



SEM-14-008

Integrated Single Electricity Market (I-SEM)

High Level Design for Ireland and Northern Ireland from 2016

BGE Response to Consultation Paper

April 4th 2014

Introduction

Energy Trading Arrangements for I-SEM

The Single Electricity Market (SEM) has been successful in delivering competition and fuel diversity to the Irish market. Market power mitigation, liquidity, and transparency measures inherent in the market design have been key in delivering these outcomes. Bord Gáis Energy (BGE) is reassured by the Regulatory Authorities' (RAs') statement that the new market is described as the "Integrated Single Electricity Market" (I-SEM) to recognise the continuity of the existing market while acknowledging the purpose of the new market is to integrate more fully with European market arrangements.

BGE believes that the following should be retained explicitly in the I-SEM:

- i. Market power mitigation measures which currently exist through the use of measures such as a gross mandatory pool, directed contracts (DCs), bidding code of practice (BCOP) and market monitoring unit (MMU);
- ii. Transparency measures which currently exist through the use of measures such as visibility of DC and non-DC (NDC) prices; uniform pool price; BCOP; unit-based bidding; public access to bid compilation details;
- iii. Cost-recovery provisions for start up and no load costs which are currently provided for via an uplift mechanism;
- iv. Liquidity provisions which are currently provided for via NDCs and a gross mandatory pool.

Company analysis and modelling informs the position presented in this response. BGE submits that a modified version of Energy Option 3 would best facilitate enhanced cross border trading, while also retaining key elements of the SEM. It would not require as much regulatory intervention as other options to address market power and liquidity issues. BGE's position is that the I-SEM should include the following trading arrangements:

- i. Forwards timeframe that permits financial trading only and FTRs for cross border trades to enhance trading capacity in the DA and ID and reduce risks of interconnector reliability for cross-border trades;
- ii. Day-Ahead timeframe that is mandatory for all physical volumes and wherein trading must occur exclusively through the EU Market Coupler's algorithm, enabling equal trading access for all market participants and robust liquidity;
- iii. Intraday timeframe which is exclusive through continuous trading, and via periodic auctions 'pooling' liquidity in ID to the benefit of demand and wind and also facilitating cost-recovery and less volatile prices to recover start and no load costs ;
- iv. Balancing timeframe whereby the prices paid for balancing actions and the prices applied to imbalances are differentiated and are subject to cost-reflective bidding rules.

BGE believes that the following elements should be incorporated into Energy Option 3:

- i. Provisions to enhance liquidity in the forwards timeframe to ameliorate the current lack of liquidity for hedging risks;
- ii. Provisions across all timeframes, in which physical trading occurs, for Bidding Code of Practice (BCOP) type rules to ensure cost-reflective bidding for market power mitigation purposes;
- iii. Provisions for cost-recovery – start up and no load costs are critical for thermal generation and if an uplift-type mechanism cannot be operated under Euphemia, their recovery can be facilitated through the use of block bids in the DA and ID (via auctions) timeframes;
- iv. Periodic auctions to facilitate the smoothing of start and no load costs and to pool liquidity in the ID timeframe;
- v. A separate pricing approach to balancing energy actions and imbalance prices as provided for in the Balancing Network Code.

BGE understands that the RAs will endeavour to ensure the continuance of the SEM design attributes that have been instrumental in delivering successful energy trading arrangements to date. Existing papers and market analysis indicate market power will remain an issue until at least 2020. The dominant SEM generator, ESB Group, owns over 50% of the total installed generation on the island, accounts for 55% of the market schedule and is also the dominant electricity supplier. Therefore it is essential that the RAs consider market power mitigation in their assessment of the HLD energy options and review it in the context of the small island nature of SEM, its low cross border interconnection, and low numbers of participants. Market power threats or weaknesses will not easily or quickly dissipate in a market with such characteristics.

BGE believes that transparency and liquidity are critical to any future market redesign. In our view Option 3, with certain modifications, facilitates these criteria as well as greater cross-border integration with the least amount of direct intervention in the market.

Capacity Remuneration Mechanism (CRM) for I-SEM

BGE welcomes the discussion in the consultation of various methods of remunerating capacity in a market. BGE submits that, for reasons explained below in answer 2, a capacity remuneration revenue stream must be maintained in I-SEM not least for revenue adequacy reasons but also to facilitate market entry and sustainable competition in the market. It is noted however that the RAs have not set out what they see the objectives for a CRM should be which makes it difficult to assess how each mechanism might work best in I-SEM and how the different options might complement the different energy market options also being considered. It is however clear that strategic reserve and a short term capacity payment mechanism are not conducive to facilitating a liquid, transparent and competitive energy market in the long-term.

The CRM options are further discussed in the answers below but BGE does not believe a decision can be made at this early stage in the I-SEM design as to what the exact mechanism should look like. A separate work-stream on the appropriate CRM in parallel with the development of the detailed design of the energy trading arrangements is needed. This is in line with the approach adopted for the SEM HLD of June 2005 which, in BGE's view, it would be the best process to follow.

BGE Responses to Consultation Questions

1. Which option for energy trading arrangements would be your preferred choice for the I-SEM market, and why?

As explained in the introduction section above, BGE believes that Energy Option 3 subject to the addition of certain parameters, provides the best foundations for an Energy Option design for I-SEM. It would continue the beneficial design attributes of the current SEM while facilitating cross border trading and it requires less regulatory intervention than Options 1, 2 and 4.

Without delving into the detail of drawbacks and possible benefits of each Energy Option, it is instructive to highlight the key pros and cons raised by the Energy Options proposed. The answers to the questions that follow, as well as the answers to the questions on each of the Energy Options themselves, will provide more detail but the table below provides a summary of BGE’s assessment of each of the Energy Options presented in the consultation paper:

Energy Option	Pros	Cons
Option 1 Adapted Decentralised Market	<ul style="list-style-type: none"> • Financial derivatives for price hedging internally in SEM 	<ul style="list-style-type: none"> • Physical bilateral trades and portfolio optimisation in ex-ante timeframes benefit mainly larger portfolio players; enhances market power opportunities (e.g. withholding) erodes liquidity (lower in DA than would be otherwise) and hedging opportunities; threatens price transparency/ discovery/ predictability (e.g. eroding usefulness of reference prices, project (re/)financing prospects) • Balancing market pricing approach which does not provide for a softened transition from a socialised imbalance market to one of potentially high imbalance exposure (see answers to questions 4 and 5 below)
Option 2 Mandatory Ex-Post Pool for Net Volumes	<ul style="list-style-type: none"> • Financial derivatives for price hedging 	<ul style="list-style-type: none"> • Physical bilateral trades and portfolio optimisation concerns which damage liquidity and benefit only large portfolio players • Dilution of DA price as splitting DA trades between EU and ex-post raises price transparency, market monitoring, reference pricing, revenue predictability (undermining investment certainty and ability to determine market entry risks), competition and enhanced market concentration concerns • Ex-post balancing price may become market price which could distort interconnector flows contrary to Target Model; • Limiting ID adjustments to volumes committed in DA – dampens price signals for flexibility, excludes plants re-available in ID from partaking in market (e.g. wind, re-available thermal plant), not conducive to enhancing cross border trading
Option 3 Mandatory Centralised Market	<ul style="list-style-type: none"> • Financial derivatives, no physical trading in forwards benefits hedging opportunities, transparency & market power mitigation • Unit based bidding – level playing field & transparency • Mandatory DA – avoids potential for 	<ul style="list-style-type: none"> • Balancing market price approach –the reference to marginal price of incs and decs being the price for providing balancing energy (whether demand or generation) as well as being the imbalance price that charged. This does not make full use of the flexibility provided for in the Balancing Network Codes which provides for the distinct

Energy Option	Pros	Cons
	<p>withholding or need to regulate across timeframes to mitigate withholding risk; enhances liquidity providing suppliers with price certainty and stability with knock on positive impacts for consumers and ease of assessing supply market entry; regulatory stability given potential for similar results as current SEM</p> <ul style="list-style-type: none"> • Central scheduling - market coupler determines fair transparent uniform price • Central dispatch – EU market schedule should be starting point in dispatch, no subsequent need for nominations reduces administrative burden for smaller participants, eases TSOs’ system management capabilities (e.g. no lag period between scheduling and nominations) and creates a level playing field between smaller and larger market participants, the former which cannot benefit to the same extent as larger players, from within-portfolio trade offs Exclusive EU-only ID trading mitigates market power, increases liquidity for flexibility signals, demand and wind trading opportunities 	<p>pricing of energy actions and imbalance prices separately subject to certain parameters – this should be considered in the context of a market with no current balancing regime, limited reliable interconnection, government driven RES installation and need for flexibility signals. A balance between the Target Model objectives which include the facilitation of integration of RES in meeting EU RES targets (Balancing Network Code 23/12/2013 draft Article 9(i)), local market characteristics and policies must be struck in determining the optimum imbalance price arrangements for I-SEM.</p>
<p>Option 4 Gross Pool – Net Settlement Market</p>	<ul style="list-style-type: none"> • Central scheduling • Central dispatch 	<ul style="list-style-type: none"> • Financial nature of option raises significant risks of exposure to financial market regulations introducing risks of administrative burdens and costs with market entry impacts • Dilution of DA price via splitting trading as per Energy Option 2– proposal to limit EU DA volumes not conducive to cross border trading efficiencies & raises regulatory uncertainty. Threatens price discovery • Does not provide much needed signals for flexible plants and demand side response

In conclusion, the I-SEM is so named to continue the current attributes of the SEM while facilitating cross-border trading. The key design attributes and benefits of SEM should therefore be retained. Option 3 provides the best foundation for developing an optimal solution but, as the RAs note, there are strengths and weaknesses in each option and the preferred solution will be heavily influenced by the ease at which the weaknesses can be fixed. BGE submits that compared to Options 1, 2 and 4, Option 3 requires least modification to retain and enhance the positive elements of SEM, as follows:

- liquidity enhancement measures in the forwards timeframe;
- BCOP type rules for all physical bids;
- cost-recovery provisions and investigation of a separate approach to energy balancing and imbalance prices in a way that balances SEM policy objectives, SEM characteristics and Target Model objectives as is provided for under the Balancing Network Code.

