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Grange Backup Power Response to SEM-15-044

Capacity Remuneration Mechanism Detailed Design Consultation Paper

1. Summary

Grange welcomes the opportunity to respond to the Capacity Remuneration Mechanism Detailed Design consultation.

In summary our high level comments are as follows:

A. Eligibility

Grange believes that for an efficient, transparent and competitive CRM all units should be eligible to participate in the CRM. Mandatory bidding should be considered as it reduces uncertainty for new investors regarding the status of the market and from a market power perspective. The unit specific de-rating method is preferred as it provides sharper exit signals, improved reliability characteristics are reflected in security standards and over-compensation of capacity providers is prevented. Option 2: Eligible to bid, subject to additional de-rating is our preferred method for de-rating not just intermittent and non-firm generation but a similar method can also be applied to demand side units and interconnectors. Grange agrees that grandfathering of de-rating factors is necessary for investor confidence and stability.

Grange believes that to address the SEM market failures and regulatory and market power issues separate new entrant auctions for CRM and DS3 will be essential to encourage the evolution of the I-SEM portfolio needed to address system operational requirements. Adherence to the CER/09/191 decision, in the initial I-SEM auctions, which implements a small steps approach for new entrant capacity, will ensure a reasonable amount of capacity which can compete in the new entrant auctions. The duration of contracts in the CRM must align with the DS3 long term contract duration for investor certainty.

Grange is in agreement with many of the pre-qualification criteria for units. In relation to connection agreements Grange stresses that pre-qualification requirements for refurbished plant must include TSO confirmation that there is sufficient evidence to support new or replacement capacity at a current connection point. Refurbished plant should also have to provide the same financial commitment as new entrants. Otherwise existing units will have an unfair advantage over new entrants by easily re-declaring as refurbished plant.

B. Institutional Framework

To incentivise appropriate investment and stability for new entrants Grange agrees with the hybrid model. Regarding any concerns for implementing long term contracts Grange, as a proportion of the capacity requirement, would expect that the % of long term contracted capacity would be well below 20%. Long term contract concerns need to be carefully weighed against the benefits of valuable competition new entrants provide in the market. An option contract for capacity providers would need to include details of the terms of the contract, contract duration, terms of payment and specific grandfathering rights.

Grange welcomes the recognition by the SEM Committee of the potential conflict of interest between the TSOs' regulatory functions and its commercial activities. Grange stresses the importance of this conflict being resolved for fair competition. At the very minimum, there should be a Chinese wall between EWIC and the TSOs as the Consultation suggests. Grange will provide more detailed comments once the SEM Committees publishes its detailed proposals to address the conflict.

C. Capacity Requirement

Grange is not in agreement with the minded to position on the 8 hour LOLE. This standard has not been subject to change since the 1990s and penetration of intermittent generation has grown significantly since then. The paper has not examined the trade-offs between costs and benefits as laid out by the TSO in SEM-15-044a. The SEMC is missing an opportunity to improve security standards, consistently with GB and France, at a minimal cost and potentially a cost saving.

Grange is not in agreement with the minded to position to implement a single zone for capacity. The position has been reached without any firm analysis in relation to zones for large all island urban areas. Grange believes the SEMC in this instance is using a selective approach for resolving complex CRM issues which is not in the best interest of consumers.

Grange is in favour of implementing the de-rating method as it is more transparent and equitable and can be implemented on a unit specific basis.

It is not possible or in the interests of consumers to make a decision on the capacity requirement methodology and demand forecasting uncertainty when the treatment of interconnectors is very uncertain and there is a lack of transparency about the consultation process for the capacity requirement methodology and modelling assumptions.

D. Product Design

Grange is in agreement with Option3: 100% DAM for the MRP. For reasons of over complexity, practicality, reduced effectiveness of hedging strategies and without due consideration of the interactions with the energy and DS3 markets and the options presented by these markets for addressing unit performance Grange stresses that the DAM is the most efficient MRP and does not agree with scarcity pricing or additional performance incentives.

Grange agrees that a floating strike price is workable in principle once all production costs are captured sufficiently in the reference unit.

