the most appropriate solution for ‘lumpiness’. As outlined in answer to question 11 above, there are a number of considerations that should be included within this total welfare function (or perhaps within the demand curve as an input into the total welfare function, and we would welcome further consultation on the detail of the total welfare function at a later date.

**18) Do you have any comments on the treatment of tied bids?**

Our understanding is that a welfare function calculation is used in GB to distinguish tied bids. Given that the welfare function should be established systematically within the Capacity Administrators market clearing solving tool, it may not be computationally intensive on an operational level (although I accept it may be complicated to design as a starting point). A detailed and transparent systematic approach will provide a more objective and transparent solution for the market and therefore would be our preference if feasible.

**19) What is the appropriate level of information to be provided: before qualification; between qualification and the auction start; between rounds in the case of a multiple round auction; and after the end of auction?**

By and large, the information as outlined in the sections 5.8.2 – 5.8.6, relating to information in advance of qualification and between qualification and the auction, seem sensible. It will be important for parties to have due notice of any change in the demand curve ahead of the auction. More detailed rules and provisions relating to governance between the qualification process and the auction and during the auction should be consulted on at a later date once all of the parameters of the auction design are finalized. The level of information shared may be reviewed at that point to reflect the nature of the role and the resourcing of the Market Monitor, but at this point, BGE would support maximum information being shared.

As for the information being shared between auction rounds where a descending clock auction is chosen, we agree with the concerns outlined in sections 5.8.7 and 5.8.8. Notwithstanding that, we believe a balance should be struck between the information shared to enable price discovery, and therefore to avoid the winners curse, and information withheld to avoid anti-competitive behaviour. In our view, aggregate information rounded to a pre-determined volume band published between rounds would provide a good compromise between these two objectives. Creating pre-determined volume bands should prevent parties from deciphering whether or not they are pivotal in the next round, and therefore avoid bidding up concerns, however giving information on an aggregate basis should be enough to allow parties understand if their bidding strategy is in line with market dynamics.

**20) Are any additional restrictions on bidder communications (over and above existing competition law) required?**

There are none that we can suggest at this time, although again we suggest that this may be reviewed again when the role and resourcing of the Market Monitor is being consulted on as there may be a trade off there.

4. Auction Parameters

**21) Do you have any comments on the overall scope / process of auction parameter setting outlined above?**

BGE recognises the merit and potential of the ISEM designed capacity market, with its accompanying reliability option, to provide strong signals for entry and exit in the market – something which is acutely missing from the current capacity market design. In designing the auction parameters however, it will be important to ensure that the exit signals are preserved, while also balancing the need to provide an element of stability to the market such that boom/bust cycles are avoided and efficient capacity is encouraged to participate in the auction. We will revert to this point again below when discussing the principles to be used in determining the slope of the demand curve.

The auction parameters will form a very important part of the auction design and will have a key role in influencing market outcomes in each of the auctions. It will be critical that a robust governance process is put in place to oversee the setting of these parameters on an ongoing basis. Some of these parameters will need to be reviewed on an annual basis while others may be best reviewed less frequently in a bid to provide some stability to the market. BGE would welcome further discussion on the governance around each of the auction parameters as part of an overall governance consultation, including the role and resources of the Market Monitor, once the design of the auction is finalised over the coming months.

**22) If a sloped demand curve is introduced, what principles should be used to determine the slope of the demand curve, and the range within which the demand curve is sloped?**

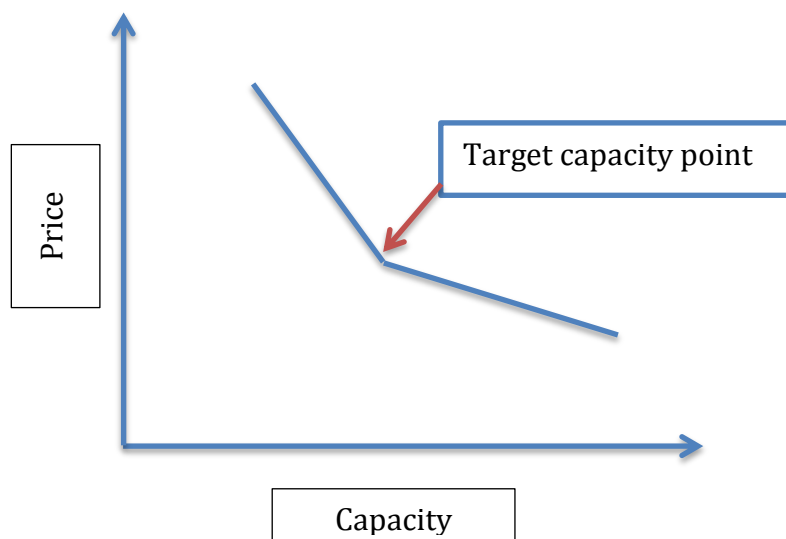
Based on experience from and analysis in other markets BGE agrees that a sloped demand curve is an appropriate input for the ISEM capacity market auction. Markets that have not included sloped demand curves have witnessed extreme outcomes in terms of market power abuse, volatile pricing and boom/bust market outcomes. Therefore, as a means of providing a level of stability to the market, enhancing transparency and protecting against market power (without the need for extensive and intrusive market rules), BGE is in favour of applying a downward sloping demand curve to the auction.