2. Is there a requirement for a CRM in the revised HLD, and why?

BGE believes that the current CRM is an integral part of the current electricity market and is concerned that the suggestion a CRM may be removed in I-SEM raises significant regulatory uncertainty. BGE believes that a CRM revenue stream must remain integral to the wholesale energy market not least for maintaining investor certainty but to also facilitate market entry and long-term price stability.

In an energy-only market, participants rely on peak period prices to recover costs and send the “build” signal to the market. If participants are not in the money in these peak periods they will exit the market. With increasing levels of intermittent generation, it will become more difficult to forecast investor revenues and may encourage generators to withhold capacity, creating shortages to increase “peakiness” with knock-on end consumer price impacts. This leads to a “boom / bust” investment cycle where, once capacity has exited the market, there may be sudden peak demand periods but insufficient generation given the lag periods in constructing new plant. In small markets there is also a longer horizon required to justify investment recovery which is due to the fact that lumpy generation can cause prices to fall for prolonged periods. This increases the risks of investing in a small market.

In an energy-only market price spikes would have to be permitted to go as high as required to recoup investment. In the current SEM the VoLL is €10,898.49/MWh and given the cost-recovery required of generation often required to meet peak demand, it is not unrealistic that prices may go to such levels if a “bust” period occurred as described above. This creates huge price exposure for market participants and ultimately end-consumers. The instability in pricing and revenue instability which is increasingly important in a system with growing levels of renewable penetration are not conducive to enhancing competition. GB is an example of a member state that has relied on energy-only markets but is realising they do not provide a long term solution for ensuring security of supply. While the TSOs’ GAR 2013-2022 has estimated that there will be sufficient capacity in SEM beyond 2020, these are based on assumptions that include market investment in certain plant types, which investment can only be realistically expected to occur if the current CRM revenues exist.

It is therefore submitted that a CRM in SEM is necessary to help incentivise competition, protect consumers from extortionate prices, provide price stability and provide long term investment signals that prevent boom-bust investment cycles. BGE does not believe that a cogent argument for removing a CRM in I-SEM exists.

3. If there is a requirement for a CRM in the revised HLD, what form would be your preferred choice for the I-SEM, and why?

Compared to the level of detail put forward on the Energy Options, there is a dearth of detail on each of the CRMs which makes it difficult to assess the Options. Without sight or understanding of the RAs’ objectives for a CRM, different (and speculative) perspectives can be taken as to how each mechanism might work best in I-SEM, particularly when certain of the CRM options are highly dependent on what the energy trading arrangements will be. A strategic reserve and a short term capacity payment mechanism are not however conducive to liquid and competitive market and therefore do not compliment the objectives of the energy market. BGE provides high level views on the questions below but ultimately urges the RAs not to specify at the I-SEM HLD Draft Decision stage in June, what the exact CRM should look like. A separate work-stream on the appropriate CRM in parallel with the development of the detailed design of the energy trading arrangements should then occur. This is in line with the approach adopted for the SEM HLD of June 2005 which in BGE’s view would be the best process to follow in this instance also.

4. Are these the most important topics to consider in the description of the HLD for the revised energy trading arrangements for the single electricity market on the island of Ireland?

BGE believes that while these topics are important for describing the potential design of the I-SEM trading arrangements, the Table fails to give consideration to the key issues of concern that are of significant relevance to the appropriate trading arrangements to adopt in I-SEM, namely: market power; transparency; liquidity and cost-recovery provisions. These must be taken into account in finalising the appropriate I-SEM design.

5. Are there other aspects of the European Internal Electricity Market that should form part of the process of the High Level Design of energy trading arrangements in the I-SEM?

In addition to the topics in Table 2 of the consultation paper, BGE believes that the following additions (*in italics*) should be included:

Topic		Sub-Topic	Choices
Arrangements for Long Term Trading		Internal	Physical vs. Financial Financial
		Cross-border	PTRs vs. FTRs PTRs with UIOSI FTRs
Participation in European markets for trading of energy in day-ahead (DA) and intraday (ID) timescales	DA	Portfolio vs. Unit bidding	Portfolio bidding Gross portfolio bidding Unit bidding
		Mandatory vs. Voluntary	Voluntary Mandatory
		<i>Exclusive vs. Non exclusive</i>	<i>Exclusive</i> <i>Non-exclusive</i>
		Bid format	Simple Block Sophisticated
	ID	Portfolio vs. Unit bidding	Portfolio bidding Gross portfolio bidding Unit bidding
		Exclusive vs. Non exclusive	Exclusive Non-exclusive
		Bid format	Simple Block Sophisticated
Process for reaching feasible dispatch position		Starting point of dispatch	DA (and ID) nominations IC schedule
		Bids to the TSO for balancing and dispatch	Complex bids Incs and decs
		Timing of bid submission	At DA and updated continuously At DA and updated at specific intervals
Imbalance/ Pool Settlement Balancing arrangements			Marginal imbalance price(s) based on separate balancing mechanism Ex post unconstrained market schedule
	Physical Balancing Actions	Bid submission format	Single cost-reflective bid for inc, dec Separate cost-reflective bids for up/ down regulation (incs/ decs)
		Pricing (payments)*	Marginal price of single cost-reflective bids submitted above; Marginal price of cost-reflective incs and decs together (one price) above; Marginal price of cost-reflective incs or decs separately (two prices) above
	Imbalance/ Pool Settlement	Pricing (charges)*	Marginal price of single bids/ one price/ two price approaches of above; Average price approach compliant with Article 60 Balancing NC parameters *Socialisation of any over/ under recovery

imbalance charges as compared to physical action payments

**There are a number of permutations of these pricing arrangements – this is a non exhaustive list to encourage consideration of the flexibility provided for in the Balancing NC. The overarching objective should be to balance the NC objectives against SEM’s characteristics and policies.*

Topic: Arrangements for long-term trading

BGE added the additional comment in italics for this Topic to emphasise that there will always be a need for internal financial forwards hedging opportunities, consideration to the enhancement of which liquidity is urged in the detailed design phase.

Topic: Participation in European markets for trading of energy in day-ahead (DA) and intraday (ID) timescales

BGE added this additional sub-topic of “Exclusive vs. Non-Exclusive” as BGE believes that making the DA timeframe a mandatory timeframe, as well as requiring that all trades are done exclusively through Euphemia will result in optimal results for suppliers, generators and consumers. Such arrangements mitigate market power and increase liquidity and transparency. For reasons expressed in the answers to the options, any physical trading outside of the EU coupling arrangements, are not supported by BGE.

Topic: Imbalance/ Pool settlement

BGE believes that the balancing timeframe will prove one of the most difficult arrangements to develop for the I-SEM in light of the large and increasing share of intermittent generation giving rise to imbalances, the cost of which are currently socialised. BGE wishes to emphasise that the Balancing Network Code provides for flexibility in determining the pricing of physical energy actions and the pricing of imbalances.¹ Adoption of balancing arrangements is to be determined with reference to the objectives of the Code which includes the facilitation of RES penetration.² BGE urges that the flexibility in the Code for such pricing approaches is fully taken into consideration in finalising balancing arrangements for I-SEM.

BGE believes that the I-SEM balancing arrangements must avoid a “big bang” effect in balancing. Between Q4 2016 and Q1 2017 there will be a transition from a socialised regime to unknown balancing price risk, which could have market entry impacts particularly for supplier entry that may not have sufficient generation to counter-balance positions before the balancing timeframe. Our analysis shows that suppliers could face a volume risk of over 5% from day-ahead projections, which risk cannot be hedged ID without integrated generation. A proportionate approach to a balancing market would provide a more stable means of providing a signal to balance within reasonable price parameters. While the balancing Target Model aims to increase cross-border transfers and competition in the provision of balancing services and encourage balance responsibility, it is necessary to view these objectives in the context of the current SEM market structure, SEM’s policy objectives (high renewables penetration which require flexible back up plants), and the SEM Committee’s objective of protecting consumer interests and promoting competition. In order to smooth the transition from socialisation to imbalance prices BGE believes that an approach should be adopted that does not undermine the SEM policy objectives or the Target Model requirements. A separate pricing approach to physical balancing *actions* as opposed to physical *imbalances* are explicitly provided for in the Balancing Network Code and these provisions must be fully utilised to meet and balance the objectives of the Balancing NC and SEM’s unique characteristics.

¹ As provided for in articles 38(2) and 60, for balancing energy pricing and imbalance pricing, respectively

² Article 9 of the Code

6. What evidence can you provide for the assessment of the HLD options with respect to security of supply, efficiency, and adaptability?

BGE believes that the comparative performance against the assessment criteria of security of supply, efficiency, and adaptability varies widely across the proposed HLD options:

Security of Supply: the chosen wholesale market design should facilitate the operation of the system that meets relevant security standards.

Ultimately security of supply comes down to diversity of generation sources (fuel, ownership and technology), transmission and distribution infrastructure and level of interconnection. All of these require investment to develop and maintain, which requires revenue adequacy in a market. If a market participant or would-be market entrant cannot accurately and transparently estimate what revenues it might recoup from a market this will undermine market entry signals and the ability to maintain competitiveness in the market. Regardless of which Energy Option is chosen, the revenue adequacy of the market will also be highly dependent on the existence of a CRM.

The design attributes of the current market which ensure security of supply are market power mitigation measures, transparency, and liquidity; these are imperative in an energy market the size of SEM, with high market concentration and low interconnection.

