



Electric Ireland Response:
Capacity Remuneration Mechanism Detailed Design
3rd Consultation Paper

SEM-16-010

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Table of Contents

Respondent's Details	3
General Comments	4
Section 3:- Auction Frequency and Volumes	6
Proposed Approach.....	6
Flexibility around timings of auctions	6
Section 4:- Market Power	7
Overview	7
Market Power Control Framework	7
Market Power Metrics	8
Prohibition of Capacity Aggregation	10
Section 5:- Auction Design	12
Auction Format	12
Structure of Bids	12
Lumpiness Issue	13
Clearing Price	13
Sloped Demand Curve.....	14
Winner Determination purely on price	14
“Out-of-merit” bids to manage lumpiness.....	15
Price determination	15
Lumpiness/ Discrete Bids	15
Tied Bids.....	16
Level of Information Provided & Restrictions on bidder communications	16
Section 6:- Auction Parameters	17
Sloped Demand Curve.....	17
Price Cap	18
Bid Limits.....	18
Section 7:- Auction Governance, Roles & Responsibilities.....	19
Role of TSOs with respect to the auctions	19
Requirement for an Independent Auction Monitor	19
Managing conflicts of interests	20
Auction Governance	20
Modifications to the Capacity Market Code	20
Disputes in respect of the Capacity Market Code	20
Section 8:- Strike Price, Difference Payments & Socialisation Fund	21
Calculation of the strike price	21
Incorporation of Carbon in the Strike Price Formula	21
Month-Ahead Index	21
Reference thermal efficiency appropriateness	22

Appropriate Oil Price.....	23
Data Sources for fuel data.....	23
Governance for changes	23
Socialisation Fund	24
Supplier’s contribution rate	24
Preference for option of socialisation of shortfall in difference payments.....	25

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General Comments

Electric Ireland welcomes the opportunity to respond to this third Capacity Remuneration Mechanism (CRM) Consultation. Consistent with our previous responses, Electric Ireland views these consultation proposals from the perspective of a standalone supplier and as a representative of the customer.

This paper consults on details pertaining to market power in the CRM, auction design and parameters, market power mitigation measures and the governance surrounding the capacity market. The choices of auction design and parameters are central to the effective operation of the I-SEM CRM. In the evaluation of the proposed options, we have focussed on what we believe delivers the most economic procurement of capacity for the customer whilst at the same time delivering the required security standard.

Sensible choices for the transitional auctions will be important to arrive at an effective enduring CRM solution. Price discovery and transparency should be key features of the transitional arrangements in order to deliver efficient prices and best value to customers. The design of the auction, more generally, and considerations such as strike price must achieve an appropriate allocation of risks between capacity providers and the customer who must pay for the capacity market.

Some of the key points for Electric Ireland and our customers are discussed below:

Prohibition of capacity aggregation

Electric Ireland strongly opposes the suggestion of a prohibition on its participation in capacity aggregation on the grounds of:

- absence of supporting evidence;
- likely effective mitigation measures;
- unfair discrimination in the retail market;
- invalidation of Electric Ireland's existing DSU business and customer contracts;
- invalidation of Electric Ireland's existing PPA arrangements with third parties imposed upon it as a Public Service Obligation;
- undermining of EU & national Demand Side policies and goals; and
- depending on the choice of market power metric, corresponding prohibitions on all associated supply businesses of generators from providing DSUs and skewing of the demand side sector in favour of non-supplier aggregators.

Electric Ireland requests that the Regulatory Authorities withdraw this suggestion or else provide substantial supporting evidence to demonstrate why this is a necessary and proportionate measure to mitigate the perceived exercise of market power and that these arguments satisfy the standards of evidence-based decision-making that the Regulatory Authorities have committed to uphold.

Socialisation

The socialisation fund is the necessary consequence of a series of SEMC decisions which seeks to provide suppliers with some protection against extreme Administered Scarcity Prices. The imperfect nature of the RO 'supplier hedge' is revealed in this consultation given that shortfalls in the fund require suppliers to bear unexpected and unbudgeted costs: either through unhedged extreme energy prices or else via an immediate charge. Electric Ireland views the 'suspend and accrue' option as less worse.

Without the benefit of relevant analyses, a 90% level of confidence appears reasonable as the cost is likely to rise rapidly for a higher level of insurance. The contribution rate should not increase by more than twice CPI year-on-year but should be allowed to fall to zero immediately the target fund level is reached (and then re-start from a non-zero previous level). Electric Ireland believes that the fund contributions should be recovered separately from the base payments and should be levied as a flat €/MWh charge across all demand.

Winner Determination of the auction

Electric Ireland recognises the future need for the entry of additional capacity given continuing economic development on the island. New investment in both capacity and DS3 provision in the I-SEM will be critical in order to provide security for our customers.

However, comparing different duration contracts directly on price, as proposed, is not a sensible option. This essentially assumes that there is no transfer of risk to customers for awarding a long term contract. If the winner determination is to be based solely on price, we would not be in favour of awarding different length contracts. If longer duration contracts are to be awarded, a market adjustment must be made to these bids, i.e., there must be a preference for shorter term contracts reflected in the price. A preference for shorter term contracts in the decision process would minimise the risk to customers of stranded capacity costs going forward. It would be envisaged that as the interaction between DS3 market and the CRM develops, that the value of the capacity market will diminish as generators procure more of their missing money through this new high value market. Thus, awarding 10-year contracts fixed at an initial price could see significant stranded costs of overpriced capacity.