Grange also agrees that for an efficient, cost effective market load following reliability options (RO) are the preferred option to avoid over-compensation of suppliers and fair management of RO volume risk.

E. Supplier Arrangements

Capacity providers for cashflow forecasts purposes would prefer to know the profile of monthly option fee payments in advance of the capacity period. Monthly option fee payments could then be paid net of any actual difference payments due after the end of each month. Grange agrees that capacity provider credit cover based on net payments is essential and should be facilitated across all markets if possible. Implementing excessive credit cover requirements for units generally in receipt of payments would not be equitable and would impose barriers to market access and entry for smaller participants. As a fair, stable and efficient approach in a small market, Grange is in agreement with the option to mutualise exchange rate costs across the market. This method also reduces barriers to entry for smaller participants.

2. Capacity Requirement

A) Feedback on minded to position to retain all-island security standard of 8 hours LOLE

- The LOLE standard hasn't been adjusted since the 1990s despite the significant penetration of intermittent generation and the TSO's documented difficulties of operating a power system securely and safely with the increasing levels of intermittent renewables. In addition there is a lack of correlation between wind output at peak times.
- Interconnector flows are switching more regularly from import to export and vice versa so the import levels the SEM has relied on since 2007 will no longer apply especially the level of 800MW indicated by the GCS in 2024. These are unrealistic and it would be interesting to ask both interconnector owners if they would confirm their willingness to bid in a volume of 800MW in an I-SEM capacity auction!
- As stated in the document SEM-15-044a a recent report by EY says "the quality of energy supplies is central to attracting foreign direct investment (FDI) and enhancing the All-Island's economic competitiveness" yet the LOLE standard has not been challenged since the 1990s and is now out-of-date.
- Our regional neighbours GB and France have a standard of 3 hours. I-SEM is avoiding the opportunity to be consistent with European neighbours while improving the security standard. The SEMC is ignoring an improvement in standards despite the TSOs arguments to open the Balancing Market at the same time as the IDM because "Reserve requirements in SEM are proportionally greater and more dynamic than other European synchronous areas". Essentially while maintaining the LOLE at 8 hours the TSOs can prudently operate the power system at a higher standard than the 8 hours and only pay for these reserves and other ancillary services through insufficiently priced ancillary services contracts. The DS3 payments won't cover the missing money problem so the cost of additional capacity from a 3 hour LOLE is required to pay for this capacity that the TSO is using to maintain actual operational security standards.
- Most importantly the costs outlined in the consultation paper of €19.1m per year represents an increase of 3% based on the capacity pot of 2015. The consultation paper has not addressed the trade-offs between costs and benefits identified by the TSO in SEM-15-044a. There is close to a breakeven opportunity (1% increase in overall costs) between the costs and benefits of implementing a 3 hour LOLE standard with potential upside if the GB National Grid cost of VOLL is used.
- Based on the above reasons Grange does not agree with the minded to position to maintain an out-of-date security standard of 8 hours and does not believe that the analysis completed provides the true security standard by which the system is operated at or the true costs of meeting this standard which should be recovered by capacity providers.

B) Preferred method of accounting for unreliability of capacity in determining the capacity requirement, along with reasons behind their preference

- Grange agrees with the de-rated method. This method is transparent and equitable and can be implemented on a unit basis so that unreliable plant and intermittent units and different technologies will have an appropriate capacity contribution reflected in the capacity requirement.
- Furthermore Grange believes if a unit cannot prove delivery performance historically then the capacity contribution should be removed from the capacity requirement and the unit should not be able to compete in the capacity auctions. This will enhance entry and exit signals and promote the introduction of new entrants and technologies.

