

# Grange Energy Centre



## Response: CRM Parameters for T-4 2022/23 Capacity Auction (SEM-18-028)

---

*Status: Final*

*Date: 25/6/18*

*[Submission: By email to [karen.shiels@uregni.gov.uk](mailto:karen.shiels@uregni.gov.uk) & [kevin.lenaghan@uregni.gov.uk](mailto:kevin.lenaghan@uregni.gov.uk) by 26/6/18 ]  
With reference to consultation document issued by SEM Committee SEM-18-028 published 14/5/18  
and available at <https://www.semcommittee.com/news-centre/i-sem-crm-t-4-cy-202223-auction-parameters-consultation>*

Document prepared with support from Tom Bruton, Principal Consultant, BioXL

### About Grange Energy Centre

*Grange Energy Centre (GEC) is a planned 96 MW fast flexible power plant located within Grange Castle Business Park in South County Dublin. GEC is a potential new generation capacity provider in the upcoming T-4 auction 2022/2023. The legal entity of Grange Energy Centre is Grange Backup Power Ltd.*

## 1 Introduction

Grange Energy Centre (GEC) welcomes the opportunity of making a submission to the SEM Committee on this important Consultation Paper (SEM-18-028). The upcoming T-4 capacity auction 2022/2023 represents a mechanism to address potential capacity shortages in constrained areas, encourage new competition with attendant downward pressure on electricity prices and support an environmentally friendly and compliant generation portfolio.

It is our view that the upcoming T-4 capacity auction 2022/2023 represents a mechanism to mitigate power supply continuity risk by encouraging the building of strategically located suitable generation capacity. New efficient generation can deliver capacity much faster than improvements in transmission grid infrastructure which may take many years to complete.

While recognising that there is a balance to be reached between the short-term and long-term requirements of the grid system, it should not only come down to price in the short-term. New efficient generation investments act as a proxy for network investment in the short-term. Furthermore, old inefficient and highly polluting plant will eventually have to be replaced. If appropriate provision and strategic investment is not made on an ongoing basis to replace and update the generation fleet, it will eventually necessitate major investment and compromise the best interests of the consumer.

We note the proposal to put an effective price cap of Net CONE on multi-year contracts to solve transmission constraints and strongly disagree with this measure. It is discriminatory and contradicts the 1.5 CONE cap which was introduced in the original state-aid approved capacity market design.

We note also the proposal to withhold further volumes from the T-4 to the T-1 auction. This is an unacceptable risk to the power supply security situation for Greater Dublin. It is not prudent or in the interests of the economy to withhold procurement until the last possible opportunity.

This and other matters are addressed in our consultation response.

## Contents

1	Introduction .....	2
2	Responses to SEM-18-028 Consultation Questions.....	5
2.1	Section 1: Overview .....	5
2.2	Section 2: Treatment of Constraints .....	5
2.3	Section 3: Auction Format .....	6
2.4	Section 4: Capacity Requirement.....	7
2.5	Section 5: Administered Scarcity Pricing Parameters.....	7
2.6	Section 6: Auction Volumes and Demand Curve .....	8
2.7	Section 7: T-4 Auction Price Caps .....	9
2.8	Section 8: Derating Factors.....	10
2.9	Section 9: New Capacity Investment Rate Threshold .....	10



## 2 Responses to SEM-18-028 Consultation Questions

A detailed response directly addressing the SEM-18-028 consultation questions follows. The subheadings Section 1, Section 2 etc.. follow the format of the consultation paper.

### 2.1 Section 1: Overview

No specific questions or comments

### 2.2 Section 2: Treatment of Constraints

1) Do you agree with the SEM Committee's proposal to reflect transmission constraints in the T-4 auction?

Yes, it is essential at this point to procure capacity to resolve transmission constraints.

The alternative is market chaos and potential loss of load. The RO's acknowledge in the consultation paper that it is not possible to implement a different type of locational signal over the auction timeframe to solve the known transmission constraints.

There is a particular threat to the security of supply in the Level 2 Greater Dublin area and GEC contend that a minimum capacity commitment of 2,000 MW are required for the 2022/23 capacity year to ensure continuity of supply.