Section 3:- Auction Frequency and Volumes

Proposed Approach

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

Electric Ireland is in agreement with the approach around the auction timings. The T-4 auction allows for both new and existing capacity to participate, concentrating the competitiveness of the auction. The T-1 auction allows for a refinement of the demand forecast as well as the opportunity for demand side units to participate.

We are in agreement with the proposal for a periodic consultation process to determine the volume of capacity to be withheld from the T-4 auction for procurement in the T-1 auction. Allowing industry to inform the adequate level of demand side volumes in the auction safeguards its continued participation and will capture the expected growth of the demand side going forward.

We supported the option of separate auctions during the transition in our CRM2 response on the basis of improved price discovery and a more straight forward and transparent process.

Flexibility around timings of auctions

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

In relation to the level of flexibility around the T-4 auctions, we support some flexibility (≤ 2 months) to cater for operational overshoots. In relation to the T-1 auction firmer timelines are required to ensure robust forecast adjustment and readiness of demand side units for the auction. As the T-1 auction will procure smaller volumes, the perceived advantages of timing flexibility will be outweighed by suppliers and customers requiring pricing certainty.

Section 4:- Market Power

Overview

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

Electric Ireland agrees that there are market power considerations that need to be addressed in the I-SEM CRM as with in other markets. Our view is that the scope for exercise of market power will be greatest where the level of competition is low and that competition is the most important factor in delivering efficient capacity prices for customers. In the current oversupplied market situation there is less of a concern and this would likely also apply to the transitional auctions where there may continue to be sufficient competition to alleviate concerns (even without additional participation from new entrants at this stage).

Our concerns are more focussed on auction outcomes during periods where the supply / demand balance becomes more tight. In such situations, where there are relatively small numbers of players participating, there is a risk of tacit collusion between existing players or between new entrants which could drive up capacity prices at the expense of customers. Consequently proportionate measures are required to address these situations.

Market Power Control Framework

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

Electric Ireland believes that the overall market power framework employed, including the EU competition and market abuse powers, needs to be carefully balanced in order to both provide measures to deter market abuses and to allow proper competition to develop including between new and existing capacity providers and also from the demand side. If the balance lands too heavily on the market abuse side, then we end up with a regulated capacity market which hinders competition but at much greater expense to the customer (than other forms of regulated markets). In particular DG COMP has a strong track record on insisting that competitive neutrality is maintained.

The consultation proposes a large set of I-SEM controls to address the potential exercise of market power in addition to the EU powers such as REMIT which are not explicitly portrayed as part of the framework. Ex-post monitoring, investigation and enforcement powers are a powerful deterrent against the exercise of market power. Overall, in moving from a fully regulated SEM CPM to a market-based I-SEM CRM one might have expected a lighter control framework.

Some of the proposed measures have well-established international precedents such as auction price caps and sloping demand curves and are non-controversial in principle. Some proposals, such as the prohibition on capacity aggregation for dominant generators and associated business, don't have the support of international precedent and appear unfairly discriminatory.

Electric Ireland believe that both physical and economic withholding can be adequately addressed by the mandated bidding & capacity requirement adjustment measures (already decided) combined with using a Sloping Demand Curve (proposed).

In summary, the overall framework is not proportionate and needs careful consideration in determining which elements should be implemented. In particular, it should be demonstrated, with supporting evidence, why each successive element needs to be included within the overall package so as to avoid hindering proper competition from developing.

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

Given that the *multi-market* Reliability Option is a complex instrument and unique to the I-SEM, it will be non-trivial for capacity providers to assess the risks of holding such instruments. During the intervening time between T-4 and T-1 auctions, improved market information may allow a better assessment of these risks or strategies may be developed to better manage these risks. Consequently such a restriction as proposed is likely to limit competition where capacity providers feel more able to accept and manage the risks of holding Reliability Options. Consequently Electric Ireland do not support this proposal which is likely to hinder competition.

Market Power Metrics

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

As discussed below Electric Ireland is strongly against prohibitions on capacity aggregation.

As stated above we have concerns about the possibility of tacit collusion between new entrants and between existing players when the margin between capacity and demand becomes tighter and, in principle, Electric Ireland favours the implementation of an Auction Price Cap to address the former possibility. Collusion between existing players is discussed below.

The All-Island Generation Capacity Statement 2016-2025 base case portrays the overall generation surplus of around 1550MW reducing to 200MW by 2025 and a deficit in NI from 2021. This is driven by median demand growth and closures of, and restrictions on, NI coal stations to comply with emission requirements. Electric Ireland is also concerned that when the surplus is low, collusion might be possible between existing players, whether assessed as dominant by any particular metric or not, to drive up the capacity price in the absence of effective competition and to the disbenefit of customers. The overall surplus is forecast to fall below 800MW by 2021 (T-4 auction to be held next year) and collusion between three players each with one station would be sufficient to inefficiently increase the capacity price from this point forward (until a new entrant was granted an RO).

There are two potential remedies: a Sloping Demand Curve and Bid Limits on generators.

A Sloping Demand Curve would make tacit collusion more difficult since as the price increases less capacity is procured and perhaps one of the three colluders in the example above would miss out. It also has wider economic benefits in the sense that if, on the other hand prices were low, then suppliers and customers should be willing for more capacity to be procured. This mechanism could also act to smooth out capacity prices from year to year. There is also a significant international precedent for Sloping Demand Curves in capacity markets.