C) Feedback on the options presented in relation to accounting for demand forecasting uncertainty, along with rationale behind any position

- The determination of the capacity requirement is not just dependent on demand forecast uncertainty but is also sensitive to peak demand forecasts, low wind, plant availabilities, generation mix, interconnector flows and individual winter conditions[1].
- A single average scenario does not reflect the above uncertainties which are crucial to weighing up the range of capacity requirements that could be procured. While Grange is in favour of a worst case scenario to ensure that customers are not under-insured and that signals are provided to new entrants and technologies Grange does see merit in assessing the least worst regret method using multiple scenarios and sensitivities in advance of a pan EU stochastic model being available.
- The treatment of interconnectors is crucial due to the sensitivity of the capacity requirement to their contribution. This significant sensitivity is supported by the range of GB CRM 2019/20 SEM interconnector de-rating factors produced by a range of models and methods for the National Grid in GB in 2015. The National Grid highlighted that for the SEM interconnectors:" There is a clear difference between the two groups of analysis highlighting the uncertainty in the Irish flows."
- The target level of capacity required in the I-SEM and the methodology and the modelling assumptions used to calculate this target level, needs to be consulted on.
- It is not possible or in the interests of consumers to make a decision on the capacity requirement methodology when the treatment of interconnectors is very uncertain and there is a lack of transparency about the consultation process for the capacity requirement methodology and modelling assumptions.

D) Feedback on minded to position to base the capacity requirement for the CRM on a single capacity zone

- The use of the generation capacity statement capacity margin to support a decision not to do locational scarcity analysis and to implement the easiest option without any assessment of the costs and benefits is very disappointing. It has been pointed out on many occasions that the assumptions in the generation capacity statement are flawed, in particular those around plant entry and exit, due to the current market failures and insufficient exit signals. Therefore the use of this document is not suitable for justification of the SEMC's minded to position. Grange does not agree with the RAs selective approach for resolving complex CRM issues which need effort and analysis in order to address the market and regulatory failures that occurred with the current CPM.
- The all island market has large urban areas, such as Dublin, which experience faster growth than rural areas. Quality of electricity supply in these areas is a factor for commercial investment and economic development. Bidding zones are not just confined to the North South jurisdictions but there has been no attempt to assess if urban areas warrant a bidding zone to provide a more robust method of locational and new entrant signal than the well-known and documented issues with the current TLAF methodology.
- Market power issues are also not a strong enough argument to prevent the implementation of multiple zones which would provide the signals to new entrants to invest and thereby reduce the concentration of market power in these areas. If an

[1] GB National Grid Stakeholder Presentation on 6th July 2015 covering Capacity Procurement Analysis

incumbent generator is deemed to have market power in a bidding zone then it should not be able to build a new plant in this zone.

- On the basis of the above reasons Grange cannot agree with the minded to position and a final decision should not be provided unless appropriate bidding zone analysis is completed. This would facilitate the ability to make an assessment of bidding zones, from the outset, under the criteria of Internal Electricity Market, Security of Supply, Competition, Equity, Adaptive, Efficiency and Practicality/Cost.

E) Detail of any other considerations respondents felt that we should take account of when determining the capacity requirement for the CRM

- Appropriate de-rating factors should be applied to intermittent, non-firm generation and interconnectors. Please see section 4 for more details.

3. Product Design

A) The approach to setting the Reliability Option Strike Price

a) Grange agrees with the "floating" strike price option in principle. Some concerns in relation to the floating strike price option are the inclusion of start, no load costs, certain transportation costs and other relevant costs due to jurisdictional differences if using a proxy unit otherwise a peaking unit may still have to make difference payments when the market price is above the strike price but the peaking unit is not scheduled above due to under recovery of start and no load costs; clarification is needed regarding the use of spot prices and will the same spot price be used if the more than one market reference price is used? Units may need to adjust for within day fuel prices in Balancing Market offers.

b) The trade-offs between the choice of a proxy unit with a conservative heat rate that exceeds the most expensive unit's production costs and a theoretical BNE unit needs to be examined. For example if the reference unit has an efficiency lower than a certain % of the all island capacity this unit also serves as an exit signal to certain types of capacity as well as reducing the need for further incentives. If the efficiency is too high resulting in strike prices that are too low then capacity providers experience more risk. Grange agrees the BNE peaking could be used as a reference unit once the issue of additional costs above are addressed.

c) It is essential that the reference unit is grandfathered for units on a multi-year contract. Precedent has already been set in SEM where the BNE remains constant for 3 years. This would need to be adjusted for contracts with a duration longer than 3 years. Alternatively to ensure investor certainty and stability provision could be included in multi-year contracts that the production costs of the new BNE cannot be lower than the initial BNE selected.