In terms of the principles to apply in designing the curve, there is a balance to be struck between valuing the risk and cost of security of supply below the target capacity requirement, while providing price stability to the market above the target capacity requirement. Analysis by the Brattle Group of the capacity curve in ISO NE demonstrates how either of these principles on their own can result in widely different demand curves with

widely different market outcomes<sup>5</sup>. International experience highlights the importance of designing a balanced demand curve so that the required level of capacity can be acquired over time at a reasonable price while avoiding price volatility and market power abuse to a certain extent.

On that basis, BGE is in favour of a steeper demand curve at points below the target capacity requirement to reflect the real cost of a capacity deficit from a security of supply point of view and to provide the correct investment signals to the market when there is a capacity shortage. Beyond the target capacity requirement, BGE supports a flatter curve to mitigate price volatility, enabling parties to reasonably understand revenue streams and reducing boom/bust cycles from one auction to the next. Reducing price stability should also support new entry and help mitigate market power abuse.

Without specifying details of the exact slopes or the exact points at which inflection points are placed, BGE proposes that based on its principles above, a supply curve similar to the figure below would be appropriate for the ISEM capacity market:



**23) If introduced, should the sloped demand curve be different for the transitional period?**

It may be that, beyond the target capacity level, a more gradual sloped demand curve may be appropriate in the transitional period to allow parties to familiarise themselves with the auction process.

It is also worth considering whether the sloped demand curve should be different for T-1 auctions to that of T-4 auctions. Considering the cost/risk of under-procuring capacity within this timeframe and perhaps the role of T-1 auctions to provide spikier price signals, it may be that the curve is steeper at all points up to the capacity requirement. It would be valuable to conduct some analysis to understand the impact this may have on entry/exit signals and prices when it works in conjunction with a more tailored T-4 demand curve as suggested above.

**24) What impact do you think the sloped demand curve will have on competition?**

In providing greater price stability between years, BGE believes that a sloped demand curve as suggested above would better prevent market power abuse and provide price stability, which in our view could only be helpful for

<sup>5</sup>

[http://www.brattle.com/system/testimonies/pdfs/000/000/939/original/Brattle\\_System\\_Demand\\_Curve\\_Testimony\\_Newell\\_Spees\\_0414.pdf?1400682856](http://www.brattle.com/system/testimonies/pdfs/000/000/939/original/Brattle_System_Demand_Curve_Testimony_Newell_Spees_0414.pdf?1400682856)

facilitating competition. This will particularly important for new entrants and non portfolio players who would be significantly hampered by boom/bust market outcomes.

**25) Do you agree with the requirement for an Auction Price Cap? What principles should be used to determine the level for the Auction Price Cap/what level should it be set at?**

Ultimately when designing a demand curve, it will be necessary to have a start and end point – the price cap is an important start point for any market. In setting the price cap, it must reflect the cost to the customer of under-procuring capacity and the risk of supply shortages.

**26) Do you agree with the requirement for other Bid Limits?**

BGE does not support specific bid limits in the capacity market. Given the number of variables that need to be considered when constructing an offer into the capacity market (including risk valuations and discount rates), we believe it will be almost impossible to design bid limits that can be applicable across the market for all types of players and all types of technologies. We believe that the downward sloping demand curve with an effective and resources Auction Monitor should provide the appropriate governance against market power and anti-competitive bidding in the market.