While Bid Limits would create an upper bound for auction bids in such tight capacity situations and limit the damage from collusion these would bring with them a number of problems which would seriously undermine the idea of a market-based capacity mechanism. In particular, the proposal would require the RAs to determine and / or approve the Bid Limits which would make the market more regulated than market-based:

- there are great difficulties in determining an appropriate price value for the Bid Limit given the complexity of the multi-market RO instrument (much more complex than the instrument in the GB market where Bid Limits are used) – attempts to derive Bid Limits by technology would hinder proper competition between technologies and with an associated considerable level of regulatory intervention would totally undermine the transition from a regulated to a market-based capacity mechanism;
- especially in tight capacity situations, the establishment of a Bid Limit would set a ‘target price’ which may actually promote tacit collusion to the detriment of the customer and would negate any perceived benefits of e.g. selecting a clearing price over a pay-as-bid mechanism;
- applying Bid Limits to just those generators deemed dominant would not address the situation of the three colluders given above;
- applying Bid Limits to just those generators deemed dominant where the Bid Limit is set too low, may have the effect of removing the commercial decision for the dominant generator for any peaker units (of whether to bid the full value of missing money & risk premiums or to bid lower in order to receive an RO) while leaving this dilemma for other marginal units – the result may be that the dominant generator may receive more RO contracts (some potentially at a loss) while other players succeed or fail and potentially exit the market on a more commercial basis.

In summary Electric Ireland does not support Bid Limits but instead views the Sloping Demand Curve as providing an adequate level of protection against collusion. Neither does Electric Ireland see any benefit in applying Bid Limits to dominant generators since it will not address the ‘three colluders’ scenario presented above.

Consequently Electric Ireland does not see any need for the use of a market power metric, since it neither supports Bid Limits or Prohibitions on Capacity Aggregation. If the Regulatory Authorities are determined to select a market power metric despite their various shortcomings, Electric Ireland believe that the Three Pivotal Supplier Test, as preferred by the PJM market, most closely reflects our concerns as described above.

Prohibition of Capacity Aggregation

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

4.8.7 Should there be a prohibition on ESB and other dominant generators providing aggregation services?

The Regulatory Authorities state the reasons for allowing Capacity Aggregation in the I-SEM as providing a service to small generators and DSUs (including the pooling of risk) and encouraging new technologies such as storage thereby increasing their participation rates.

The Regulatory Authorities might have gone much further by saying that Capacity Aggregation was *essential* to the success of the I-SEM because:

- small generators (and DSUs) will face much greater risks under I-SEM and, since the selected model for the Aggregator of Last Resort was the minimal option, these parties will rely on the development of commercial aggregation services in order to participate fully;
- in order to comply with a range of EU, Government, and SEM policies including energy efficiency policy, state aid guidelines, the SEM Demand Side Vision, and I-SEM (ASP) price signals, significant and growing participation of the Demand Side is absolutely required; and
- in order to achieve DS3 goals of significantly increased provision of ancillary services, and in particular at times of high wind output and full thermal commitment where demand side ancillary services provision is the only alternative to wind curtailment, increased demand side participation is also necessary.

It is against this background that Electric Ireland considers the Regulatory Authorities' proposals that there should be prohibitions on Capacity Aggregation by ESB (GWM) and Electric Ireland:

- the RAs assert to respondents that ESB is dominant ("ESB or other dominant generators") on the basis of a highly-caveated table of market power metrics before decisions are made (or even consultations are issued) on de-rating methodologies or selection of the market power metrics;
- no evidence is presented to support the assertion that "the potential for market power is increased" if "ESB or other dominant generators" are allowed to provide Capacity Aggregation services;
- no evidence, logic, or reasoning is provided for prohibiting Electric Ireland from providing Capacity Aggregation services while ring-fencing continues and if, in the outturn, ESB (GWM) is deemed to be dominant.

In our view, the discussion presented here by the RAs falls far below the standards of evidence-based assessment and decision-making. The RAs have presented no evidence of harm resulting from either ESB GWM or Electric Ireland providing capacity aggregation services. The RAs have presumed here that market power will be exercised, again with no evidence, despite the deterrent effect of ex-post monitoring and enforcement powers. Electric Ireland requests that the RAs provide substantial supporting evidence to demonstrate why this is a necessary and proportionate measure to mitigate the perceived exercise of market power and that these arguments satisfy the standards of evidence-based decision-making that the Regulatory Authorities have committed to uphold.

Electric Ireland sets out below a number of arguments against these proposals:

- the capacity auction bids provided by a capacity aggregator on behalf of small generators or DSUs will naturally be largely determined by the economic fundamentals of the clients rather than the aggregator with only minor adjustments to address e.g. pooling of risk and, in the case of DSUs, some additional (voluntary) de-rating to address delivery risk (thus reducing any perceived capacity increase impact);
- exercise of market power in auctions is likely to be adequately addressed by at least a combination of an Auction Price Cap and a Sloping Demand Curves so that further prohibitions are not required;
- increasingly industrial and commercial customers under I-SEM & DS3 will look to share in the value available from demand response revenue streams and any supplier or utility will seek to meet customer expectations in this area – a prohibition on Electric Ireland (or ESB) providing capacity aggregation services would:
 - deny to Electric Ireland a natural development of customer service provision and disadvantage it against its competitors;
 - invalidate its existing DSU business including commercial arrangements with customers (and perhaps require its distressed sale to a non-supplier aggregator?); and
 - prejudice growth in an emerging market sector and prejudice the achievement of EU & National Demand Side goals;

such a discriminatory and draconian regulatory intervention in the retail market would require a high bar of supporting evidence;