2) Do you have any comment on the possible inclusion of multi-year pay-as-bid Reliability Options to meet the minimum Locational Capacity Constraint requirement?

It is imperative that multi-year pay-as-bid contracts are permitted to solve a locational constraint.

To not allow multi-year bids is effectively excluding new plant from the market, as it is not possible to finance and build a new generation unit without a multi-year capacity commitment.

To allow constraints to be solved only by existing plant on single year bids is not in the consumers best interest over the medium-term. If new efficient plant with better environmental performance is encouraged to enter the capacity market, this will be in the consumers best interest, rather than encouraging inefficient polluting plant to stay in the energy system.

If multi-year bids are only allowed in unconstrained areas, where the generation capacity is not required this sends a perverse market signal to new entrants to locate in an unconstrained area.

3) Do you have a preference between the options set out in relation to pay-as-bid offers?

Option 3 is clearly the optimal choice to allow fairer competition between existing capacity providers and new entrants. This would also encourage market exit for older inefficient polluting plants. This approach would be consistent with the intention of the state aid guidelines that *"The measure should be open and provide adequate incentives to both existing and future generators"*. Recital 226 Guidelines on State aid for environmental protection and energy 2014-2020 or 'EEAG'<sup>1</sup>

---

<sup>1</sup> [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0628\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0628(01)&from=EN)

The option 2 proposal of a 1 x CONE price cap for procuring capacity to solve transmission constraints is effectively a price cap on new entrants in constrained areas which is anti-competitive, when others are allowed bid up to 1.5 X CONE (albeit for a 1 year period).

This is not consistent with the State Aid Decision (Case 44465)<sup>2</sup> which clearly set out that new generators could bid up to 1.5 CONE, not mentioning that this should be restricted to single year bids:

*“Demand-side response operators and new capacity... can bid up to the market wide auction price cap (1.5 x Net CONE)” – recital 50, State aid No. SA.44464 (2017/N).*

Furthermore, the EU Commission based their state aid decision on the basis of a 1.5 X CONE cap (Not 1 x CONE):

*“The Commission in addition considers that the fact that the full investment of new entrants must be recouped is already taken into account in the bidding caps, since new capacities can bid up to 1.5 Net CONE” – recital 137, idem*

CONE is derived from the Best New Entrant (BNE) as assessed under SEM-18-025. The concept of using BNE to set a price cap assumes a perfect market, which is flawed and not compatible with an open and fair auction. It is a reasonable expectation that only the most competitive bidders would have a similar cost base to the lowest cost new entrant (as assessed under the BNE process), and that the majority of bidders would have a cost base above the hypothetical and idealised scenario of the BNE. To not allow multi-year bids above CONE is placing an unreasonable expectation on new entrants that they must have an investment case that is as good as or better than the notional Best New Entrant.

### 2.3 Section 3: Auction Format

1) Do you have any comments on the SEM Committee's proposal to move to an auction format based on Auction Format C for the CY2022/23 T-4 auction, following the State aid decision?

This is the logical approach to follow and in-line with the state-aid decision to send an appropriate market exit signals where surplus capacity is located.

2) Do you have any comments on the TSOs proposed AASM for implementing the new auction format, as set out in Appendix A, or the RAs' proposed change to the N parameter?

We accept the RO and TSO advice that it will enable solving of the auction scenarios without running an infinite number of solutions.

3) Do you have any comment on the proposed change to the format to accommodate multi-year pay-as-bid Reliability Options?

It is welcome that multi-year bids are being accommodated within the auction.

However as discussed in Section 2 response, we do not wish to see discrimination against new entrants in the form of a 1 x CONE price cap.

---

<sup>2</sup> [http://ec.europa.eu/competition/elojade/isef/case\\_details.cfm?proc\\_code=3\\_SA\\_44464](http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=3_SA_44464)

We also disagree that it is appropriate to favour 1 year bids to solve lumpiness issue. There is no such thing as a perfect market that always offers exactly the lot volume required. By way of analogy, it is not a reasonable expectation to only pay for the 11 eggs required when a shop offers a dozen.