**27) Should the other Bid Limits be applied at the same level to all existing non-intermittent firm transmission access generators, or should the limits be technology specific?**

As noted above, BGE does not support the implementation of bid limits in the capacity market. However, if the RAs decide to apply bid limits, we believe they should only be applied to those parties identified as holding market power and should not be applied universally across the market. Even if applied to individual participants identified as having market power the bid limits will have to recognise the different risks related to different technologies (with different dispatch risks) and to different market participant types (where there is more than one party identified with market power)

**28) Should the other Bid Limits be applicable to all bidders, or just dominant/ pivotal generators?**

As noted above, BGE believes that creating bid limits in the capacity market will be extremely complex to administer and to usefully apply given the range of different market participants and technology types. Our preference is that market power and anti-competitive bidding is managed by a combination of: a) mandatory bidding; b) a downward sloping demand curve, and c) an active and well resourced independent Auction Monitor.

**29) What principles should be used to determine the level for the other Bid Limits/what level should they be set at?**

As outline above, BGE is not in favour of bid limits being applied to the market. We believe there are more flexible mechanisms to manage market power concerns without restricting market participation and outcomes. However, notwithstanding our preference that they should not be applied, if bid limits are to be applied they should only be applied to parties identified as holding market power. In setting bid limits, the limits will need to be developed on a technology by technology basis, reflecting the dispatch and outage risks of specific units. They will also need to account for the individual discount rates of the party that the bid limit is being targeted at as well as the number of years which each unit is expected to be in operation for. It is because of the complications in detailing and setting a range of factors to be applicable to the market as whole that we believe bid limits would be inappropriate for the capacity market.

## 5. Auction Governance, Roles & Responsibilities

### **30) Do you agree on the proposed role of the TSOs with respect to the auctions?**

As BGE has suggested in its bilateral meetings with the Regulatory Authorities, we see merit in leveraging the resources that are available to the market within the TSOs and subject to a robust Code, controls within the TSOs to address conflicts of interest and independent market monitoring, we support the proposal to appoint the TSOs as the capacity market administrator. We do believe however that the TSO must be allowed to sufficiently resource the relevant team to manage the auction as well as the management of the Capacity Code and modification process. As was noted in the Consultation Paper, the capacity market will distribute significant revenues across the market and it will be imperative that the auctions and the administration process is conducted in a timely manner allowing for considered analysis and consultation.

### **31) Do you agree on the requirement for an Independent Auction Monitor and its proposed roles and responsibilities? If not, please specify what changes you would make? Should this role be combined with the role of SEM/I-SEM Market Auditor?**

BGE agrees that given the importance of the capacity market outcome for the stability of the wider system and competition within the market we believe that it is reasonable and necessary to employ an independent Auction Monitor to oversee the auction process and support the Regulatory Authorities in monitoring the behaviour of all relevant parties. As noted above, a fully resourced Auction Monitor provides confidence to the market and, if proven effective, should negate the need for extensive bidding rules to mitigate market power..

### **32) Do you agree with the SEM Committee's proposed approach to managing conflicts of interests in the Capacity Market Code? Are any other steps appropriate to ensure that any actual or perceived conflicts of interest are managed?**

A detailed Code combined with an independent Auction Monitor will alleviate certain of the concerns relating to conflicts of interest. Clear processes for the delineation of functions within the TSOs to ensure that commercially sensitive information is not shared outside of the team responsible for administering the capacity auction together with compliance statements from the senior management team within the TSOs would also be appropriate.

### **33) Do you have any comments on the proposed auction governance arrangements?**

It is not clear from the Consultation Paper what sanctions may be taken by the RAs, outside of suspension and cancellation, where anti-competitive behaviour is suspected during pre-qualification or during an auction. To the extent that the Auction Monitor is concerned that a bid or data submitted during pre-qualification is abnormal, it should be allowed to engage, query, investigate bi-laterally with the related party before resorting to suspending or cancelling the auction. In short, there should be an option to address anti-competitive concerns before resorting to suspending or cancelling an auction. We suggest that this should be provided for within the Capacity Code.

Related to this, where the Auction Monitor suspects anti-competitive behaviour within an auction, it should have a role in investigating this further in conjunction with the RAs. This process and role of the Auction Monitor should also be provided for within the Capacity Code.

The governance process outlined in the Consultation Paper does not seem to make reference to the bid bonds and collateral to be put in place by participants entering into an auction. Although we understand that the nature of these provisions are part of the wider DS3/CRM pre-qualification consultation, their requirements and how they will be called upon should be detailed within the Capacity Code.

Lastly, as mentioned in previous answers, there are a number of parameters within the capacity market design that will affect the outcome of the market. These parameters should not be subject to unnecessary or

unexpected changes. We therefore believe that the governance of all parameters should be explicitly detailed within the Capacity Code, outlining when they should be reviewed (i.e. how often), the timelines for review (ensuring enough notice is given for consultation and for changes to the market) and the process for review (to ensure detailed analysis and consultation is allowed and provided).