B) The implementation of scarcity pricing in the I-SEM Balancing Market

- At this stage Grange is opposed to the implementation of scarcity pricing. The consultation refers to GB balancing prices for comparison but these prices are smoothed due to the PAR method. A single imbalance price, the pricing method for the I-SEM has not been implemented yet in GB. The GB market is portfolio based and self-dispatch, with a difference generation and interconnection mix, compared to the unit based, centrally dispatched I-SEM so the GB market is not a suitable comparison of market behaviours and prices.

- There is no indication yet that the frequency of higher prices will be lower in EUPHEMIA than in the current SEM.
- The I-SEM method for determining the imbalance price has not been decided. Issues regarding the incorporation of start costs and the use of a form of PAR have arisen. The energy markets and in particular the balancing market should be allowed to reflect market conditions in the pricing. If bid caps and price caps below VOLL and PAR are **not** used in the imbalance pricing method and a suitable algorithm is chosen for imbalance pricing then the need for administered scarcity pricing is reduced. Also the units already have a performance incentive to perform in the balancing market by the potential to receive the higher or lower of their balancing bid/offer or the imbalance price and additional DS3 revenues. If ROs apply in the Balancing Market the imbalance price will be effectively capped at the RO strike price and this will affect the market's ability to reflect real time conditions. Suppliers then have less incentive to manage their imbalance volume risk in the DAM and IDM, weakening the liquidity in both these markets. The efficient and economic operation of the markets should not be supplanted by increasing regulatory and administered forms of pricing. Otherwise the flexibility of certain generation units and demand side response cannot be rewarded through the energy markets, mainly the balancing market, preventing the evolution of the generation and demand fleet and the introduction of new technologies.
- The issues between ETA, CRM and DS3 interactions have not been addressed in the ETA or CRM consultations and there is no analysis available about the frequency of extreme scarcity events which would result in administered scarcity pricing. System stress events result from a number of operational issues. DS3 is in progress to address all ancillary services, including operational reserve. GPIs are covered under ancillary services and reflect the incentives to be grid code compliant. An assessment of the most appropriate and effective market for applying a performance incentive is required and this is not available at the moment in order to make an informed decision.

C) The choice of market reference price options from amongst the options presented and consistency with key objectives

- While it is useful to review developments in other markets it is essential to reiterate the primary objective of the CRM. The HLD decision section 5.2 states: "A capacity remuneration mechanism (CRM) in the I-SEM is required because an energy-only market will not, in practice, deliver long term generation adequacy in the all-island market." Long term adequacy is the key objective of the CRM and required for security of supply. The auction pricing signals should provide signals for investment in generation adequacy in the long term. The choice of MRP is not required to ensure security of supply. Other mechanisms, such as the DS3 and balancing markets can incentivise availability at times of system stress. The Balancing Market opens at the same time as the IDM expressly to manage security of supply issues. Bidding into the Balancing Market is mandatory and units are required to comply with the grid code. The grid code also deals with compliance during system stress, see section CC.7.3.1.4 and 5. Please see section 3B above for further comments on the interactions of all markets in the I-SEM. The focus in the CRM consultation has moved dramatically from a long term to short term vison by focussing on administered scarcity pricing and real time pricing. For e.g. the only pro outlined for using a Balancing Market reference price is "reflecting system stress" which is short term by its definition in general and in Appendix C of the consultation paper. This is not consistent with the decision in the HLD.