- a prohibition of capacity aggregation by Electric Ireland would invalidate its existing long term non-discriminatory PPA arrangements with third parties imposed upon it as a Public Service Obligation;
- prohibition of capacity aggregation for dominant generators, depending on the choice of metric, may include ESB, SSE, BGE, and Viridian (and their associated supply business) and so would effectively eliminate the development of commercial aggregators from amongst traditional suppliers and create a very unlevel playing field between supplier and non-supplier aggregators – this would amount to unfair discrimination and would seriously prejudice achievement of high level policy and I-SEM / DS3 goals (as described above);
- if prohibitions on Electric Ireland are being considered, if ESB GWM is deemed dominant and if ring-fencing continues, then they should also certainly apply to those associated supply businesses of dominant generators without the mitigating benefits of ring-fencing – depending on the market power metric selected as above, this could have the effect of invalidating more existing Demand Side Units, significantly reducing competition in this sector, and really setting back the required growth of the Demand Side.

Section 5:- Auction Design

Auction Format

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

Electric Ireland's preferred auction format is the **multiple round descending clock auction**.

The descending clock auction format allows for **price discovery** and **greater transparency** relative to the simple sealed bid auction format. This price discovery will be essential in the context of a new market design where participants will be competing against each other to hold reliability options. Electric Ireland is of the view that this price discovery will facilitate greater competition amongst the participants in the auction.

The simple sealed bid, while a simpler format, would allow the auction participants no visibility of the emerging market value for a new and complex instrument – the reliability option. The risk here is that an elevated price would be the outcome of the auction due to participants including excessive risk premiums in their auction bids.

The consultation described the scenario of the "*winner's curse*" in a sealed bid auction format whereby a capacity provider who has misjudged the value of the product could end up over-bidding. This scenario whereby participants have an elevated view of the market value of reliability options would result in a less economic delivery of capacity for customers.

One concern raised about the multiple round descending clock auction format is the potential to enhance the market power for dominant players. Electric Ireland believe that a sloping demand curve would be an effective mitigant in this respect.

We are in agreement that the combinatorial auction format is too risky to consider in the transitional period and would question its suitability in relation to capacity going forward. Lessons learned from the transitional period around the interactions between the three markets may inform the optimum timings and sequence of the CRM and DS3 auctions.

Structure of Bids

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

Whole unit bids represent an 'all or nothing' risk for the capacity provider but would lend more transparency to auction results.

On the other hand, allowing supply curve bidding may allow the capacity provider to manage its risk by trading off volume and price risks. This could also be helpful to DSUs who may have a portfolio of customer assets at different price levels. Supply curve bidding could also help with the lumpiness issue described in section 5.6.1.

Electric Ireland can see merits in both bid structure types.

Lumpiness Issue

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

Electric Ireland does not support option 3b as it allows the auctioneer to accept out of merit bids which as we describe below, we would not be in favour of. We are also concerned that as a result of an optimisation some in-merit bids might be rejected *'in order to make room for a marginal bid'*.

Electric Ireland's preferred option to solve the "lumpiness" issue is option 2b. In this option, a net welfare calculation is carried out on the marginal bid in order to determine if it is accepted or rejected.

Where the marginal bid is *lumpy* and the remaining capacity requirement represented only a minute proportion of the total capacity procured in the auction, the impact of *lumpiness* is reduced as not procuring the bid in question has limited impact on the overall auction. Where as if the in-merit portion of the marginal bid represented a significant proportion of the capacity requirement, common sense would dictate that it could not be rejected.

Electric Ireland is not in favour of selecting out-of-merit bids or rejecting in-merit bids (through optimisation) as a solution to the "lumpiness" issue. We feel this could have adverse implications for the energy and ancillary services markets. A capacity provider will determine their bidding strategy based on a holistic analysis of the revenues to be recovered across the three markets. By selecting an out-of-merit bid in the reliability option auction, it can distort the bidding activities of that and other participants in the other markets. Participants who hold reliability options are incentivised to be active in the energy markets. An out of merit bid in the capacity market which has been artificially selected to hold a reliability option could be at risk of not clearing in the energy market – the generator either routinely runs below cost in the energy market or doesn't run during a scarcity event, resulting in significantly increased risk of default on difference payments. Additionally, generators whose in-merit bids were rejected and so do not hold reliability options, yet are in merit in the energy market, may have to recover this lost revenue by increasing the cost of their short run marginal cost bids.

Selection of out-of-merit bids could also promote gaming amongst some participants who consider their units of a size that could fill any potential gap. This may incentive inflated bidding by these smaller units which is an undesirable outcome.

Lastly, the ability to accept of out-of-merit bids seriously erodes the transparency of the auctions and may ultimately undermine their credibility.

Clearing Price

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

Electric Ireland agrees with the approach of setting the clearing price based on the highest accepted in-merit bid as this in our view will lead to the most efficient delivery of capacity.

We are not in favour of selecting any out-of-merit bids as winners in the auction. Winners would be determined based on being or under the marginal bid. The clearing price in the auction being the marginal bid.

The pay-as-bid approach does not incentivise truthful bidding and would encourage participants to include bids based on their view of what the clearing price of the auction would be rather than representing the true costs to that participant. Incentivising truthful bidding is especially important in the transition to the new capacity market.