- i. If market power abuse is permitted to exist, e.g. physical and economic withholding to the detriment of volumes (particularly for supplier-only participants or balancing of demand and wind) and prices, this signals market exit and is also a barrier to entry. The potential for such potential abuse is higher in a market with bilateral and/ or portfolio optimisation measures than a market with centralised highly liquid trading arrangements (e.g. a pool);
- ii. A lack of transparency makes price discovery very difficult which in turns undermines the attractiveness of either existing or new investment in the market. BCOP type rules and a central repository for bid compilation details (e.g. an MMU) also facilitate price discovery enabling risk assessments for hedging needs and potential market entry opportunities to be better assessed. Again the potential for erosion of transparency is significant in a market with bilateral and/ or portfolio optimisation compared to centralised, liquid trading arrangements;
- iii. Liquidity is critical in a well-functioning competitive electricity market and is reflected in the ease at which one can buy or sell a particular commodity or instrument without incurring onerous costs or significantly affecting the price. Liquidity provides investor confidence allowing for optimal risk and market manipulation mitigation enabling adequate forwards hedging and facilitating the derivation of a robust DA reference price. Permitting bilateral and/ or portfolio optimisation trades can undermine the liquidity for forwards hedging and take from the volumes in DA eroding DA prices. Without liquidity, market competitor numbers will diminish and there will be a barrier to entry.

Without liquidity and transparency and in markets where market power is facilitated, targeted measures, such as strategic reserves are required to deliver security of supplies which is not a long term solution to capacity adequacy. The issues previously faced in the Irish market prior to SEM and the issues currently faced in the UK market demonstrate that bi-lateral markets do not efficiently or effectively deliver security of energy supplies to markets. Options 1 and 2 would therefore perform least favourably in this regard. Option 3 performs best against this criterion.

Efficiency: the market design should, in so far as it is practical to do so, result in the most economic (i.e. least cost) dispatch of available plant.

In BGE's view, one of the most important elements of this assessment criterion is the efficiency of interconnector flows. In this regard the overall dispatch of all units on the system and in general is important. Our analysis has shown that if commercial and technical data is not appropriately reflected in the bid formats submitted to the EU market coupler, solving on an independent trading period basis will result in inefficient or unintuitive outcomes. This can be in the form of incorrect flows across interconnectors or inefficient cycling and pricing in the market. It is for this reason that BGE believes that block bids will be a critical companion to the arrangements drawn up for the I-SEM HLD.

In terms of central or self dispatch arrangements in ensuring least cost dispatch of available plant in SEM, BGE does not believe that self dispatch (aside from its evident need in continuous ID trading) would be conducive to economic dispatch in I-SEM as it would not necessarily allow for the efficient combination of both technical and commercial parameters. In a small system with significant system constraints and locational specific requirements, a market with central dispatch and a form of bidding rules provides the most technically and ultimately economic outcome.

Options 1 and 2 perform least favourably while Option 3 performs best in light of the above discussion.

Adaptive: The governance arrangements should provide an appropriate basis for the development and modification of the arrangements in a straightforward and cost effective manner.

The provision of EU trading rules through the network codes does not prohibit the RAs' ability to make changes or govern the SEM. The RAs will continue to be able to regulate as they do currently but additional consideration of the impact of any changes on cross border flows and compliance with the network codes will be required as part of the decision making process. This has been an emerging feature of governance over the past number of years with EU Directives/Regulations related to the internal energy market.

Until the current market issues of market power, transparency and liquidity dissipate, there will be a continued role for the regulators in ensuring efficient trading arrangements for the benefit of competition and ultimately consumers, no matter what energy trading arrangements are in place though some will require more regulatory intervention than others (e.g. Options 1 and 2 more so as compared to Option 3). It is also important that the final I-SEM HLD is capable of adapting with the evolution of the Target Model. As NWE is the pilot project for the Target Model to date, and given that Energy Option 3 is close to the design of electricity markets in the NWE region, Energy Option 3 is in BGE's view a design that is most capable of evolution as the Target Model progresses.

7. Are there any changes you would suggest to make the Adapted Decentralised Market more effective for the I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?

BGE does not believe that bilateral or portfolio trades are the correct fit for a market the size of SEM with high market concentration, a dominant player and low forwards liquidity. Significant interventions to make this option any way effective for I-SEM are needed and are outlined below in more detail. In summary, the changes suggested below migrate or modify Option 1, “the Adapted Decentralised Market”, towards Option 3, “the Mandatory Centralised Market”, in a bid to address the market power, liquidity and transparency concerns BGE has with Option 1.

Forwards:

In SEM currently, the forwards timeframe plays a key market power mitigation and liquidity role. BGE believes that if forward physical trades were allowed in the SEM, liquidity in the DA market would be eroded with knock-on effects on price discovery and therefore competition in the market.

From a hedging perspective, notwithstanding that liquidity has increased in the forwards market in the last 12-18 months, there is still a serious dearth of forward liquid volumes. This illiquidity is most evident in the availability of non-standard forward products including peak and weekend products. Despite the belief that forwards volumes would increase with the horizontal re-integration of ESB, this has not been the case - a recent NDC auction illustrates this where only two products were offered and purchased. As ~55% of total scheduled generation is in the ownership of ESB Group, suppliers are evidently heavily reliant on ESB’s volumes and their willingness to transact.

Were bilateral physical trades permitted in the forwards timeframe, this would reduce the amount of DCs and NDCs available for forwards market hedging which is not conducive to risk mitigation. Hedge contract prices would likely be even higher than the NDC prices we are currently witnessing. It would likely facilitate those in the better bargaining position (long generators) to offer contracts at a price above their short run marginal costs. If a deal is struck with for example a long generator and one/ two suppliers in the forwards timeframe, given the size of SEM this could erode the competitiveness of other generators and suppliers resulting in market exit and ultimately higher prices if sufficient exit occurs.

Regulatory intervention (e.g. limits) could mitigate the risks of ex-ante bilateral/ portfolio trading but BGE believes that permitting such trading creates the need for regulatory intervention beyond that required currently. In summary, for regulatory certainty and investor confidence reasons:

- a) BGE does not support any physical trades in the forward timeframe as it will reduce liquidity in the DA and ID and impede price discovery in those markets (given our market characteristics this is important);
- b) BGE believes that hedging provisions in the forward market should be liquid – although it is improving in SEM, we are still reliant on cross border power to hedge as prices for flexible products, outside of DCs, are often above fair value;
- c) BGE believes FTRs are more conducive to facilitating cross border hedging arrangements and also freeing up interconnector capacity for DA and ID to enhance liquidity in those markets.

From a cross-border trading perspective, cross-border hedging is made possible through the use of PTRs with use-it-or-sell-it rights (UIOSI). BGE believes that financial transmission rights (FTRs) should result in the same practical outcomes as PTRs with UIOSI but the benefit of the FTRs is that physical capacity of the interconnector in the forwards timeframe is not used up and is thus available for use in the day-ahead and intraday timeframes which will assist liquidity in these latter timeframes. Furthermore, FTRs also mitigate the risk of cross-border trading when the interconnector fails.

To free liquidity on the interconnector and mitigate the risk of relying on reliable interconnection for cross-border trading, FTRs are the preferred forwards cross-border trading option.

Day-Ahead (DA):

The current day-ahead market in SEM also plays an instrumental role in terms of market power, transparency, cost-recovery and liquidity in particular.

Mandatory vs. Voluntary; Exclusive vs. Non-Exclusive

The central pool ensures the dominant generator’s 55% share of generation, in that generation in the SEM is not withheld with a view to obtaining bilaterally negotiated prices, and that the market price includes and is based on the most efficient plant in the market. All participants are assured equal access to the market which promotes competition. The

uniform pool price also provides a liquid and reliable reference price allowing for adequate price and risk assessments which facilitate risk management planning and incidentally market competition, project financing possibilities and market entry. It also provides a robust reference price for hedging and renewables support payments. Were the price diluted for example by allowing bilateral or portfolio trades outside the pool, price transparency and robustness, and the incidental benefits would be significantly eroded. Without liquid and transparent prices, competition in both the generation and supply markets will be negatively affected. The pooling of volumes through a mandatory DA market has worked to enhance competition in the SEM to-date and should continue as given the size of our market and the dominance of ESB Group, to do otherwise would significantly diminish the ability of competitors to enter and grow in the market to compete against ESB Group's portfolio in the long-term. All physical ex ante trading should go through the DA market which should therefore be made mandatory. The DA market trading should also occur exclusively through Euphemia.

Portfolio vs. unit bidding

The current pool also prohibits market participants from applying trade-offs within their portfolios of generation which can be applied through portfolio as opposed to unit bidding– the benefits of the former which could only be derived by market players with a large market share. With respect to gross portfolio as opposed to net portfolio bidding, the consultation paper notes that gross portfolio bidding would help mitigate market power. However BGE submits that this is only when compared to net portfolio bidding and overall unit based bidding should continue to apply in SEM having regard to the current construct of the generation mix in SEM.

Portfolio bidding is not beneficial to transparency and is thus damaging to competition. Price discovery is impossible and portfolio bidding favours larger generators. Unit bidding however enables large and small participants to partake in SEM on a level playing field and also facilitates transparent and simpler monitoring and understanding of bid formation by the MMU and market participants.

Bid format

BGE welcomes the explicit recognition in the consultation paper that start up costs, part loading and no load generation costs and shut down costs are important to plant in SEM. The importance of their recovery in any new I-SEM cannot be overemphasised in BGE's view. The need for such will become ever more evident with the advent of increasing RES integration and low levels of interconnection. The need for thermal plants to be able to stop/ start more often, ramp faster will be inevitable particularly with the policy drive for RES penetration. The current uplift mechanism is a key tenet of conventional generator cost recovery and must be retained in the new market design, if investor certainty is to be maintained.

Acknowledging that it may or may not be possible to retain the uplift mechanism in its current format, BGE is of the view that block bids are capable of enabling start costs and no-load costs to be recovered. Our analysis confirms that commercial and technical operational characteristics can be catered for in block bid, and the various derivations of same (e.g. linked block bids), formats.