- It is not clear to Grange how cross border trade would ultimately provide any RO volume in the Balancing Market so this volume is limited to the DAM at the moment.
- Efficiency, Competition and Practicality: A key objective is practicality and it is missing from this section of the paper. Using real time pricing raises more issues than it resolves and significantly increases the complexity in the CRM proposals to address infrequent occurrences of extreme scarcity while indicating limited benefits which could instead be achieved in other markets/processes. The balancing market is already mandatory, the DAM is exclusive. Therefore Grange proposes that the CRM should reference the DAM for ROs, create liquidity and competition in the DAM and simplify the hedging process for generators, suppliers and smaller participants. Encouraging sharper and volatile marginal pricing in imbalance pricing further encourages liquidity in the DAM, IDM and the forwards and provides pricing signals which rewards flexibility for generators and demand side response. Market power can separately be monitored and controls implemented and in a targeted way if necessary.
- The only other option to review from a capacity provider perspective is option 4b. While volume risk can be managed using a split price the surmised benefits from reflecting infrequent system stress events don't outweigh the cons from managing increasingly complex hedging strategies and decreased liquidity in other markets.
- Based on the above reasons Grange is in favour of Option 3: 100% DAM price to be used as the market reference price for ROs.

D) Whether the RO volume and/or additional performance incentives should be load-following

- Grange is in agreement that the RO volume should be load-following to avoid difference payment over-compensation to suppliers and to allow capacity providers to manage their RO volume risk more effectively. Grange agrees that all unit types should be eligible to participate in the CRM subject to suitable de-rating methods being applied. Please see section 4 for more information. If the pool of capacity is sufficient then the risk of supplier peak demand not being hedged by the total RO volume is reduced.

E) The requirement for, and design of additional performance incentives

- The RO difference payment is already an incentive to perform. GB doesn't have an RO so instead has a penalty mechanism.
- As soon as additional performance incentives are proposed exemptions are immediately considered. This is not equitable or efficient in a small market with unique levels of renewable intermittent generation.
- I-SEM market conditions differ greatly from US and GB markets. DS3 is specifically dealing with scarcity and operational issues that may arise due to low wind etc. The DS3 auctions will also incentivise generator availability and performance in order for units to receive DS3 revenues if successful in the DS3 auctions. Performance incentives already exist under GPIs and haven't been referenced in this consultation.
- Additionally a decision on the imbalance pricing method has not been made. As the CRM will be intrinsically linked to the energy markets it is premature to assess the performance incentives when it is not possible to compare the value of these incentives to the complexity and costs of implementing these incentives especially when the energy and DS3 interactions are not known.
- Excessive penalties reduce the viability of the flexible plant investment business case.
- For the reasons above Grange is opposed to the introduction of additional performance incentives/penalties, especially as outlined in section 3B without consideration of all

the interactions between ETA, CRM and DS3 and without due consideration to the GPIs already in place.

- In the event that additional penalties are progressed Grange does not believe any capacity provider should be exempt and that monthly and annual caps would apply so that over the course of a year the provider could only lose a max of 100% of annual auction revenue. This cap would need to apply to the RO difference payment as well as additional penalties, which will in turn reduce the effectiveness of the RO hedge. Also a unit should not be penalised in the CRM for adhering to a balancing market or DS3 system service instruction. For e.g. taking the DAM as the MRP, if a unit is contracted for 50MW in the DAM but instructed down to 40MW in the balancing market then the unit should be viewed as having provided 50MW of capacity.