Sloped Demand Curve

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

Electric Ireland recognises the benefits associated with the use of a sloped demand curve within the capacity auctions for the following reasons:-

- **Market power mitigation**
A sloped demand curve reduces the incentive for market participants to exercise their market power. Vertical or near-vertical supply curves allow for withheld capacity to shift the supply curve up; the effect being an increase in the price of capacity procured for consumers. A sloped curve reduces this incentive.
- **Capacity beyond the “Requirement” has value**
Sloped demand curves recognise that obtaining additional capacity may have merit depending on the circumstances. Given the many assumptions used to determine the capacity requirement it should not be considered an ‘exact’ value and from a customer perspective it is economic to purchase, within limits, more capacity where the price is low and less where the price is high.
- **Price volatility mitigation**
Electric Ireland is in agreement with the consultation that having a fixed capacity requirement may lead to volatility in terms of the prices to customers from year-to-year. This volatility can be smoothed out with the use of a sloped demand curve.

Winner Determination purely on price

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

Longer term reliability options would offer more price certainty and less risk to new entrant capacity providers but this risk is transferred to the customer who may be faced with the cost of stranded capacity in the later years of the contract. Responding to the CRM2 consultation, Electric Ireland argued that the impact to customers be a key consideration in how a winner would be determined between contracts of varying lengths.

Determining a winner purely on the basis of face value bid price without any adjustment for length of contract ignores the risk associated with the potential for stranded capacity and is unacceptable to Electric Ireland.

Adjusting longer term contracts to reflect this heightened risk to customers would somewhat level the playing field. The process of determining a practical and objective methodology of adjustment may be laborious however it would be necessary to ensure the customer is not carrying excessive risk.

The consultation considers winner determination with no adjustment as being the most appropriate. Electric Ireland views this option as being unworkable and inequitable for the customer with contracts of substantially different lengths. Where the comparison is purely on a price basis, we would advise common length terms for all participants in the auction. As acknowledged by the Regulatory Authorities at the Dundalk forum, international experience suggests that new entry is perfectly possible with short term contracts e.g. up to 3 years in duration and that the GB arrangement for up to 15-year contracts is a clear ‘outlier’ in capacity markets. Electric Ireland requests that the Regulatory Authorities reconsider reducing their proposed maximum contract length from 10 to 3 years.

“Out-of-merit” bids to manage lumpiness

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

Electric Ireland is of the view that only in merit bids should be accepted. As previously stated, our concern is that the selection of out-of-merit bids in the capacity market could distort activity in the energy and ancillary services market.

In addition to this, the selection of out-of-merit bids may encourage untruthful bidding as smaller sized units may include premiums in their bidding activity as these units would be more likely to be called to “fill the gap”.

Price determination

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

We are in agreement that the price would be determined as the highest accepted in merit bid. Electric Ireland is of the view this would lead to the most economic delivery of capacity. A “pay-as-clear” basis encourages:-

- Bidders to submit truthful bids. “Pay-as-bid” incentives participants to submit elevated bids at the point where they think the auction will clear. This could be harmful to the customer as the market value of reliability options is yet to be defined.
- Potential for more participation in the auction as the “pay-as-clear” approach would allow smaller players to participate.
- Where there is greatest incentive for truthful bidding, the most efficient stack of the available capacity is delivered to the market.

Lumpiness/ Discrete Bids

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

The “lumpiness / discrete bid” issue has already been discussed above.

Tied Bids

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

Electric Ireland proposes that bids be adjusted to reflect contract length. Where this is not the case, Electric Ireland is of the view that where bids are tied, they would be ranked on the basis of duration - shortest to longest with the longer duration contracts bids exiting first. Where bids are balanced on price, the next consideration is the length of contract.

Longer term contracts have inherently more risk to customers due to the risk of stranded capacity therefore where there is no price benefit, the less risky option should be considered first i.e. the shorter duration contract.

Level of Information Provided & Restrictions on bidder communications

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

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

The consultation illustrated the GB T-4 auction as an example whereby the provision of the aggregate levels of the qualified capacity incentivised truthful bidding and enhanced the competitiveness of the auction. This clearly benefited the customer and Electric Ireland would be in favour of this in the I-SEM capacity auctions.

Disaggregating the combined level of qualified capacity by technology and fuel type may pose threats as this could allow for certain types of generation to elevate their bids on the basis of the level of a similar type units' qualification.

As per the consultation, Electric Ireland is in agreement that public statements of expectations of auction clearing prices should not be allowed. It would be sensible and correct that communication rules should not prevent capacity aggregators agreeing with their clients at what price their capacity should be bid into the auction.

Section 6:- Auction Parameters

Sloped Demand Curve

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

Electric Ireland primary considerations are ensuring that an adequate level of capacity is obtained at the most economic price feasible. In respect of this, the principles used to define the sloped demand curve could be as follows:-

Price Signal around the Security Standard

- Send an effective price signal to the market when the loss of load expectation is high. The SEM Committee decided (Detailed Design Capacity Remuneration Mechanism Decision Paper SEM-15-103) to continue with the existing LOLE of 8 hours for the island. Auction prices in circumstances where capacity levels are close to or below this standard should reflect the importance of delivering the security standard.
- Similarly above the security standard, the supply curve should reflect that whilst there is some value in procuring excess capacity, it is of reduced value to the customer and the price should echo this with a transition to a point at which there is zero benefit of procuring too much capacity.

Capacity Requirement

- Where in the longer term there is an excess of capacity in the market – a steeper curve can be used.
- Conversely where the security standard is in jeopardy, a flatter curve can be incorporated. This ensures that an early exit signal is not sent to plant which will be required going forward. The benefit to customers of this is that a higher security standard is procured at a more economic price.

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

During the transition, there will be sufficient competition in the market, as capacity will be in an over-supply situation as evident from the recently published All-Ireland Generation Capacity Statement – in this regard a different slope would not be required.