Bidding Code of Practice

In the current market, the BCOP ensures the fairness of electricity prices. Requiring all conventional generators to reflect their short run marginal costs (SRMC) of running ensures a level playing field of access to the market for all market participants whether portfolio or unit, large or small. When coupled with the requirement to submit bid compilation details to the MMU, it facilitates market monitoring and transparency in the market.

Given the level of market concentration in the SEM, a bi-lateral market with no BCOP would diminish competition significantly and push independent suppliers and generators out of the market. BCOP type bidding rules in tandem with central 'exclusive' trading arrangements, via EU trading to ensure no dilution of price signals occurs, would help to address market power in the SEM, and provide transparency and price discovery in the market. This in turn will facilitate long-term security of supply, competition and cost reflective pricing in the market.

Intraday (ID):

Portfolio vs. unit bidding

For the same reasons as outlined under DA above, BGE believes that unit bidding should apply in ID as it should across all timeframes.

Exclusive vs. Non-exclusive

For the same bilateral/ portfolio optimisation lack of transparency, liquidity and market power potential concerns as noted in DA above, BGE believes that trading in ID should be exclusively through the EU ID continuous platform. In addition, with increasing wind generation and the new exposure of demand, wind and conventional generation to energy imbalances the liquidity in the ID and balancing markets as markets of last resort will become more important in the short-medium term at least. BGE believes that ID auctions will facilitate better pooling of liquidity in the ID timeframe and should be considered as part of the detailed design.

In the absence of liquidity in the ID market, participants, particularly wind generators and demand, will rely on the balancing market price for the purposes of balancing their positions. To drive liquidity in the ID market, the balancing market must therefore be conducive to incentivising participants to trade in the ID market. In BGE's view, a 'cost-reflective' balancing market will better incentivise flexible generation and demand to trade in the ID market as opposed to holding back flexibility to avail of higher or scarcity prices in the balancing market

Bid format

BGE accepts that it may be more difficult to enable start up and no load costs to be recoverable in the ID timeframe if ID is to occur on a continuous basis with simple bids, due to the short turnaround required in continuous trading. However, BGE believes that periodic auctions should complement the recovery of start up and no load costs through the submission of block bids. For example, if a generator re-starts from outage within day, instead of having to load costs into one trading period and producing price spikes, periodic auctions would permit a generator to spread the recovery of their costs over a number of trading periods using block bids. This would protect consumers from price spikes and help the TSO to manage the risks of intraday. Thus simple bids should be used in continuous trading only, with block bids submitted for periodic auctions.

Imbalance/ Pool Settlement:

As outlined in more detail in the answer to question 5, BGE is of the view that the balancing market needs to provide a smoothed "cash out price" for imbalance volumes. A smoothed approach should provide a balance between providing an incentive to trade in the DA and ID timeframes while not exposing parties to unquantifiable risks.

8. Do you agree with the qualitative assessment of the Adapted Decentralised Market against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?

- Security of supply: BGE submits that the level of regulatory intervention that would be required to prevent the risks from bilateral/ portfolio trades make this a weakness rather than neutral. Liquidity reduction, transparency erosion and increased potential for abuse of market power increase the requirement for regulatory intervention and hence regulatory risk, further threatening security of supply.
- Stability: BGE submits this is a weakness since considerable regulatory intervention would be required to deliver a liquid DA and ID market and prevent market power abuses such as excessive pricing or withholding to the detriment of competition. A bilateral market also drastically diverges from the SEM.
- Efficiency: Weakness - self-dispatch is not conducive to a small island market with low interconnection and high market concentration as outlined above.
- Practicality: BGE would change this from 'neutral' to 'neutral/ possible weakness' as it requires most divergence from current SEM.
- Equity: BGE disagrees with split 'possible strength/ possible weakness' and considers this to be a 'possible weakness' as ensuring liquidity in DA and ID would need significant regular regulatory intervention which undermines regulatory and market uncertainty. Bilateral contracts are more helpful to large players and promotes vertical integration to disadvantage of competition and transparency regardless of the level of intervention.
- Competition: BGE disagrees with 'possible strength/ possible weakness', this should be 'possible weakness'. We do not believe that permitting choice between what types of contracts to enter via market coupling algorithm is optimal for a small market with high market concentration and high RES for the reasons discussed earlier - uncertain liquidity in ex-ante timeframes; potential for withholding; transparency if low liquidity; cost recovery. The regulatory intervention required to make this option competitively work in BGE's view negates any potential strength.
- Environment: We would change this from "possible strength/ weakness" to 'possible weakness'. Managing wind generation's exposure to imbalances depends on a liquid DA and ID market which would be eroded by bilateral trading. Choices between timeframes erode liquidity which should be concentrated in the DA market, exclusively through EU trading. A cost-reflective imbalance price cannot drive cost-reflective pricing in ID, enhancing ID liquidity, if balancing energy is tied up in bilateral contracts from ex-ante timeframes. Periodic ID auctions assist pooling of liquidity.
- Adaptive: BGE disagrees with 'neutral' and would split between 'neutral/ possible weakness'. Increased regulation of the trading arrangements on the island is not conducive to enhancing EU integration and cross-border trading, which is the objective of the "Integrated – SEM" and should not be regarded as 'adaptiveness'. The reduced need for local/ all-island only changes, furthers the objective of market integration.
- IEM: Agree with 'possible strength/ possible weakness' split but heavily contingent on liquidity measures to ensure efficient DA flows which raises regulatory uncertainty.

9. How does the Adapted Decentralised Market measure against the SEM Committee's primary duty to protect the long and short term interests of consumers on the island of Ireland?

BGE believes that under Option 1 physical bilateral trades and portfolio optimisation in ex-ante timeframes benefit mainly larger portfolio players; enhances market power abuse opportunities, erodes liquidity and hedging opportunities, and threatens price transparency. Without frequent regular regulatory intervention, the Option is not considered by BGE to be feasible from a consumer protection perspective. Such intervention would lead to regulatory uncertainty and undermine market confidence. Smaller generators and supplier would tend to exit and there would be a market entry barrier for DSR. Ultimately it could increase market concentration leading to higher prices and a security of supply risk in the long term.

10. Are there any changes you would suggest to make the Mandatory Ex-post Pool for Net Volumes more effective for the I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?

As outlined in detail in answer to Q7, BGE has significant concerns that any option which permits bi-lateral and non-exclusive trading will diminish liquidity and transparency in the market which will facilitate the potential for market power abuse. In our view the changes and interventions that would be needed to address the concerns are not conducive to a robust market given the level of direct regulatory intervention they would require. The changes suggested below essentially attempt to migrate Option 2 towards Option 3 which BGE believes provides for a more open and competitive market without direct regulatory involvement.

Forwards:

Internal

BGE believes only financial products should be permitted to be traded in the forwards timeframe within SEM.

There will also continue to be a need for regulatory intervention to ensure that there are certain volumes of forwards hedging products within I-SEM given the current scarcity in counterparties. Prohibiting physical ex ante trading helps to ensure that there will be sufficient forward hedging opportunities for smaller counterparties in SEM. Otherwise market power abuse would be a real risk as the low offering of forwards products, likely at a high price (current NDC products are illustrative of the high prices one might expect to pay for bilateral contracts). As the dominant player, ESB Group, has ~55% market schedule share it can heavily influence these prices, and hence also spot prices to the detriment of enhancing competition and lowering consumer prices. Bilateral arrangements are conducive to vertical integration which increases market concentration to the detriment of supplier entry.

Cross-Border

FTRs on cross-border forwards trading are preferred to PTRs with UIOSI. FTRs free up more capacity to be used for DA and ID EU market trading and also reduces the risks faced by market participants, that are increasingly pushed to forwards hedging cross-border, in having to rely on the operation of the interconnector to mitigate risks.

Day-Ahead:

Mandatory vs. voluntary; Exclusive vs. non exclusive:

BGE believes that the day-ahead timeframe should be mandatory and exclusive where all physical ex-ante trading occurs exclusively through the EU market coupler. This helps ensure liquidity in the DA price (price is not eroded by bilateral nominations which have same effect as wind on price). Such liquidity assists the robustness of the DA price which is key for reference pricing in hedging and renewables support. It also assists assessing revenue returns and investment maintenance as well as supply market entry prospects.

Portfolio vs. unit bidding

Unit bidding is BGE's preferred approach for all physical trading in I-SEM except for demand bidding. Only large portfolio players such as ESB Group are in a position to arbitrage portfolio bids to the detriment of the competitiveness of smaller players. Unit bidding is also more transparent which better enables MMU market monitoring for competition as well as competitor monitoring in the market.

Bid format

In light of increased RES and large within-day swings in demand, start-up and no-load cost recovery will become ever more important in the I-SEM. Uplift may or may not be catered for in the new market arrangements but our analysis confirms that technical and commercial offer information can be catered for in the block-bid type bids. Certain rules around transparency in these bids should also be adopted.

BCOP bidding

A BCOP should apply to the submission of all bids for physical trades whether ex-ante or in balancing. It ensures a level playing field for larger and smaller generators (with no portfolio arbitrage opportunities), facilitates market monitoring and transparency. This would mitigate market power by inhibiting economic withholding/ excessive pricing, allowing for more competitive outcomes and maintains investment signals on the demand and supply side. The usefulness of a BCOP would be reinforced when physical trades are mandatorily and exclusively required to occur DA through Euphemia.

Intraday:

Portfolio vs. unit bidding

Unit bidding is BGE's preferred approach for all physical trading in I-SEM. Only large portfolio players, and in particular the dominant generator, ESB Group, are in a position to arbitrage to the detriment of the competitiveness of smaller players. Unit bidding is also more transparent which better enables MMU market monitoring for competition as well as competitor monitoring in the market.