## 2.4 Section 4: Capacity Requirement

1) What are your views on the potential changes proposed to the CR methodology i.e:

- Incorporate some measure of operating reserves in the CR? What MW value?
- Whether the 8-hours LOLE standard should be tightened (reducing the LOLE target). What level do you consider to be appropriate and why?

It is reasonable to take a combined view of the capacity requirement in view of the operating reserve and tightening of the LOLE standard.

It was acknowledged in SEM-16-082 that a reserve requirement of 444MW should be considered, and this was not included based partly on the rationale that a higher overall capacity commitment had been made for the transition years. It is now appropriate to include this reserve as originally recommended by the TSO.

This would be sufficient to cover the required 100MW of minimum operating reserve and also the ~250MW increased capacity volume implied by moving to a theoretical 3 hour LOLE standard. The addition of 444MW should allow the 3-hour LOLE standard to be met in practice.

As outlined in the consultation document, the 3-hour LOLE standard is the policy direction of travel in terms of harmonisation with other EU countries and in particular the countries with current or proposed interconnectors (GB and France) and within the CORESO regional co-ordination zone (GB + France + Belgium + Ireland).

## 2.5 Section 5: Administered Scarcity Pricing Parameters

1) Which of the options for the value of Full ASP do you consider most appropriate for the first T-4 capacity auction, and why?

The direction of travel in EU policy is to avoid artificial price floors and to make ASP=VOLL to encourage price harmonisation.

The intention of the SEM Committee during CRM design was to move to VOLL after the transition period.

It is therefore appropriate that Option C “Full VOLL” is implemented.

This exposes generators to greater risk, but also sends the “*desirable exit signal in the longer term*” to less reliable plant, as acknowledged in the consultation paper. T-4 capacity procurement is not a process with only short-term consequences, it is already clearly influencing the long-term shape of the all-island generation portfolio.

2) Should we move to setting VoLL on an October to September year, rather than the current Calendar Year basis, so that a single value of VoLL pertains within a Capacity Year?

This is a reasonable and practical measure.

## 2.6 Section 6: Auction Volumes and Demand Curve

1) Should the proportion of the CR the SEM Committee hold back from the T-4 CY2022/23 auction for the T-1 CY2022/23 be increased from 5% to 7.5%, and why?

It is not prudent to withhold any additional volumes of capacity from the T-4 auctions. To do so exposes the grid and consumers to unacceptable risk of power shortages if insufficient capacity is available in the existing fleet (given that no new investment can be reasonably expected to participate in a T-1 timeframe).

There is an over-reliance on legacy inefficient plant running on HFO, Coal, Peat and Distillate which struggle to meet current and future industrial emissions limits. The continued operation of many of these plants relies on derogations from the Industrial Emissions Directive which expire in 2023.

Not only are there limits on air emissions, but also the CO<sub>2</sub> footprint of generators is being limited under the Clean Energy Package to 550g CO<sub>2</sub>/kWh. This is outlined in an earlier section, page 14 of consultation paper, where the increased risk of generator exit that this poses is highlighted.

Meeting air emission limits and reducing the carbon footprint would involve major overhaul of these plants.

It is a far better strategy to maximise the stimulation of new investment and sustainable low carbon generation capacity in a T-4, than withhold volumes for T-1 auction.

The rationale that higher levels of DSU can be relied on to participate in T-1 is flawed. Many of the low-hanging fruit participate in initial auctions, but increasing volumes becomes much more challenging, requiring ever-increasing payments to entice DSU into the market.

The state aid decision to require DSU units after 2020 to enter into RODP, as acknowledged in the consultation paper is likely to further impact on their ability to participate.

2) Should the minimum MW in each constrained area be adjusted for volumes withheld from the T-4 auction to the T-1 auction for CY2022/23? Which of Options 1, 2 and 3 do you prefer, and why?

GEC do not believe it is prudent to withhold T-4 capacity in constrained areas.

We disagree with the assertion that any meaningful quantity of data centre operators will enter into DSU contracts for capacity payments, and this is not an appropriate mitigation strategy to address the dramatic growth in demand for data centres in the Dublin area.