This situation should be monitored over the transition to ensure it continues to remain the case.

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

Electric Ireland is of the view that a well designed sloped capacity curve will enhance competition. Using a fixed vertical curve to procure capacity means that the auctioneer will procure the required capacity irrespective of price (up to an Auction Price Cap). A sloped demand curve introduces an additional element of 'competition' that will be beneficial for the customer.

Price Cap

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

Electric Ireland is in agreement with the introduction of an auction price cap. There is a well established international precedent for this and it would mitigate the potential for excessive prices which of course is imperative for customers. This is especially important in combatting tacit collusion between new entrants in a tight supply situation.

A balanced approach must be employed, however, whereby the level of the price cap is not too low that it would deter efficient market entry and potentially lead to insufficient capacity procurement, whilst also protecting the consumer.

As the consultation has shown, the standard in other jurisdictions is to set the price cap as a multiple of the Net CONE. This clearly emphasises the importance of an open and transparent calculation of a BNE so that this administratively determined cost can be put to the market to ensure its cost reflectiveness.

Bid Limits

Do you agree with the requirement for other Bid Limits?

Electric Ireland is in favour of an environment where value is driven by competition. The risk of an artificially set bid limit being too low is a real threat to disincentivising participation in the capacity auctions. There is a risk to the auction that a competitively determined price is not obtained if bid limits restrict participation. The result being an adequate standard of capacity is procured but at a higher price for the customer.

Introducing a bid limit could potentially also promote tacit collusion since the bid limit would become a target price rather than letting competition define the value.

Section 7:- Auction Governance, Roles & Responsibilities

Role of TSOs with respect to the auctions

Do you agree on the proposed role of the TSOs with respect to the auctions?

The TSOs are the natural choice as CRM delivery body, however conflicts of interest must be managed. In ESB's response to the I-SEM Roles and Responsibilities Consultation, SEM-15-016, we supported the proposed role of the TSOs as the CRM delivery body but requested that adequate level of business separation be implemented between the CRM delivery body and the other TSO functions.

Requirement for an Independent Auction Monitor

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

The EirGrid Group will operate Ex Ante markets as well as the Capacity and Balancing Markets while owning an interconnector and with the potential for ownership of future interconnectors. Concerns over conflicts of interest certainly need to be addressed and an independent auction monitor could provide reassurance over EirGrid's activity in these auctions and improve confidence in the outcome of the auctions more generally. In particular, the presence of a body with a monitoring function during the actual auction process will help control information flows and so may ease concerns over the exercise of market power.

Electric Ireland has several views on this topic:

- The independent monitor role will introduce an additional body with costs ultimately to be borne by the consumer: solutions must not place undue costs on customers.
- Any independent monitor must have the authority and expertise to perform the role effectively.
- Cost savings might be realised if the function could be carried out by an existing body, for example, by the Market Monitoring Unit, provided that it can be appropriately resourced.
- If there is to be an externally appointed independent monitor:
 - Costs should be minimised
 - Any overlap with the role of the I-SEM Auditor should be minimised and any gaps between the remits of the two bodies identified and addressed: there may be merit in combining the two roles provided that the Independent Auction Monitor's report can be issued immediately after each auction.
 - There must be no conflicts of interest. Any changes in business practice of the monitor which could call their impartiality into question must be immediately raised with the SEMC to decide whether or not their position remains tenable.

Managing conflicts of interests

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

While EirGrid will have a number of operational functions as part of its Capacity market delivery role, Electric Ireland welcomes the Regulatory Authorities’ retention of responsibility for overall monitoring and decisions in relation to policy, roles, and other matters. Clear rules for Capacity market operation and published timetables (with appropriate notice times) for auctions, availability of pre-auction parameters & other relevant information, and availability of auction results are very important.

However as indicated by ESB Group’s comments on conflicts of interest in our response to the Consultation on I-SEM Roles and Responsibilities (SEM-15-016), we believe that adequate business separation will also be required. We note that the Regulatory Authorities have not yet decided on whether e.g. ring-fencing arrangements between different EirGrid businesses are to be implemented.

Auction Governance

Do you have any comments on the proposed auction governance arrangements?

Electric Ireland has no particular comments on the auction governance arrangements

Modifications to the Capacity Market Code

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

The process for making changes to the CMC looks sensible. It is appropriate to have governance in place for such changes, in particular one that maintains a formalised consultation process, and a separate process from that for energy given the need to implement changes in advance of fixed deadlines (i.e. before the next auction).

Disputes in respect of the Capacity Market Code

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

Electric Ireland welcomes a viable route for disputes to be settled outside of the legal system. The choice of the expert panel should be without prejudice to any market participants. Such experts as chosen must command respect within electricity markets internationally.

Section 8:- Strike Price, Difference Payments & Socialisation Fund

Calculation of the strike price

The correct calculation of the Strike Price is essential for the effective performance of the capacity mechanism: it must be given due consideration since it is a fundamental determinant of the value of the capacity market to Suppliers and Generators alike. Consequently the Strike Price must achieve an appropriate balance between the interest of these two classes of participant.

Too low a Strike Price may increase the perceived risk to generators of taking up Reliability Options (due to increased difference payments) which may either be reflected in inflated capacity auctions bids or an insufficient number of generators bidding in the capacity auctions to guarantee capacity or achieve efficient pricing, increasing the cost of capacity to suppliers and hence customers. In addition, a Strike Price which is too low to reflect the costs of operating e.g. peaking plant, increases the risk of such plant not partaking in the capacity auctions and hence, may result in insufficient capacity being procured or inefficient high prices.