**34) Do you have any views on the model and process for making modifications to the Capacity Market Code?**

The suggested process to modify the Capacity Code seems reasonable and sensible in terms of process and timelines. Although we would suggest one additional step to include a role for the Independent Auction Monitor to review the analysis conducted ahead of the consultation and to provide a recommendation on the outcome of the changes to the market as an input into the consultation.

**35) Do you think that disputes in respect of the Capacity Market Code should be resolved by a similar process to TSC disputes? Should there be a separate panel for Capacity Market Code dispute resolution?**

Disputes relating to the TSC largely relate to pricing and settlement issues and given that payments relating to the capacity market will largely be settled through the energy market, it would make sense that there is some consistency between the two Codes in this regard.

However, disputes in the Capacity Market may be very different to those in the TSC where parties are being investigated for anti-competitive behaviour. We would therefore suggest that the Capacity Code provides for two distinct processes to allow different timelines, interactions, access to information and governance depending on the nature of the dispute. It may be that a party to the Code is disputing a finding of the Auction Monitor, this would therefore need a different type of process to that of a typical pricing/settlement dispute.

**6. Other Residual Issues**

**36) Do you agree with the proposed approach to incorporating the carbon price into the Strike Price formula?**

Yes.

**37) Do you agree with the approach of moving to a month-ahead index?**

Yes.

**38) Do you agree that a reference thermal efficiency of around 15% is appropriate? If not, why not?**

Yes.

**39) Do you agree that the appropriate oil price is the Heavy Fuel Oil price?**

Yes.

**40) Do you agree with the principles / criteria set out in Section 8.2.28, that the SEM Committee proposes to use to choose between data sources for fuel and carbon prices, exchange rates?**

At a high level the principles seem reasonable however, they do not recognize that for some parameters, such as gas capacity charges, a liquid market may not be relevant and the related regulated tariff should be applied.



**41) Do you agree with the proposed governance / process for changes to fuel and carbon prices, exchange rates and transport adders used in the calculation of the Strike Price?**

Changes to the data sources for the calculation of the Strike Price should be subject to public review as part of the general governance process for all parameters as part of the Auction design and should not be changed at the discretion of any party.

**42) Do you agree with the proposed approach for setting the Supplier's contribution rate? If not, please explain.**

The socialisation fund proposed to address the issue of the 'hole in the hedge' will be critical for suppliers in managing cashflow and bad debt. Considering that the 'hole in the hedge' is most likely to arise when prices and demand are high, it will be imperative to protect suppliers from price spikes. In general suppliers will enter into forward hedges to protect themselves against such price spikes, but considering that most generators that are in merit in the market, and therefore likely to hedge forward, will be part of the RO, they will be unwilling to hedge beyond the capacity market strike price. Therefore, without protection against the 'hole in the hedge' at the times of highest prices, suppliers are being exposed to a significant cashflow risk as a result of the design of the capacity market.

On that basis, it is critical that the socialisation fund is calculated appropriately to give confidence to suppliers in the market design and the value of capacity to the market. BGE does not have any specific issue with the process proposed for the calculation of suppliers contribution rate, however it is concerned that if the contribution rate is envisaged not to be sufficient within the first 4 years of the market Go-Live that suppliers are being subjected to significant risks above and beyond that already expected with the introduction of imbalance charges and bidding responsibilities. Related to our answer to question 43 below, we therefore propose that some overdraft type facility is provided by the TSO, as the capacity administrator, to cover the cost and risk of the 'hole in the hedge'.

**43) Do you have a preference as to which option (Suspend and Accrue or Immediate Additional Charge) should be applied to socialisation of any shortfall in Reliability Option difference payments? If not, please explain.**

As outlined in answer to question 42 above, BGE is gravely concerned that the 'hole in the hedge' will put suppliers at significant risk. Again, given that it will likely materialise when prices and demand are high, without protection from the RO payback and forward contracts (for reasons outlined above), suppliers will face significant cashflow risk. We cannot support a solution which suggests that suppliers simply accept the cashflow shortfall or an ad hoc charge to remedy the issue. Both solutions result in the same outcome for suppliers, a significant gap between its costs to supply and its revenues from customers. Suppliers generally avoid this outcome by prudent hedging strategies, however this is precluded by virtue of the design of the capacity market. We do not believe that suppliers should bear these potentially significant and unpredictable events, and BGE therefore strongly supports a solution where the TSO holds an 'overdraft fund' to top up payments to suppliers where there is a shortfall from both the generator paybacks and the supplier contribution fund.