# Electric Ireland Response:

## Capacity Remuneration Mechanism

### *Parameters Consultation Paper*

*SEM-16-073*

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## Respondent's Details


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## General Comments

Electric Ireland welcomes the opportunity to respond to the Capacity Remuneration Mechanism (CRM) Parameters Consultation paper. Consistent with our previous CRM 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 parameters arising from decisions in the previous CRM consultations.

## Section 2: Administered Scarcity Pricing Parameters

We are keen that the proposed CRM design should operate effectively and achieve its aims, in particular for the CRM to satisfy an appropriate security standard at an efficient cost and provide efficient signals for market entry and exit as required. A core element of the CRM design is the inclusion of Administered Scarcity Pricing. Two options for the ASP function are presented in the consultation for consideration:

- Option 1: Simple Linear Function
- Option 2: LoLP x VoLL approximation

There is an issue with the shape of the function proposed in Option 2. The difference in the increase of ASP between 400 and 200 MW of operating reserve is larger than the increase of ASP between 200 and 0 MW of operating reserve. Intuitively, one would expect this to be the other way around, with the function being steepest where operating reserve is approaching zero: one would expect the chance of the lights going out (being reflected in LOLP) to be much greater with only 50MW of reserve left than with 400MW of reserve left. A steeper curve as reserve approaches zero would also have the positive effect of providing a progressively stronger price incentive to generation to become available as operating reserve reduces.

The shape of the LOLP x VoLL curve on which Option 2 is based is also very different from the 'indicative', but intuitive, shape that has been presented several times previously in consultation documents and Emerging Thinking slide packs. Electric Ireland requests that the RAs provide further justification for this counterintuitive LOLP x VoLL curve should the decision be to use option 2.

However, we believe that there may be merit in a third option, with a gentle slope initially and a steeper slope as zero reserve is approached (which would largely match the indicative shape presented by the RAs previously). This provides a progressively increasing incentive for generation to be available as operating reserve reduces. This could be in the form of a two piece linear curve, with a gentle slope between 500-200MW operating reserve and a steep curve between 200-0MW operating reserve. This option has been illustrated in Figure 1 below.