Exclusive vs. non exclusive

Due to the lack of transparency, liquidity and market power potential concerns arising from bilateral/ portfolio optimisation trades, ID trading should occur exclusively on an EU/ Cross border basis via the continuous SOBF and periodic auctions. Liquidity in ID will become more important with high RES and the new exposure of wind, demand and conventional generation to imbalance arrangements. Bilateral/ portfolio trades reduce ID liquidity. Cost-reflective/ BCOP type bidding in balancing should eventually shift liquidity to the ID timeframe at similar cost-reflective prices, when those offering balancing services will become averse to waiting until real-time to sell balancing energy. The importance of prohibiting any physical trading outside of ID EU markets and of cost-reflective bidding in balancing cannot be overemphasised.

Bid format

The ability to recover start up and no load costs will become more important in a high RES market. In the intraday market it will be difficult to enable recovery of such costs via simple bids so periodic ID auctions should complement continuous trading as they can accept block bids across a number of hours rather than loading costs into just one hour. Block bidding will also pool liquidity in ID, facilitating pre-real-time balancing of wind, demand and thermal plants.

Imbalance/ Pool Settlement:

Please see the answer to questions 4 and 5 (Topic: Imbalance/ Pool settlement) which outlines the rationale for and legal basis for applying a different pricing approach to balancing actions and imbalances.

11. Do you agree with the qualitative assessment of Mandatory Ex-post Pool for Net Volumes against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?

- Security of supply: BGE disagrees with the RAs' view as "neutral", this should be a "possible weakness", given the level of regulatory intervention that would be required to address the risks from bilateral/ portfolio trades. Liquidity, transparency erosion and potential enhancement of market power exertion is possible with this option - regulatory intervention (e.g. volume limits) could control this but the level required undermines regulatory and market certainty further threatening Security of supply.
- Stability: Agree with RAs – 'possible weakness' as difficult to manage liquidity between DA and ex-post.
- Efficiency: Disagree with RAs 'neutral' view. Self-dispatch is not conducive to a small island market with low interconnection and high market concentration for reasons outlined under 'efficiency' in answer 6 above.
- Practicality: Agree with 'neutral'. Depends if trading more in EU pool or ex-post – also however additional bilateral considerations which may be impracticable.
- Equity: Agree it is a 'possible weakness' but would add to the DA, ex post liquidity split comment, that bilaterals are more favourable to larger players.
- Competition: BGE would change this from 'possible strength/ weakness' to 'possible weakness' and comment that it depends on the balance of physical trading between the ex-post pool and European markets. The regulatory intervention required to make this option competitively work in BGE's view negates any potential strength, rather it cements the weakness as it undermines regulatory and investment certainty.
- Environment: BGE would change this from "possible strength/ weakness" to "possible weakness". Wind generation's exposure to imbalances depends on a liquid DA and ID market which is eroded by bilateral trading and is further eroded in this option by splitting liquidity between DA and ex-post. Choices between timeframes erode liquidity which should be concentrated in the DA market, exclusively through EU trading. A cost-reflective imbalance price should drive cost-reflective pricing in ID also enhancing ID liquidity but balancing energy may be tied up in bilateral contracts from ex-ante timeframes. Periodic ID auctions assist pooling of liquidity.
- Adaptive: BGE thinks this should be split 'neutral/ possible weakness' rather than "neutral" since viewing adaptiveness as the possibility of regulating the trading arrangements on the island is not conducive to the ISEM design objective of enhancing EU integration and cross-border trading.
- IEM: Agree with 'possible weakness' assessment. The DA, ex post pool split could result in inefficient cross border flows particularly if liquidity moves to ex post pool.

12. How does the Mandatory Ex-post Pool for Net Volumes measure against the SEM Committee's primary duty to protect the long and short term interests of consumers on the island of Ireland?

The split in liquidity between the EU DA and the SEM ex-post raises liquidity concerns. There will be split pricing which reduces transparency in the price that can be obtained in the market. Even if liquidity moves one way or another, unless there is regulatory intervention, the split will remain uncertain. Conversely if there is regulatory intervention, this dissipates market/ investor certainty and enhances regulatory uncertainty. A lack of uniform prices, robust reference price, the risks inherent with bilaterals (withholding, driving liquidity to favour vertical integration, diminishing the already split DA price) undermine competition and raise huge risks of market exit on the supply and generation side. It is also an obstacle to demand side participants if prices are un-discoverable, and suppliers if they do not have complementary generation. Competition erosion leads to higher prices and undermines consumer interest protection.

13. Are there any changes you would suggest to make the Mandatory Centralised Market more effective for the I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?

This option is BGE's preferred option from the consultation. However BGE suggests certain changes in the different timeframes to better facilitate competition, liquidity and transparency in the market.

Forwards:

Internal

BGE submits the choice of financial trades only within-SEM in forwards, will provide the optimal outcome for SEM in light of the counterfactual (permitting some bilateral/ portfolio trades). There is a need to improve internal liquidity in this timeframe given the current scarcity in counterparty numbers, which should be dealt with in the detailed design phase.

Cross-Border

The proposed FTRs approach is also favoured from the point of view of providing additional physical capacity for DA and ID cross border trades and reducing reliance on interconnector flows from a cross border hedging perspective.

Day-Ahead:

Portfolio vs. unit bidding

Unit bidding is the preferred approach for all physical trading in I-SEM. Only large portfolio players, and in particular ESB Group, the dominant generator, are in a position to arbitrage to the detriment of the competitiveness of smaller players. Unit bidding is also more transparent which better enables MMU market monitoring for competition as well as competitor monitoring in the market.

Mandatory vs. voluntary; Exclusive vs. non exclusive

BGE agrees with making the DA a mandatory timeframe wherein trading should occur exclusively through the EU market coupler. Please see the detail in answers 7 and 10 above which provides the rationale for making the day-ahead mandatory and exclusive to Euphemia. Liquidity in day-ahead will be improved resulting in equal access for generator and supplier participants, and robust reference prices (given no risk of erosion of prices by 'O' nominations from bilateral/ portfolio trading), and market power implications such as physical and economic withholding; knock-on impacts for smaller market participants will be avoided. Transparency in the price available in the market assists investment decisions and supplier, demand and generation entry.

Bid format

In light of increased RES and large within-day swings in demand, start-up and no-load cost recovery will become ever more important in the I-SEM. Uplift may or may not be catered for in the new market arrangements but our analysis confirms that technical and commercial offer information can be catered for in the block-bid type bids. Certain rules around transparency in these bids should also be adopted.

BCOP bidding

A BCOP should apply to the submission of all bids for physical trades whether ex-ante or in balancing. It ensures a level playing field for larger and smaller generators (with no portfolio arbitrage opportunities), facilitates market monitoring and transparency. A BCOP mitigates market power (inhibiting economic withholding/ excessive pricing) allowing for more competitive outcomes and maintains investment signals including on the demand and supply side. Its usefulness is reinforced when physical trades are mandatorily and exclusively required to occur DA through Euphemia (reduces dilution of DA prices).

Intraday:

Portfolio vs. unit bidding

As outlined above unit bidding is BGE's preferred approach for all physical trading in I-SEM. Only large portfolio players, and in particular the dominant generator are in a position to arbitrage to the detriment of the competitiveness of smaller players. Unit bidding is also more transparent which better enables MMU market monitoring for competition as well as competitor monitoring in the market.

Exclusive vs. non exclusive

Due to the lack of transparency, liquidity and market power potential concerns arising from bilateral/ portfolio optimisation trades, ID trading should occur exclusively on an EU/ Cross border basis via the continuous SOBF and periodic auctions. Liquidity in ID will become more important with high RES and the new exposure of wind, demand and conventional generation to imbalance arrangements. Bilateral/ portfolio trades reduce ID liquidity. Cost-reflective balancing market bidding in compliance with a bidding code of practice should eventually shift liquidity to the ID timeframe at cost-reflective prices, when those offering balancing services will become averse to waiting until real-time to sell balancing energy. Prohibiting any physical trading outside of ID EU markets and requiring cost-reflective bidding in balancing is very important.

Bid format

The ability to recover start up and no load costs will become more important in a high RES market. In ID it will be difficult to enable recovery of such costs via simple bids. Therefore periodic ID auctions should complement continuous trading as they can accept block bids whereby the costs are spread across a number of hours rather than loaded into just one hour. It will also pool liquidity in ID, facilitating pre-real-time balancing of wind, demand and thermal plants.

Imbalance/ Pool Settlement:

Please see the answer to questions 4 and 5 (Topic: Imbalance/ Pool settlement) which outlines the rationale for and legal basis for applying a different pricing approach to balancing actions and imbalances.

14. Do you agree with the qualitative assessment of Mandatory Centralised Market against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?

- Security of supply: Disagree with ‘neutral’. It should be ‘possible strength’ as, with a mandatory DA market where physical trades are exclusively cross-border, market power abuse is mitigated e.g. withholding. The liquidity and transparency of a uniform price helps hedging, risk assessment and reference pricing which all facilitate investment and market entry signals. A cost-reflective balancing market should drive ID liquidity and inhibit market power abuse. In BGE’s view this option best offers security of supply but ultimately the view is contingent on the existence of a CRM.
- Stability: Rather than ‘possible strength/ weakness’ BGE believes this should be ‘possible strength’ as while regulatory rules may be needed to make DA mandatory, ID liquidity should increase provided cost-reflective bidding in balancing is required. Further, the forwards and DA timeframe are effectively the same as in the current SEM save for a different central algorithm. The market coupler will ultimately become a ‘Europool’ as is DG ENER’s vision.³
- Efficiency: This should be ‘possible strength’ as opposed to ‘neutral’ as not only can it be delivered by this option, but central dispatch and central scheduling will be the effective outcome which leads to least cost dispatch and is favourable as compared to options 1 and 2 where self commitment is proposed.
- Practicality: Agree with ‘neutral’ view.
- Equity: Agree this is a ‘possible strength’.
- Competition: Should be a ‘possible strength’ and not split with ‘neutral’. This option retains the beneficial elements of SEM which, BGE agrees with the RAs, has been conducive to competition. The high transparency is critical and a competitive split between balancing and intraday market timeframes should arise as a result of cost-reflective bids in balancing. Cost-reflective bidding for all physical trades should help competition in all timeframes.
- Environment: Agree with ‘neutral/ possible strength’ – liquid IDM can be encouraged via cost-reflective balancing bids as discussed above.
- Adaptive: Should be split ‘neutral/ possible strength’ (not ‘neutral’) as it is more conducive to cross border trading and it should not be the intention to retain control/ limit the market, from interacting cross border. As noted in answer 6 also, this Option being close to NWE electricity trading arrangements is the best candidate for being able to adjust to changes in line with Target Model evolution.
- IEM: Agree, this is a ‘possible strength’. Provides best scope for compatibility with retaining SEM attributes such as market power mitigation measures, transparency and liquidity while also facilitating cross-border trades.