4. Eligibility

A) Eligibility of plant supported through other mechanisms

- Reflecting on the assessment criteria of security of supply, competition, equity, efficiency and practicality/cost the most transparent and objective option for eligibility is that all types of units are eligible to participate in the CRM. Participation by all in the energy and capacity markets leads to more efficient and liquid markets and market based solutions instead of regulatory or administrative solutions which can lead to a lack of competition and discriminate against certain technologies. It will be up to the regulatory and governing authorities to ensure that over-compensation is not possible through the relevant support schemes.
- However interconnector owners that have been grant or state-aided should not be eligible to bid in the RO auctions as this would be unfair and contrary to EU Competition rules. At the very minimum significantly reduced de-rating factors should apply to these interconnectors.
- Grange is in agreement with the principle of mandatory bidding. It is more transparent, provides an overall status of installed capacity in the market and reduces uncertainty for investors and the reasons why, from a market power perspective, a unit is or isn't bidding.
- Renewable and non-firm generation, due to inherent unreliable characteristics at times of system stress, must face additional de-rating to reflect these characteristics. To clarify it will not be sufficient to apply a de-rating factor based on the unit's availability performance; the de-rating factor for intermittent generation should be based on the capacity credit and non-firm generation should have a similar capacity credit method applied as well. This is necessary to ensure fair competition and provision of appropriate signals to participants. De-rating methods must be transparent and communicated to the market so that clear entry and exit signals are provided. In conclusion the proposed option 2: eligible to bid, subject to additional de-rating should be applied to renewable and non-firm generation.
- In the event that a generator is not eligible or chooses not to bid in the CRM the capacity requirement should only be reduced by the MW amount including additional de-rating. This is to ensure security of supply standards are met and effective and fair competition is encouraged. If a unit is retiring part way through the capacity period the capacity requirement should not be reduced by the unit's potential CRM MW amount. At the very most a pro rata or weighted average should be removed based on the verified retirement date of the unit. This method prevents barriers of entry to new entrants and provides appropriate access to participants to CRM auction volume.

B) Eligibility of demand side and storage providers

- Grange believes that DSU and storage providers should be eligible to participate but should have de-rating factors applied consistent with the technical characteristics and reliability of these units. These technologies are best placed to comment on whether the de-rating factor is determined over a minimum period or the max level of capacity that can be sustained over all hours.
- Storage providers should only be able bid for a RO based on generating capacity and not based on the capability to reduce load. This prevents over-compensation for capacity truly contributed at times of system stress.

C) View on the technology vs plant specific approaches to de-rating

- I-SEM energy market is unit based. The CRM is also unit based. To be consistent with this principle, and given it is easily achievable in a small market, the plant specific approach is far more favourable than a plant specific approach:
    - Plant specific de-rating provides clearer and sharper exit signals, signals which have been missing in the current CPM. Improved exit signals lead to increased competition, reduce barriers to entry and encourage a more efficient market. In the event that an existing plant can't prove a de-rating factor based on historical data because of low run hours, in for example the last 24 months, then the unit must have an additional reduction in its de-rating factor applied. Availability data is not sufficient proof especially for older existing units. In Great Britain, generators are required to nominate (ex-post) any three settlement periods, on separate days, in which they have delivered at least their de-rating figure over the winter peak period. If performance data cannot back up a de-rating factor then the capacity contribution should be removed from the capacity requirement calculations, the unit should not participate in the auctions or a significant reduction should apply to the unit's de-rating factor.
    - Security of supply standards benefit from the true reliability characteristics of a plant being reflected
    - Plant specific factors are more equitable for participants and potential for over compensation of plant, which are less reliable than an average technology factor would imply, is reduced.

D) View on the historic, projection or hybrid approaches to de-rating

- Historic approaches provide clearer exit signals if historical performance has been poor. Factors based on historical data are clearer to define and monitor and more transparent for investor certainty
- Projections are open to subjectivity in assumptions and more difficult to verify than historical data. For example modelling may show an increase in interconnector imports into I-SEM. If the de-rating factor increases and an RO for the increased amount is sold but does not deliver during system stress events this could have been at the expense of a more reliable unit, which damages competition and the cost efficiency of the CRM. Conversely if a wind and solar de-rating factors are not decreased for future capacity periods or over the lifetime of a long term contract then the issues of over-compensation arise as capacity contributions significantly decrease when the renewables saturation points are met.
- Give the above issues with options 1 and 2 a hybrid approach may be worth reviewing but there is very little information provided on how this would work in practice. More

information is required in conjunction with average and marginal capacity contribution details to make an informed decision.

E) View on grandfathering of de-rating factors

- Grange agrees that grandfathering of de-rating factors is necessary for investor confidence and stability. Also it reduces the barriers to new entry and encourages competition. If a liquid secondary trading market exists generators would be encouraged to buyback ROs to manage the penalty risks of not delivering. Grange is open to discussion on profiling the reduction of a de-rating factor in a long term contract using a small steps approach. This option does allow some management of availability and performance risk of units over a number of years and further performance risks can be managed through trading in a secondary market.