On the other hand, a Strike Price that is set too high has the effect of a wealth transfer from Customers to Generators in the case of scarcity events. This effectively erodes the value of the hedge to suppliers. In addition, an over-inflated strike price undermines the primary incentive mechanism of the Reliability Option since it reduces the difference payments penalty for Generators who are not available or running during scarcity periods.

The consultation paper explicitly states that it is likely that the DSU price will set the Strike Price (unless oil & gas prices exceed previous highs). Other than a graphical analysis of existing DSU commercial offers in CRM Decision¹, there is not, however, any indication given as to the method used to arrive at the DSU price (suggested to be in approximately €500/MWh in this Section 8.2.3). While Electric Ireland believes that engaging the demand side of the energy market is an essential part of the long-term solution to the changes in the energy market, it is imperative that a robust method is used to determine the true cost of calling DSU to reduce demand. If this cost is far in excess of the energy cost of inefficient thermal plant, significant infra-marginal rent could be obtained by all thermal plant, resulting in a wealth transfer from customers to generators.

Incorporation of Carbon in the Strike Price Formula

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

The presented formula serves to calculate the energy cost of the least expensive generation capacity. As such, the addition of a carbon price along with carbon intensity to the Strike Price formula is sensible. It does, however, serve to increase the Strike Price, reducing the value of the hedge to suppliers.

Month-Ahead Index

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

Using a month-ahead index provides better stability to suppliers and reduces the exposure to volatile gas prices coming from GB. While using the spot price effectively captures the opportunity cost to generators and would minimise the risk of running below cost, the Strike Price equally serves to determine the value of the RO as a Supplier hedge against ASP: a Strike Price with daily volatility provides no certainty to suppliers and

significantly complicates supplier risk management. A month-ahead index would add a further incentive to generators to adopt a well-balanced approach to their fuel hedging strategy, which should ultimately benefit customers. The use of a the Maximum function in the Strike Price Calculation formula ensures that suppliers are exposed to the worst of extremes in gas, oil and DSU prices at all times. Participants providing capacity are exposed to volatility pertaining only to the (fuel) technology of their plant and reap the benefits when the cost of another capacity type has spiked. To restore balance to the risks faced by suppliers and generators, it is more equitable that suppliers benefit from some level of reliability in the Strike Price.

Reference thermal efficiency appropriateness

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

Supplier exposure to Administered Scarcity Pricing in a perfectly functioning capacity mechanism (as distinct from longer term risks of capacity shortages) is based solely on the Strike Price. Thus, in the first instance from a Supplier perspective, the Strike Price should be as low as possible while still allowing for a well-functioning Capacity Mechanism¹. The reference efficiency should be representative of the plants that come online at times of system stress. Generators with such low efficiencies may face increased risks of suffering substantial losses during a scarcity event for which they are not in merit. Depending on the strategy of these generators, they may decide not to bid for Reliability Options or their bids made may not clear in the Capacity Auctions. Consequently, the Strike Price must represent the actual cost of operation of a low efficiency peaker generation plant as described in CRM Decision 1.

This reference efficiency should be reviewed periodically, particularly as new capacity comes online and old capacity exits, to assess what is the lower end of efficiency required to incentivise sufficient plant to bid for Reliability Options.

The use of a single reference efficiency may not be appropriate. The purpose of the formula is to identify the highest cost plant required for system security. Thus, the formula should be dynamic enough to reflect changes in commodities and technologies without modification. The Strike Price formula has a weakness in that it uses a single reference efficiency. Generic formulae, such as that presented, have the advantage of finding the best solution without modification of the CMC. The discussion surrounding the use of Heavy Fuel Oil as the oil reference price (Section 8.2.13) highlights this weakness. The formula outlined in Section 8.2.5 uses the lowest efficiency generation in conjunction with the maximum fuel price, even if they relate to different technologies. As such, the formula may not represent the true cost of generation. The issue could be solved using the formula below, which finds the maximum of DSU price and the fuel / carbon cost calculated using the relevant the reference efficiency for each plant type:

$$\text{Strike Price} = \text{Max}\left(\frac{1}{T\%_{gas}} * [RP_{gas} + CI_{gas} * CP], \frac{1}{T\%_{HFO}} * [RP_{HFO} + CI_{HFO} * CP], \frac{1}{T\%_{gasoil}} * [RP_{gasoil} + CI_{gasoil} * CP], DSU\right)$$

¹ If the Strike Price is set very low, capacity providers will include high risk premia in their auction bids, resulting in inefficiently high capacity prices for suppliers and customers.

Appropriate Oil Price

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

If different generation technologies have varying minimal efficiencies, as stated per Section 8.2.24, it is inappropriate to choose a single reference efficiency and price for both types of oil generator. If a single reference thermal efficiency is used, it would be appropriate that HFO be used if, indeed, the efficiency of Gasoil plants is much higher (Section 8.2.24). It would be inappropriate to use the maximum oil price combined with the minimum generation efficiency. See answer to reference efficiency, above.

Data Sources for fuel data

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

The proposed process for deciding on data sources appears sensible. The choice of data source should be regularly audited for accuracy and cost.

Governance for changes

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

A governance process applying to input data promotes confidence in the market. The proposed process for determining changes to these indices appears sensible. The frequency of updates should be made clear, however.