15. How does the Mandatory Centralised Market measure against the SEM Committee’s primary duty to protect the long and short term interests of consumers on the island of Ireland?

Prohibiting physical trading outside the DA timeframe and making physical trades exclusive via Euphemia, significantly mitigates market power, increases spot market liquidity and transparency. Otherwise, additional market power mitigation measures to those currently in place would be required. Access to a transparent uniform price and level playing field access (assisted for example by unit bidding, unit commitment with no subsequent nominations and cost-reflective bids) to spot trading encourages competition. Applying BCOP type rules across all timeframes also helps market entry attractiveness. Demand and wind can balance at cost-reflective prices and such prices should also likely appear in the ID market after experience of balancing trading with BCOP rules. This makes for an attractive market to enter and would continue the increasing number of competitors seen in SEM in recent years. A more competitive market results in competitive pricing and lower end consumer prices, very much in the interests of consumers.

³ Matti Supponen, Electricity and Gas Unit, European Commission - presentation 14.10.2010, Oslo

16. Are there any changes you would suggest to make the Gross Pool – Net Settlement Market more effective for the all I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?

BGE does not believe that this option is conducive to cross border trading or the facilitation of greater intermittent generation. On that basis it would need significant changes to make it compatible with the Target Model and the wider policy objectives of the SEM.

Forwards:

Internal

BGE supports proposed financial products only should being permitted in the internal forwards market for market power mitigation reasons and DA price liquidity and robustness.

Cross-Border

BGE also supports the proposal for FTRs only, from an i. additional physical capacity for DA and ID cross border trades; and ii. less reliance on interconnector flows for cross border hedging, perspective.

Day-Ahead:

Mandatory vs. voluntary; Exclusive vs. non exclusive

BGE does not support the proposal to split DA trading between the EU DA market and a SEM-only ex-post timeframe. This reduces liquidity in DA and the robustness of the reference price that can be used in the market. Suggesting more liquidity in the ex-post may be encouraged runs contrary to increasing cross-border trading and given that the ex-post price may determine the main island price, it could have knock on negative impacts on cross-border flows (inefficient flows). The option raises compliance concerns and opens market participants to the risk, burden and cost of being subject to financial regulation. DA trading should be mandatory for all ex ante physical flows and should occur exclusively through the EU market coupler.

Portfolio vs. unit bidding

BGE welcomes the proposed unit bidding. Unit bidding is the preferred approach for all physical trading in I-SEM. Only large portfolio players, and in particular the dominant generator are in a position to arbitrage to the detriment of the competitiveness of smaller players. Unit bidding is also more transparent which better enables MMU market monitoring for competition as well as competitor monitoring in the market.

Bid format

In light of increased RES and large within-day swings in demand, start-up and no-load cost recovery will become ever more important in the I-SEM. Uplift may or may not be catered for in the new market arrangements but our analysis confirms that technical and commercial offer information can be catered for in the block-bid type bids. Certain rules around transparency in these bids should also be adopted.

BCOP bidding

A BCOP should apply to the submission of all bids for physical trades whether ex-ante or in balancing. It ensures a level playing field for larger and smaller generators (with no portfolio arbitrage opportunities), facilitates market monitoring and transparency. A BCOP mitigates market power (inhibiting economic withholding/ excessive pricing) allowing for more competitive outcomes and maintains investment signals including on the demand and supply side. Its usefulness is reinforced when physical trades are mandatorily and exclusively required to occur DA through Euphemia (reduces dilution of DA prices).

Intraday:

Portfolio vs. unit bidding

Unit bidding is the preferred approach for all physical trading in I-SEM. Only large portfolio players like ESB Group are in a position to arbitrage to the detriment of the competitiveness of smaller players. Unit bidding is also more transparent which better enables MMU market monitoring for competition as well as competitor monitoring in the market.

Exclusive vs. non exclusive

Due to the lack of transparency, liquidity and market power potential concerns arising from bilateral/ portfolio optimisation trades, ID trading should occur exclusively on an EU/ cross border basis via the continuous SOBF and periodic auctions. Liquidity in ID will become more important with high RES and the new exposure of wind, demand and conventional generation to imbalance arrangements. Bilateral/ portfolio trades reduce ID liquidity. Cost-reflective/ BCOP type bidding in balancing should eventually shift liquidity to the ID timeframe at similar cost-reflective prices, when those offering balancing services will become averse to waiting until real-time to sell balancing energy. The importance of prohibiting any physical trading outside of ID EU markets and of cost-reflective bidding in balancing cannot be overemphasised.

Bid format

The ability to recover start up and no load costs will become more important in a high RES market. In ID it will be difficult to enable recovery of such costs via simple bids. Therefore periodic ID auctions should complement continuous trading as they can accept block bids whereby the costs are spread across a number of hours rather than loaded into just one hour. It will also pool liquidity in ID, facilitating pre-real-time balancing of wind, demand and thermal plants.

Imbalance/ Pool Settlement:

Please see the answer to questions 4 and 5 (Topic: Imbalance/ Pool settlement) which outlines the rationale for and legal basis for applying a different pricing approach to balancing actions and imbalances.

17. Do you agree with the qualitative assessment of Gross Pool – Net Settlement Market against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?

- Security of supply: Agree it can be delivered with this option – ‘neutral’ – provided however it is compliant with the rules and is accepted as more than a short term solution.
- Stability: Agree with ‘neutral’
- Efficiency: This should be ‘possible strength’ as opposed to ‘neutral’ for the same reasons noted in the assessment for Energy Option 3.
- Practicality: Agree with ‘neutral’ view.
- Equity: Agree this is a very ‘possible strength’.
- Competition: Should be ‘possible strength’ and not split with ‘neutral’. This option retains the beneficial elements of SEM which evidence shows has been conducive to competition. Regulation of market participant behaviour should not take from this view as this applies in the current SEM.
- Environment: Agree with ‘neutral/ possible strength’
- Adaptive: This would appear to enable local market trading arrangements interference easier, which conversely is a ‘weakness’ as it is not conducive to cross border trades.
- IEM: Agree – significant concerns around encouraging liquidity away from DA cross border trades.

18. How does the Gross Pool – Net Settlement Market measure against the SEM Committee’s primary duty to protect the long and short term interests of consumers on the island of Ireland?

As this market should continue very much along the lines as the current SEM it is arguably conducive to competitive entry. However it exposes participants to financial trading regulations and the certainty with which our market arrangements, in light of the direction of travel of Target Model requirements, would remain in force long term would undermine competition. BGE believes that ultimately the compliance, financial risks issue and burdens of financial contracting would not make this market attractive or easy to understand. Competitor numbers would not be expected to grow rapidly and consumers would not benefit from lower prices as they should under Energy Option 3 for example.

Summary Position Future I-SEM Energy Trading Arrangements

BGE has discussed the proposed Energy Options in the context of the key market design attributes it believes require significant and careful consideration in any new I-SEM design. Through this discussion, BGE has identified market design attributes that should apply across all timeframes. In the context of the above discussion and acknowledging that the SEMC notes that each option has relative strengths and weaknesses and how easy and important it is to address these weaknesses will be a key decision factor in the High Level Design, BGE submits that Option 3 subject to certain critical amendments is best positioned to achieve the objectives of consumer protection and promotion of competition.

In summary, BGE believes the I-SEM design must make provision for the following elements:

Forwards:

- i. Financial internal products with no provision for internal physical products for market power, hedging counterparty liquidity and transparency reasons. Enhanced liquidity measures in the detailed design should enhance internal SEM hedging opportunities.
- ii. Financial transmission rights should apply cross border which should enhance capacity on interconnectors in DA and ID and reduce risk of interconnector reliance for cross border hedges.

Day-Ahead:

- iii. Mandatory day-ahead market for all ex-ante physical volumes with trading permitted exclusively through the EU Market Coupler which should outturn similar schedules and prices to the current pool. It maximises liquidity and positively influences market power mitigation e.g. by prohibiting physical withholding (which would limit liquidity) or economic withholding (which would permit excessive pricing) in the ID or balancing market. Price discovery and liquid robust reference prices will be revealed.

Intraday:

- iv. Allow for continuous trading exclusively on the EU market and for periodic auctions; the former enables almost real time adjustments and the latter are conducive to start and no load cost recovery as well as pooling liquidity in ID.

Balancing:

- v. TSO bids for balancing and dispatch should be incs and decs for balancing energy actions subject to the same cost-reflective bidding rules as apply in day-ahead which can include costs that cover off elements of the complex bidding we have in SEM today.
- vi. Avoidance of a big bang approach to balancing should be adopted that is in line with the objectives of balancing (e.g. flexibility, DSR) and that makes use of the flexibility provided for in the balancing network code of pricing balancing energy actions and imbalances separately as further explained in answer 5 above.