The potential data centre demand growth is the equivalent of decades of organic growth in the typical fashion of residential and commercial demand.

Most data centres wish to adhere to the Uptime Institute Tier IV standard for reliability which is the highest level of guarantee that a data center can provide, with 99.99% availability. This data center category is fully redundant in terms of electrical circuits, cooling and network. This architecture can withstand even the most serious of technical incidents without server availability ever being affected (See <https://uptimeinstitute.com/>).



Given this expectation around reliability, it is unlikely that a third party would be granted rights by a data centre operator to control power supply.

The proposal to withhold capacity up until the point of last procurement (T-1) is putting the Greater Dublin area power security at risk. The economic consequences are severe.

Secure reliable power supply is a key tenet of Ireland's FDI proposition, and many current and future jobs rely on this expectation. An Indecon assessment instructed by Eirgrid estimated the economic cost to Dublin of a 1 hour outage is €19m and €456m for a 24 hour outage.

We note also a recent communication by the CRU to the Joint Oireachtas Committee on Communications, Climate Action and Environment:

*"The Dublin region has experienced rapid demand growth and demand is expected to continue to increase .... Further reinforcement of the transmission system in Dublin will be necessary to continue to move power to customers, such as data centres. Additional generation in Dublin would also reduce such constraints. Conversely, the loss of existing generation in Dublin could cause security of supply concerns for the electricity supply in Dublin, but not the system as a whole."*

3) Which of the demand curve options, Options A or B, in your view is the most appropriate for the first T-4 capacity auction, and why?

Option A (no change from last T-1) is the more appropriate. The consequence of Option B is to again defer procurement from the T-4 auction to the T-1 for the same capacity year. This comes to our previous remarks around the risks that entails and the discrimination against entrants to the market requiring long-term capital deployment.

## 2.7 Section 7: T-4 Auction Price Caps

1) Do you agree with the proposal to keep the Auction Price Cap (APC) at 1.5 x Net CONE for the T-4 auctions? If not, please explain. Is your response in any way contingent upon the final value of BNE Net CONE for CY2022/23?

It is appropriate protection for consumers to maintain an overall price cap of 1.5 X CONE, and this should be maintained. The response is not contingent on SEM-18-025.

2) Do you agree with the proposal to keep ECPC at 0.5 x Net CONE for the T-4 auctions? If not, please explain. Is your response in any way contingent upon the final value of BNE Net CONE for CY2022/23?

Yes, this is appropriate. The response is not contingent on SEM-18-025.

3) USPC setting: Do you agree with the proposed approach for UFI submissions?

It is clear the GEC preference is to have no USPC, but rather let inefficient plant exit the market if the fixed cost base is too high. In this sense we do not agree with the approach for UFI submissions (unavoidable future investments). We believe these investments are avoidable by shutting down the generator and replacing it with new efficient generation plant.

4) USPC setting: Do you agree with the proposal to apply 2% p.a. inflation projection for estimating costs for CY 2022/23?

Yes.

## 2.8 Section 8: Derating Factors

1) Do you have any views on the proposal of EMDF value of 60% subject to review and update of the analysis for the decision paper?

This is reasonable

2) Do you expect to be applying to qualify a new interconnector between the I-SEM and an external market other than GB?

No

3) Do you have any feedback on the issues around transitioning from the interim to the hybrid solution for cross-border trading of capacity?

No

## 2.9 Section 9: New Capacity Investment Rate Threshold

1) Do you agree with keeping NCIRT at €300/kW, in the light of new evidence on BNE gross investment costs? Does your view depend on the choice of BNE reference plant resulting from the Best New Entrant consultation (SEM-18-025)?

Our view is not dependent on the BNE consultation. A high level of NCIRT should be maintained. This is to ensure only genuine new best-in-class technology is deployed, rather than basic refurbishment of older plants for the purposes of extending operation for short periods.

As evidenced within the paper in Table 5, 40% of BNE ranges from €305-€389 / KW-derated.

The NCIRT should therefore be revised upward inline with inflation and the findings of the BNE consultations.