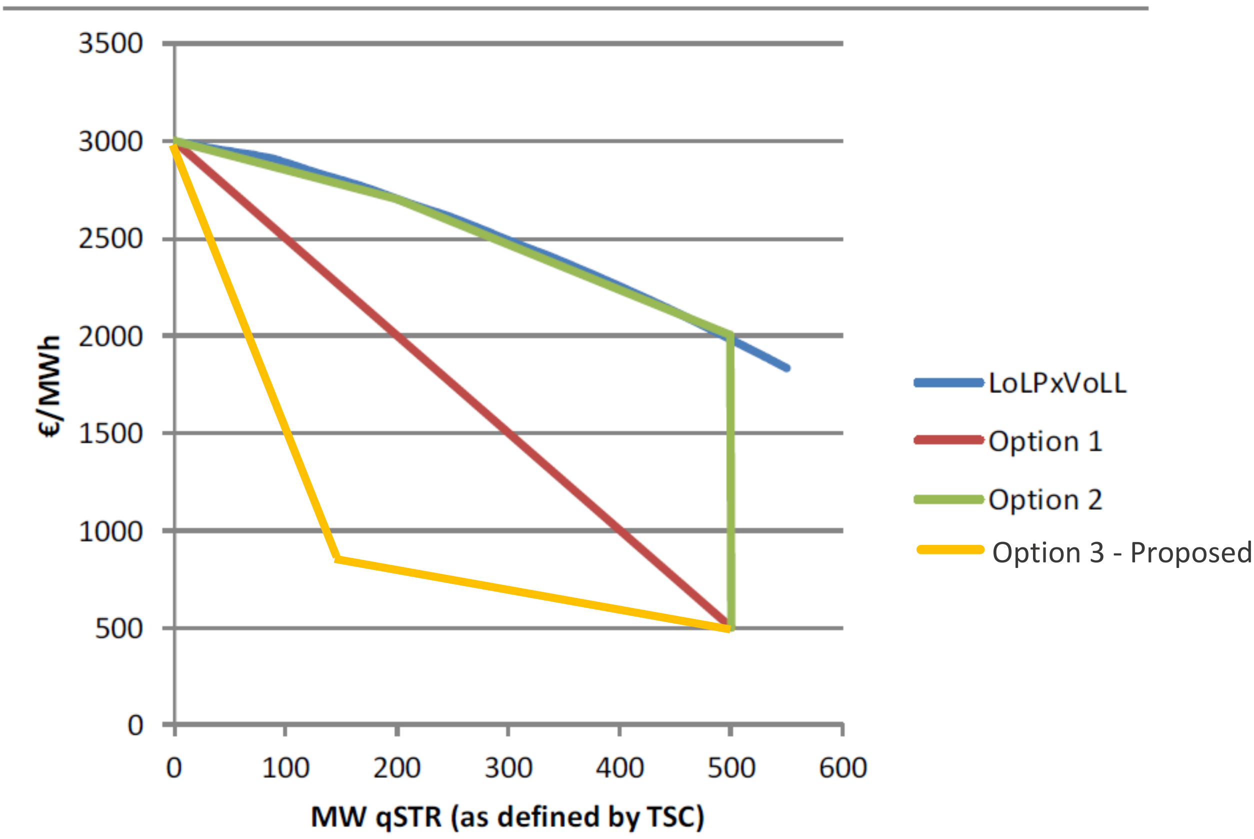


*Figure 1 - ASP Curves*

Of the two options presented, Electric Ireland would prefer 'Option 1' as we consider it to less punitive to our customers when compared to 'Option 2'. The idea of a vertical line in the ASP curve also fundamentally undermines the concept of the RO strike price being set by the combination of oil & gas peaker costs and DSU shutdown costs. It also works against the idea of a lower transitional FASP and the implications for how quickly ASP would increase by having an ASP starting price substantially higher than the strike price.

Consequently we believe that Option 2 is an unfeasible solution as the step from €500/MWh to €2,000/MWh at 504MW Operating Reserve is too severe and is unlikely to provide any tangible benefits in comparison to Option 1. The pricing parameters are not a function of LoLP x VoLL when the remaining operating reserve is above 504MW (qSTR>504MW) so it does not seem justifiable that it abruptly matches LoLP x VoLL once the operating reserve drops below 504MW.

Arguably there is already a significant price incentive for generators to be available when the strike price is reached since it is designed to be set higher than the SRMC of almost all capacity providers.

Overall EI's first preference is our proposed Option 3 which would reflect the indicative piecewise linear shape previously presented. We would strongly reject Option 2.

## Section 3: Cost Recovery and Charging

Of the options presented in the consultation, Electric Ireland believes that Option 3 is the most appropriate charging base. Under this approach, residential customers will not be put at a disproportionate disadvantage.

The proposed cost recovery approach using 'focussed periods' sends sharp price signals in times of likely high demand. Without interval metering in place for the residential market there is no basis to reward these customers for any behavioural change resulting from price signals in their tariffs. Such customers don't see an itemised capacity charge in their bills. This situation is likely to persist until smart metering infrastructure is rolled out.

As a result, Electric Ireland views option 3 as the least extreme of the 3 measures, with a sharper price signal (such as Option 1 or 2) being more appropriate for such times when the infrastructure is in place to enable the residential customer to respond (e.g. home automation) and for measurement of the response at a customer level. Option 2 also fails a sensibility test since while tea-time hours coincide with the demand peak in the winter months they do not in the summer months (due to the separation of cooking and lighting peaks).

Additionally, under options 1 and 2 there is a risk that larger customers will be incentivised to run backup generation during peak hours in order to avoid excessive capacity charges. This behaviour can have negative environmental implications and is not a characteristic of a well-functioning capacity market. A similar situation has occurred in the UK where Triad charges have resulted in customers running their generators every evening in order to avoid charges.

## Section 4: Reliability Option Parameters

### DSU Floor Price

Setting the DSU floor price at €500/MWh offers a number of advantages. It is likely to set the Strike Price (unless oil & gas prices exceed previous highs) in most cases which will offer a degree of stability in the Reliability Option process as it is likely to be less volatile than other potential floor prices.

While Appendix B outlines current DSU Shutdown Cost values in the SEM, it could be argued that these may reflect a blend of DSU costs from the costs of operating back-up generation to some estimation of pure demand reduction shutdown costs. Consequently careful interpretation may be required in using these costs as a DSU floor price for I-SEM. While the figures presented in Appendix B appear to suggest that a DSU floor price of €500/MWh would be appropriate, there is no exact reasoning provided as to how this figure was determined, or what conditions may lead to the figure being revised in future (and by how much it could change).

Alternatively, 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.

### Stop-Loss Limits

It is important that there is always an incentive for generation holding an RO to perform in the energy markets and we agree with the concerns expressed in Section 4.5.6 of the consultation relating to reduced incentives to perform after the second billing period following multiple scarcity events.

The alternatives suggested in Section 4.5.9, where the stop-loss limit is reduced progressively in subsequent billing periods certainly warrant consideration, provided that the drawbacks of these approaches do not outweigh the benefits.