General:

- vii. Portfolio based bidding should be prohibited. It can be availed of by only market incumbents. It also raises liquidity and transparency concerns. Market power issues arise where for example lower bids in DA can be off-set within portfolios in generation bids submitted in ID and balancing which can drive up prices particularly where the generator knows it will be required to run. Exit signals could increase as well as market concentration.
- viii. Unit based bidding for conventional generation should apply and the EU Market Coupler's schedule reflecting unit commitment should be used by the TSOs as the starting point in dispatch rather than permitting market participants to nominate what units will meet the schedules returned.⁴ Portfolio bidding and commitment raises excessive pricing concern here and concern in the lag between schedules and nominations and inherent impact on TSO dispatch scheduling.
- ix. Cost-reflective bids should be submitted by all participants in all timeframes. Furthermore, the range of commercial and technical information that is currently submitted by market participants to the RAs for monitoring purposes should continue and potentially be enhanced depending on the bid formation types that

⁴ Acknowledging that at least in the medium term wind generators could use aggregation (e.g. via a BRP, such as the TSO), whereby wind bidding and commitments could occur on a portfolio basis through the TSO or by companies themselves

- will be used in SEM. This will enable continued competition monitoring which will become an increasingly important element of all EU energy markets in light of the requirements of the REMIT legislation.
- x. Block bids allow for cost recovery similar to the uplift function and should be permitted in DA and in periodic auctions in ID.
 - xi. Market participants should be required to submit technically feasible bids which will enable the TSOs to better manage the system but also encourage market participants to pre-determine their technical capabilities of delivering on their commitments and avoiding balancing price exposures.
 - xii. Allow for as much updating of bids as physically possible that does not undermine system operation and security.

On the basis of the discussion above, and the above summarised design requirements, subject to adaptations, Option 3 is best placed to meet these criteria. Other options such as Option 1 would require strict controls including prohibiting bilateral trades in the forwards, DA and ID timeframe which is not conducive to a small market like SEM and undermines regulatory and market certainty. Cost-reflective bidding rules across all physical trades' bidding is required. Significant consideration also needs to be given to the balancing price arrangements in the context of the competing policy objectives in SEM and the RAs' overarching objectives for this timeframe. Provided the above design attributes are adopted BGE believes that the SEMC can meet its objective of protecting consumer interests while promoting and maintaining competition on the island on the foundations of Option 3 subject to consideration of the above discussed and summarised additions.

Capacity Remuneration Mechanism (CRM) for I-SEM

19. What are the rationales for and against the continuation of some form of CRM as part of the revised trading arrangements for the I-SEM?

BGE believes that the current CRM is an integral part of the current electricity market and is concerned that the suggestion a CRM may be removed in I-SEM raises significant regulatory uncertainty. BGE believes that a CRM revenue stream must remain integral to the wholesale energy market not least for maintaining investor certainty but to also facilitate market entry and long-term price stability.

In an energy-only market participants rely on peak period prices to recover costs and send the “build” signal to the market. If participants are not in the money in these peak periods they will exit the market. With increasing levels of intermittent generation, it will become more difficult to forecast investor revenues and may encourage generators to withhold capacity, creating shortages to increase “peakiness” with knock end consumer price impacts. This leads to a “boom / bust” investment cycle where, once capacity has exited the market, there may be sudden peak demand periods but insufficient generation given the lag periods in constructing new plant. In small markets there is also a longer horizon required to justify investment recovery which is due to the fact that lumpy generation can cause prices to fall for prolonged periods. This increases the risks of investing in a small market.

In an energy-only market price spikes would have to be permitted to go as high as required to recoup investment. In the current SEM the VoLL is €10,000 and given the cost-recovery required of generation often required to meet peak demand, it is not unrealistic that prices may go to such levels if a “bust” period occurred as described above. This creates huge price exposure for market participants and ultimately end-consumers. The instability in pricing and revenue instability which is increasingly important in a system with growing levels of renewable penetration are not conducive to enhancing competition. GB is an example of a member state that has relied on energy-only markets but is realising they do not provide a long term solution for ensuring security of supply. While the TSOs’ GAR 2013-2022 has estimated that there will be sufficient capacity in SEM beyond 2020, these are based on assumptions that include market investment in certain plant types, which investment can only be realistically expected to occur if the current CRM revenues exist.

It is therefore submitted that a CRM in SEM is necessary to help incentivise competition, protect consumers from extortionate prices, provide price stability and provide long term investment signals that prevent boom-bust investment cycles. BGE does not believe that a cogent argument for removing a CRM in I-SEM exists.

20. Are these the most important topics for describing the high level design of any future CRM for the I-SEM?

BGE believes that these five topics are important for describing the high level design of any future CRM. However, BGE believes that the two key elements of any CRM design as recognised by the RAs in AIP/SEM/09/105 are reliability and adequacy. BGE believes that the current mechanism is working well, however, how it incentivises reliability of generators providing capacity that is of value to the system could be improved. If this is not addressed, generators will continue to receive CRM payments whether or not they are available at peak periods and/or regardless of whether they are providing reliability to the system. The current CRM’s original objectives of: i) ensure capacity adequacy / reliability on the system; ii) price stability; iii) simplicity; iv) efficient price signals for long term investments; v) inhibit susceptibility to gaming, and vi) fairness, are all relevant for the I-SEM. An additional objective could be to incentivise reliability in a stronger way than merely withholding the payment if a generator is not available at a particular period.

21. Are there any changes you would suggest to make the design of a Strategic Reserve mechanism more effective for the I-SEM (for instance a different choice for one or more of the topics?)

BGE does not believe that Strategic Reserve (SR) is right for the I-SEM. As it is a “targeted mechanism” there is uncertainty around how the reserve will be procured, raising potential issues of discrimination as well as state aid considerations. The “slippery slope” syndrome as referenced in the consultation paper also raises concerns which could have liquidity impacts on the energy market – a central tenet of the energy trading arrangements.

22. Do you agree with the initial assessment of the strengths and weaknesses of a Strategic Reserve Mechanism? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?

BGE does not agree that delivery of capacity with certain flexibility characteristics is a strength as ‘capacity’ and ‘flexibility’ are completely separate concepts. While flexible plant can deliver benefits to a system, it may not always be the most cost-efficient capacity that a system could deliver in terms of adequacy and firmness. The flexibility incentive is being dealt with through the DS3 project⁵ and will also be provided through the balancing market. The TSOs’ role in choosing the plant required raises transparency in procurement issues.

While SR when ring fenced from the energy market may facilitate DSP as noted in the consultation, there is also a potential risk ring-fencing it from the energy market could reduce DA energy market volumes. Furthermore, if the reserve is permitted to partake in the balancing timeframe, (assuming there are no bidding rules) it could expose market participants out of balance to huge imbalance prices particularly if a cap of VoLL is to apply. As the energy market remains the main driver for investment, a strategic reserve mechanism is not a long term investment signal and does not solve the “missing money” problem.

If only a limited number of participants are included, they could hold market power and withhold capacity demanding certain remuneration levels, undermining security of supply.

23. Would a Strategic Reserve Mechanism work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?

It is premature to speculate whether any of the CRMs described in the consultation paper might work better or worse than the other CRMs with any of the presented energy trading arrangements. This consultation is a high level design and further detail of how the energy trading arrangements will work, for example: a) will they permit bilateral trading which erodes DA prices and signals?; b) will it include a BCOP type rule-set which may not enable full recovery of long run marginal costs, is required? As suggested in the answer to question 3, only the HLD for the I-SEM energy trading arrangements should be proposed in June. The June draft decision should merely indicate if a CRM is considered necessary in the SEM with a parallel CRM work-stream starting in June as understanding of the design of the energy trading arrangements develops.

24. Are there any changes you would suggest to make the design of a Long-term price-based CRM effective for the I-SEM (for instance a different choice for one or more of the topic?)

While BGE does not consider it prudent to design a CRM in a market in which energy market design is not yet known, we have some comments on the CRM described which we would like to be taken into consideration by the RAs after the energy market design decision has been made and they are reviewing CRM designs.

BGE believes that the current CRM is working well and in line with the original objectives for which it was adopted except for insufficiently incentivising generator reliability at times of peak load, which is a barrier to market entry for more reliable plant. While the consultation paper suggests there are to be no penalty arrangements, BGE believes that there is room for an explicit penalty to emphasise the importance of the reliability element of a CRM.

25. Do you agree with the initial assessment of the strengths and weaknesses of a Long-term price-based CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?

The year-on-year stability element of the CRM is noted. BGE however submits that long lead times/ lag periods for a CRM, for example 3 years would be a more effective lead time for this CRM. The need for greater stability in the CRM has been recognised in recent years in the SEM and should be developed further as part of the detailed design.

⁵ BGE would welcome the RAs’ confirmation of this as well as recognition that plant ‘capacity’ differs from plant ‘capability’ – while double payments must rightly be avoided, plants must be remunerated for the value they are providing to a system at a particular time which may be either ‘capacity’ or ‘capability’ related.

Careful consideration should also be given to the impacts on current investments in any proposed to move to a CRM with very divergent outcomes from the current CRM.

26. Would a Long-term price-based CRM work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?

The June draft decision should merely indicate whether a CRM will be required in I-SEM. No CRM should be ruled out without suitable assessment and justification. A parallel work-stream to the finalisation of the draft HLD, from June should scope out fully which CRM is most appropriate in light of the adopted energy trading arrangements, an understanding of which is necessary before determining the exact CRM.

27. Are there any changes you would suggest to make the design of a short-term price-based CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?

The short-based CRM is in BGE's view akin to the outputs expected of an energy market. It undermines the theoretical concepts of CRMs – adequacy in particular (it is not just short term flexibility that is necessary in a market – as discussed above, flexibility is a different concept to capacity reliability which the RAs need to explicitly recognise) and is a real candidate for contributing to the risk of boom-bust cycles as outlined in answer 2 above. Any link with spot prices raises market power concerns in terms of withholding for example to increase prices and capacity payments. The mechanism described is more suitable for products required to be delivered under the DS3 project which is a completely separate issue – flexibility and capacity/ reliability objectives must not be mixed. While double-payments should be avoided, the market must also recognise the value of separate flexibility characteristics separately.