F) View on options presented with respect to non-firm generation

- Please see section A

G) What evidence should an aggregator be required to show physical backing?

- Fostering competition is essential. If physical backing of ROs is required then contractual evidence of this physical backing should be provided.
- Once an RO is sold by an aggregator substitution within that portfolio by newly contracted customers should not be allowed for the duration of the RO.

H) Should there be a maximum size of unit that can bid into the RO auction via an aggregator, and if so what is that threshold?

- The current de minimus level of 10MW does seem reasonable.

I) Should there be a minimum size below which a capacity provider may not bid directly into the RO auction, and must bid via an aggregator? If so what is that threshold?

- Going below a 1MW threshold doesn't seem practical from an implementation perspective.

J) What pre-qualification criteria should be applied?

1. Existing Plant
   Grange is in agreement with the proposed prequalification requirements for existing plant.
2. Grange is also in agreement with prequalification requirement proposed for new and refurbished plant. Grange welcomes the refurbished plant criteria for sufficient material investment to warrant multi-year contracts. For a fair and equitable outcome if the investment is material then refurbished plant should be subject to the same financial commitment criteria as new plant. Please see below for more information eligibility requirements and on the connection agreement requirements for refurbished plant.

K) Detail of any other considerations respondents feel we should take account of when determining policy in relation to eligibility

- To address the SEM market failures and regulatory and market power issues separate new entrant auctions for CRM and DS3 will be essential to encourage the evolution of the I-SEM portfolio to address the system requirements.
- Adherence to the CER/09/191 decision, in the initial I-SEM auctions, which implements a small steps approach for new entrant capacity, will ensure a reasonable amount of capacity which can compete in the new entrant auctions.
- Live grid connection offers ensure fairness, transparency and equity with those applicants that have invested in projects to date. These connection offers and firm access quantities have been based on ITC modelling of future power system requirements and have been through a thorough new plant selection process.
- Grange does not believe the prequalification requirements should be considered in isolation of other design questions such as contract duration. The CER/09/191 direction set the overall policy framework for new generator entrants out to 2025 and was a cornerstone of the developing electricity market. The direction was published following exhaustive consultation and ITC modelling processes; this approach was undertaken to ensure an orderly new entrant process, triggered by the fact that "there were over 6,000 MW of conventional applicants in the connection queue". The first 500MW results from the ITC programme were published in this direction. Significant time and effort was expended in the 'small steps approach' to determine appropriate grid locations for new entrants. It would be in the interests of security of supply, competition, efficiency and cost to the consumer that equivalent grid analysis is completed for refurbished plant intending on capital investments warranting multi-year contracts. Grange stresses that pre-qualification requirements for refurbished plant must include TSO confirmation that there is sufficient evidence to support new or replacement capacity at a current connection point. In a letter by Eirgrid in 2007 the TSO already stated in its opinion that a well-known old and inefficient plant "no longer represents a desirable point for the connection of new, or replacement capacity". And still this installed capacity is reported in current Generation Capacity Statements as being available in the 2020s! This market failure in relation to exit signals has to end. Therefore it is not acceptable that an existing connection agreement for refurbished plant is sufficient for eligibility in the CRM auctions. If TSO evidence supporting replacement capacity is not provided the existing plant should at the maximum be allowed to participate in auctions providing 1 year contracts.
- In addition to the above requirements Grange is in favour of 3 contract duration lengths, consistent with the GB method, i.e. 1 year, 3 year and 15 year contracts. Grange firmly believes that the 15 year contracts announced as part of the GB capacity auctions will provide long term stability for investors and consumers in the I-SEM. The paper "System Adequacy Problem: Lessons Learned from the American Continent" noted that Italy considers awarding 3 year contracts in a reliability options mechanism and concludes that "they are clearly not sufficient to hedge investors' risk and, therefore, they are not suitable for attracting new plants."
- The minimum investment threshold method, as implemented in the GB capacity market, to determine eligibility for 3 year or 15 year contracts should be considered in the I-SEM CRM.

5. Supplier Arrangements

A) Recovery of CRM option fees from suppliers on a flat, profiled, or focused basis.