Alternatively, setting the billing period stop loss limit to 0.25 of the annual limit would mean that scarcity in four separate weeks would be required to exhaust the annual limit and so would greatly increase the likelihood of a meaningful incentive on capacity providers to continue for the full capacity year.

While some elements of the stop-loss limits may be too demanding to introduce for go-live from a technical perspective, they may be worth considering for the enduring arrangements.

## Section 5: New Build, Termination Fees and Performance Bonds

Electric Ireland believes that there should be additional investment categories, rather than simply just the 'New Capacity Investment Rate Threshold'. The other two markets referenced in Table 3 of the consultation (GB and ISO NE) have additional categories to account for refurbishment, incremental capacity and environmental compliance. Including an additional category in the I-SEM would support schemes requiring a lower level of financial commitment than new build capacity. A lower level investment category for refurbishment could qualify for a one year contract period while still providing a degree of certainty for investors. This would offer a number of benefits including:

- Better use of existing capacity
- Existing providers will be more likely to carry out upgrades/refurbishment
- Better value to customers
- There is currently an excess of capacity, so there is no immediate need for large new builds

Electric Ireland does not feel it is appropriate to apply termination fees to capacity that does not meet the definition of a new build. This capacity has been deemed by the TSO to have a low level of required investment and does not deserve the financial security of a 10 year contract. As a result, it seems unwarranted that this capacity would be subjected to financial penalties for 'termination'. As mentioned in Section 5.3.23 of the consultation, the risk of this capacity terminating is already reduced under grid code requirements but also because they are already in the market and so would not face the full range of risks facing a new build.

With regard to DSUs, the short implementation periods for recruiting additional demand side participants results in two arguments against the application of termination fees to DSUs:

- Given that DSUs would find participation in T-1 auctions more appropriate, a significant portion of demand sites being recruited as additional capacity to a DSU would fall within the proposed €30/kW termination fee timeframe for 13 months before the start of the capacity year and would be unable to make use of the lower €10/kW termination fee which would seem to be discriminatory against DSUs
- Demand sites which terminate can be replaced by alternative demand side capacity easier and faster (and therefore at less cost and less risk to system security) than conventional capacity so that arguably termination fees are not required or at very much reduced levels

DSUs are typically composed of a portfolio of small aggregated sites with short implementation periods. There are numerous benefits associated with this dynamic trait, however DSUs need to be treated in a way that accommodates this flexibility in order for their full benefits to be achieved. Applying a termination fee to DSUs intending to grow their DSU organically by recruiting incremental customers would be a significant barrier to entry for the demand side and so undermine the growth of this important market sector. Consequently EI proposes that no termination fees should be applicable to DSUs since the risk to system security of failure to deliver proposed capacity is much reduced and because remedies are available in a timely and low cost manner.

Capacity which is subject to the 'Existing Capacity Price Cap' (€38.90/kW p.a. proposed) should not be exposed to a potential termination fee in excess of this (€40/kW proposed).

## Section 6: Auction Parameters

### Net CONE

As the CRM3 consultation showed, the standard in other jurisdictions is to set the price cap as a multiple of the Net CONE. There is a need for this to be calculated in an open and transparent manner.

The calculation of Net CONE has numerous inputs, each of which must be accurately and transparently determined as many of the outputs of the calculation will be used to define important parameters for the CRM auction.

### Auction Price Cap

In line with our previous consultation responses, Electric Ireland is in agreement with the introduction 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. Setting the required multiple to 1.5 times Net CONE in the case of I-SEM seems appropriate when compared to SEM and other international markets. The multiple value should be subject to review as discussed in the consultation.

### Existing Capacity Price Cap

In our response to the CRM3 consultation, Electric Ireland was not in favour of an Auction Price Cap for Existing Capacity. We are in favour of an environment where value is driven by competition. The risk of an artificially set Price Cap for Existing Capacity being set too low is a real threat to dis-incentivising participation in the capacity auctions. There is a risk 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.

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.

### Demand Curve Parameters

One of Electric Ireland's primary considerations is ensuring that an adequate level of capacity is obtained at the most economic price feasible. In respect of this, we are in favour of a sloped demand curve. Above the security standard, the demand 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. The zero-crossing point of 20% in excess of the Capacity Requirement as proposed in the consultation seems suitable for the transition. 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-Island Generation Capacity Statement. However, there will still be merit in procuring extra capacity if possible, at an economic price.

Electric Ireland supports the rationale behind the 3 options presented. We believe that Option C is the most appropriate for the first transitional auction.