28. Do you agree with the initial assessment of the strengths and weaknesses of a short-term price-based CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?

The trade-off with long term signals vs. short term signals undermines the objective of a CRM and is not conducive to revenue or resource adequacy undermining existing and future security of supply in the market. Price volatility in the capacity price is a real concern. Potential for gaming is higher in portfolio players to the detriment of the competitiveness of smaller market participants.

29. Would a short-term, price-based CRM work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?

The June draft decision should merely indicate whether a CRM will be required in I-SEM. No CRM should be ruled out without suitable assessment and justification. A parallel work-stream to the finalisation of the draft HLD, from June should scope out fully which CRM is most appropriate in light of the adopted energy trading arrangements, an understanding of which is necessary before determining the exact CRM.

30. Are there any changes you would suggest to make the design of a Quantity-based Capacity Auction CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?

BGE does not consider it prudent to suggest the design for a CRM in a market in which energy trading arrangements are not yet known. It does however wish to make the following high level comments on this CRM option.

Capacity auctions are generally considered to be complex to implement and administer. It involves a level of regulatory intervention e.g. in the form of setting the descending clock auction price, which can provide uncertainty to the market and therefore undermine the stability benefits of a CRM.

Further, for new entrants the cost of assessing what one might bid in as against competitors and monitoring the market may be a deterrent to market entry. Withholding is another potential risk here though descending clock auctions mitigates it to an extent. It may not provide signals for new but more expensive technologies, such as storage, to enter the market.

A boom-bust cycle could result from shifting between excessive and inadequate remuneration leading to over or under-capacity. Auctions would have to be well designed to prevent abuse of market power abuse and to

incentivise reliability. The reference to distinguishing between different ‘capabilities’ needs more clarity – is it considering mixing an ancillary service product procurement approach into capacity? Capacity and flexibility are separate concepts - clarity on the RAs’ distinction between these two products would be welcomed.

31. Do you agree with the initial assessment of the strengths and weaknesses of a Quantity-based Capacity Auction CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?

The consultation paper notes that this CRM provides a relatively stable environment for capacity investment and delivers a transparent price. This stability and transparency could be undermined however if the price is not sufficient to adequately remunerate capacity to provide the reliability product. There are a number of possible ways to deal with this such as regulatory intervention in applying price floors to bidding which also mitigates any potential of market power abuse.

A reference to demand side and interconnection flexibility in responding to short term capacity price signals is made. BGE reiterates that the CRM is not a short term signal mechanism and its objective is adequacy and reliability, not flexibility which belongs in the ancillary services sphere.

32. Would a Quantity-based Capacity Auction CRM work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?

The June draft decision should merely indicate whether a CRM will be required in I-SEM. No CRM should be ruled out without suitable assessment and justification. A parallel work-stream to the finalisation of the draft HLD, from June should scope out fully which CRM is most appropriate in light of the adopted energy trading arrangements, an understanding of which is necessary before determining the exact CRM.

33. Are there any changes you would suggest to make the design of a Quantity-based Capacity Obligation CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?

BGE does not consider it prudent to suggest the design for a CRM in a market in which energy trading arrangements are not yet known. It does however wish to make the following comments on this CRM option.

Capacity obligations are best suited to those in a bargaining position that allows them to buy/ sell generation. It has the effect of encouraging vertically integrated market participants and will ultimately enable them to be more competitive (e.g. through generation/ supply cost trade offs) than single suppliers with no or low generation. By corollary it raises a barrier to entry also for new suppliers unable to estimate what their demand may be and who/ at what price they may trade with. It is also likely to deter suppliers from contracting with “peakier” customers which is not conducive to consumer protection.

Furthermore, in either centralised or decentralised it is difficult to have long term visibility of suppliers’ portfolio needs. Shorter term solutions may be favoured which can lead to volatile prices for consumers and a lack of long term investment signals undermining the adequacy element of CRMs. The provision for penalties underscores the importance of capacity reliability. Again there is a distinction between ‘capacity’ and ‘capability’ that needs to be recognised.

34. Do you agree with the initial assessment of the strengths and weaknesses of a Quantity-based Capacity Obligation CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?

In addition to the considerations noted in answer 33, it is opined that there is potential for the obligation to be for longer than one year. This might incentivise more supplier entry to the benefit of competition.

35. Would a Quantity-based Capacity Obligation CRM work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?

The June draft decision should merely indicate whether a CRM will be required in I-SEM. No CRM should be ruled out without suitable assessment and justification. A parallel work-stream to the finalisation of the draft HLD, from June should scope out fully which CRM is most appropriate in light of the adopted energy trading arrangements, an understanding of which is necessary before determining the exact CRM.

36. Are there any changes you would suggest to make the design of a Centralised Reliability Option CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?

BGE does not consider it prudent to suggest the design for a CRM in a market in which energy trading arrangements are not yet known. It does however wish to make the following comments on this CRM option.

More detail on exactly how parameters for setting the strike price as well as any rules around the bidding into the auction would be welcome. The use of a day ahead reference price implies the need for a liquid day ahead energy market transparent price – more detail on what ultimate energy trading arrangements will apply in I-SEM will therefore heavily assist in this regard before proper assessment of this option can occur that is not speculative.

The long lag periods and penalty provisions are conducive to long term price signals and reliability signals. Explicit penalties may also be added in addition to the implicit penalty of the one-way CFD.

37. Do you agree with the initial assessment of the strengths and weaknesses of a Centralised Reliability Option? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?

A potential weakness noted in the consultation paper is the risk of dampened short term energy price signals as market participants may be capped at a strike price which is set at a low level. Significantly more detail around how it is proposed this strike price will be set (Yearly? Using a prescribed formula? Market based determination?) is needed before its potential advantages and disadvantages can be thoroughly scoped out.

38. Would a Centralised Reliability Option work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?

The June draft decision should merely indicate whether a CRM will be required in I-SEM. No CRM should be ruled out without suitable assessment and justification. A parallel work-stream to the finalisation of the draft HLD, from June should scope out fully which CRM is most appropriate in light of the adopted energy trading arrangements, an understanding of which is necessary before determining the exact CRM.

39. Are there any changes you would suggest to make the design of a Decentralised Reliability Option CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?

BGE does not consider it prudent to suggest the design for a CRM in a market in which energy trading arrangements are not yet known. It does however wish to make the following high level comments on this CRM option.

In addition to the answer to question 36, the Reliability Option (particularly the decentralised approach) has the potential for the same issues as the energy only option if no market power or liquidity measures are taken into consideration in its design.

40. Do you agree with the initial assessment of the strengths and weaknesses of a Decentralised Reliability Option? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?

The ‘benefit’ of strong short price signals is moot in light of the double-objectives of adequacy and firmness required of a CRM. Short term price signals belong to the energy market.

No ‘hard’/long-term capacity targets raises a real security of supply concern and the lack of experience of the decentralised RO in other markets and the small size and high market concentration in SEM raises questions around its suitability in the market to be considered when assessing this option.

41. Would a Decentralised Reliability Option work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?

The June draft decision should merely indicate whether a CRM will be required in I-SEM. No CRM should be ruled out without suitable assessment and justification. A parallel work-stream to the finalisation of the draft HLD,

from June should scope out fully which CRM is most appropriate in light of the adopted energy trading arrangements, an understanding of which is necessary before determining the exact CRM.

Summary and Conclusion on CRM for I-SEM

BGE believes that it is not pragmatic to decide on the design, even at a high level, of the CRM that should apply in I-SEM by early June. The appropriate CRM is heavily dependent on the energy trading arrangements that will ultimately be adopted for I-SEM in terms of the capability to earn long term marginal costs in the energy market and the existence of market power mitigation rules to maintain sustainable spot prices and liquidity. Similarly to the approach adopted in the SEM HLD Decision Paper of June 2005, BGE urges the RAs to outline in the June draft decision if a CRM is to be adopted for I-SEM and develop the detail of that, including impact assessments, in a parallel work-stream to the development of the final energy trading arrangements HLD and subsequent detailed design stage from June.

BGE believes that strategic reserve is not suitable as a CRM as it does not complement a liquid and competitive energy market or provide the long-term price signals that are needed to incentivise efficient market entry/exit. A short-term capacity price mechanism is not considered appropriate for SEM either in light of the fact that it provides only short term price signals which should occur under energy trading arrangements and introduces volatility which undermines investor certainty. Both options also portray significant scope for market power manipulation which would require significant regulatory intervention.

The remaining options have scope for consideration in the new I-SEM; all have strengths and weaknesses, some of which have been included in the answers above and must be considered in deciding on an appropriate CRM. Ultimately, the CRM that is chosen for the I-SEM market must include the following elements:

- a) Retain the existing objectives:
 - i. ensure capacity adequacy/ reliability on the system;
 - ii. price stability;
 - iii. simplicity;
 - iv. efficient price signals for long term investments;
 - v. inhibit susceptibility to gaming, and vi) fairness;
- b) Provide “adequacy” – a long term issue concerning maintenance of an adequate volume of installed generation capacity to meet anticipated peak demand plus a reserve margin;
- c) Signal “firmness” - a short to medium term issue which requires ready to use capacity when the system most requires available generation to meet demand, this is the “reliability product”; a stronger signal than currently exists for reliability/ firmness, must be a key element of the new CRM design;
- d) Address market power to ensure revenue and resource adequacy and avoid potential market entry barriers;
- e) Avoid negative retrospective effect with potential for stranding assets.

The lead times for investment should necessarily also be longer than one year, e.g. 3 years like the current fixed BNE time. BGE also requests confirmation from the RAs of the recognition of the difference between flexibility and capacity and the different values both can add to a system. Double-payments must be avoided but value must equally be appropriately rewarded. BGE looks forward to significantly more engagement and consultation with the RAs on the CRM for I-SEM once the energy trading arrangements have been decided on.