Socialisation Fund

Effective operation of the capacity mechanism should result in the procurement of sufficient capacity for each period. Such operation of the capacity market should minimise the exposure of suppliers to Administered Scarcity Pricing not covered by difference payments i.e., the “hole in the hedge”. An effective CRM will mean the difference payments socialisation fund should only be required to cover shortfalls in difference payments on rare occasions. The socialisation fund should not be seen as the answer to a poorly functioning capacity mechanism, but a last resort safety net.

Shortfalls in aggregated difference payments represent an inadequate operation of the capacity mechanism. At this point, the SEMC and Regulatory Authorities are in an ideal position to minimise the exposure of customers to Administered Scarcity Pricing. If the ROs are functioning perfectly, generators are incentivised to be available at times of system stress by the threat of difference payments and suppliers are exposed to high energy prices (up to the level of the Strike Price).

When a stress event occurs and there is not a full RO hedge, it is suppliers (and hence customers) that bear the brunt of this poor operation. As System Demand is relatively predictable, a stress event is likely to result from a generator outage or a rapid loss of wind generation output, albeit potentially at a time of high demand. Despite this, the cost of imperfections in the capacity market is borne by suppliers and customers, despite funding this capacity mechanism.

Serious strain could be placed on suppliers if there were a sizable hole in the RO hedge combined with very high ASP; this could result in some smaller suppliers being forced out of the market. As the largest supplier, Electric Ireland will be the greatest contributor to the socialisation fund. This fund will assist smaller Suppliers that are exposed to Administered Scarcity Pricing without adequate cover from Reliability Option difference payments. The fund level sufficient to cover 90% of instances is deemed acceptable for Electric Ireland. It should be noted that this socialisation fund represents a significant sum of money tied up and not useful for other investments. As such, contribution to this fund has an opportunity cost for Electric Ireland. Significant contribution of Electric Ireland to this socialisation fund is an example of strong market performers benefitting smaller participants and keeping the market competitive.

Supplier's contribution rate

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

The proposal for Supplier's contributions to a socialisation fund is not based on balance responsibility performance. As such, suppliers who are consistently balanced in the ex-ante markets will be penalised to subsidise market participants who are consistently exposed in the balancing market. This does not promote balance responsibility.

The Supplier's contribution rate should be set in as fair and equitable a manner as possible. The proposed methodology suggests that the socialisation fund contributions be recovered via increases to the supplier capacity charge during these focussed periods. Electric Ireland views this proposal as unacceptable. While the main supplier capacity charge application to focussed periods was predicated on demand being the main driver of high LOLE (false! - demand may be a more systematic driver of LOLE but demand is not likely to 'cause' actual scarcity events: highly likely to be triggered by general outages or loss of wind output), there is no basis to suggest that demand is the driver of the magnitude of the socialisation fund. The causal factors are: generator opt-outs; interconnector-led cross-border participation; expiry of stop loss limits; DSU interim

energy participation arrangements; and four-year-out peak demand under-forecasting (limited by T-1 auctions).

If Supplier exposure to underfunding of difference payments is to be socialised across all Suppliers, it would be unfair to apply a levy for this socialisation fund solely across focussed periods. The potential occurrence of system stress events is not limited to these focussed periods. To charge only customers who are active in the focussed periods does not represent a socialisation of the shortfall in difference payments. Residential customers will be unduly penalised under this scheme to socialise the inadequacies of the capacity mechanism. These customers receive no market signals, yet will disproportionately fund the socialisation fund. Thus, Electric Ireland views the proposed methodology for socialising shortfalls in difference payments as not appropriate.

Consequently, Electric Ireland proposes that the socialisation fund contributions should be recovered via a separate mechanism from the main supplier charge applied to focussed periods. Electric Ireland suggests that, since there is no clear 'polluter' to charge in this case, the socialisation fund contributions should be recovered via a flat per kWh charge across all periods. This would avoid residential customers bearing the largest part of this charge for which they are not responsible and while at the same time having neither price incentives to enable them to respond nor metering to enable them to be rewarded. Electric Ireland suggests the current split of Market Operator costs as a precedent for such differential charging.

Preference for option of socialisation of shortfall in difference payments

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

Electric Ireland preferred option is Suspend and Accrue. There are two reasons for this:

- to promote smooth charges in the Capacity Market; and
- avoid eroding the balance responsibility incentive.

Both options are undesirable in that they both lead to unexpected and unbudgeted payments: either, under Suspend and Accrue, the supplier suffers extreme energy prices without mitigating difference payments due to fund depletion (part way through a scarcity event or as a result of a further scarcity event) or under the Immediate Additional Charge.

In the first instance, the Capacity Market should be designed to operate efficiently and effectively such that the shortfall in Difference Payments is minimised and hence, the socialisation fund required should also be minimised. Situations arising whereby the Capacity Mechanism results in Suppliers being put under serious strain would be a manifestation of poor design and implementation of the CRM, rather than an ineffective socialisation fund. As such, to prevent spikes in charges for Capacity, the Suspend and Accrue method provides stability in charges and stays within the parameters for the design of the socialisation fund. In contrast, the other option results in an unbounded additional charge (the scarcity event may continue for many hours in the case of an interconnector outage).

The effect of shortfalls should not be such that suppliers cannot bear the cash flow strains. As such, temporary cash flow issues should act as an incentive to suppliers not to be out of balance, particularly at times of tight system margin. This also retains an incentive on suppliers to engage in demand response activities. On the other hand, under the Immediate Additional Charge option, out of balance suppliers are handed a lifeline

funded by other suppliers who were in balance and the EU Network Code balance responsibility obligation is severely eroded.