- Capacity providers for cashflow forecasts purposes would prefer to know the profile of monthly option fee payments in advance of the capacity period. Monthly option fee payments could then be paid net of any actual difference payments due after the end of each month.

B) Supplier credit cover arrangements for I-SEM CRM should be broadly similar to those under SEM and whether/what credit cover arrangement should be introduced for capacity providers.

- Grange agrees that capacity provider credit cover based on net payments is essential and should be facilitated across all markets if possible. For e.g. If the capacity provider is scheduled for its RO volume when the Day Ahead price exceeds the strike price then if looking at exposure across all markets the capacity provider does not have an exposure in the CRM. Consequently if the capacity provider is not available and a RO is called then a CRM exposure is generated. In relation to the CRM if the monthly option fee payment amount is known ex ante this is in effect a proxy for posted collateral. Exposure due to difference payments that are not covered by energy market revenues could be calculated as the energy markets are traded. If a defined % level of the posted collateral is reached then there would be a margin call and collateral would then need to be posted. Implementing excessive credit cover requirements for units generally in receipt of payments would not be equitable and would impose barriers to market access and entry for smaller participants.

C) Whether costs of exchange rate variations should be borne by capacity providers or mutualised across the market

- Grange is in agreement with the option to mutualise exchange rate costs across the market. This is a fair, stable and efficient approach in a small market. This method also reduces barriers to entry for smaller participants.

6. Institutional Framework

A) Are the above outlined governance arrangements suitable for implementation of the I-SEM capacity mechanism?

- In general Grange is in agreement with the overall institutional framework proposed except that for the stability and investor confidence reasons outlined in section B below capacity providers option rights and obligations and payment rules would need to be addressed under an option contract.
- Grange also welcomes that the SEMC is formally recognising the conflicts of interests posed by EWIC, a commercial but grant aided operation, operating as part of the Eirgrid group. The CRM is not the only market where a conflict of interest arises. The TSO will manage balancing market dispatch in the energy arrangements at the same time the interconnectors will have implicit capacity scheduled in the IDM, the TSO is the sole buyer of DS3 system services for which EWIC will be a volume provider. Business separation, at the board, management, staff, location and IT level, is a must as was completed for ESB Networks. However if this is not completed and while EWIC is protected by its ability to recover its costs through the TUoS mechanism then EWIC

must not compete in the CRM or DS3 auctions or must be severely curtailed in its ability to do so.

B) Which options, for contractual arrangements, are the most appropriate, as assessed against the listed criteria?

- To incentivise appropriate investment and stability for new entrants Grange agrees with the hybrid model. The current code covers a capacity mechanism that does not have multi-annual durations. Grange does not believe that the constraints on capacity regulations due to the objectives listed in 6.3.14 are strong or specific enough and place too high a regulatory risk on new entrant investors. New entrant investors face greater financial and long term risks than existing incumbents when entering a capacity market. Hence they will need an option contract to reduce investment risk and provide legally binding proof to financial investors of the terms and conditions of a bankable revenue stream. Legal drafting of the code will be required for the I-SEM and contracts could be legally drafted at the same time. Regarding any concerns for implementing long term contracts Grange, as a proportion of the capacity requirement, would expect that the % of long term contracted capacity would be well below 20%. Long term contract concerns need to be carefully weighed against the benefits of valuable competition new entrants provide in the market.
- An option contract would need to contain but not limited to: the detailed terms relating to the rights and obligations of the capacity provider; start and end date of the Reliability Option; identity of the physical capacity; the identity of the legal entity; whether the plant is new build etc; grandfathered rights in respect of the strike price, the market reference price and de-rating factors; details of settlement, invoicing and credit cover arrangements.

C) Are implementation agreements required for new entrants participating in the capacity auctions?

- Grange is in agreement that an implementation agreement is required for new entrants. Grange also believes that the provisions in Chapter 6 - Capacity Agreements of the GB Capacity Market Rules from section “Achieving the financial milestone” on can be used as a suitable template for an I-SEM implementation agreement.