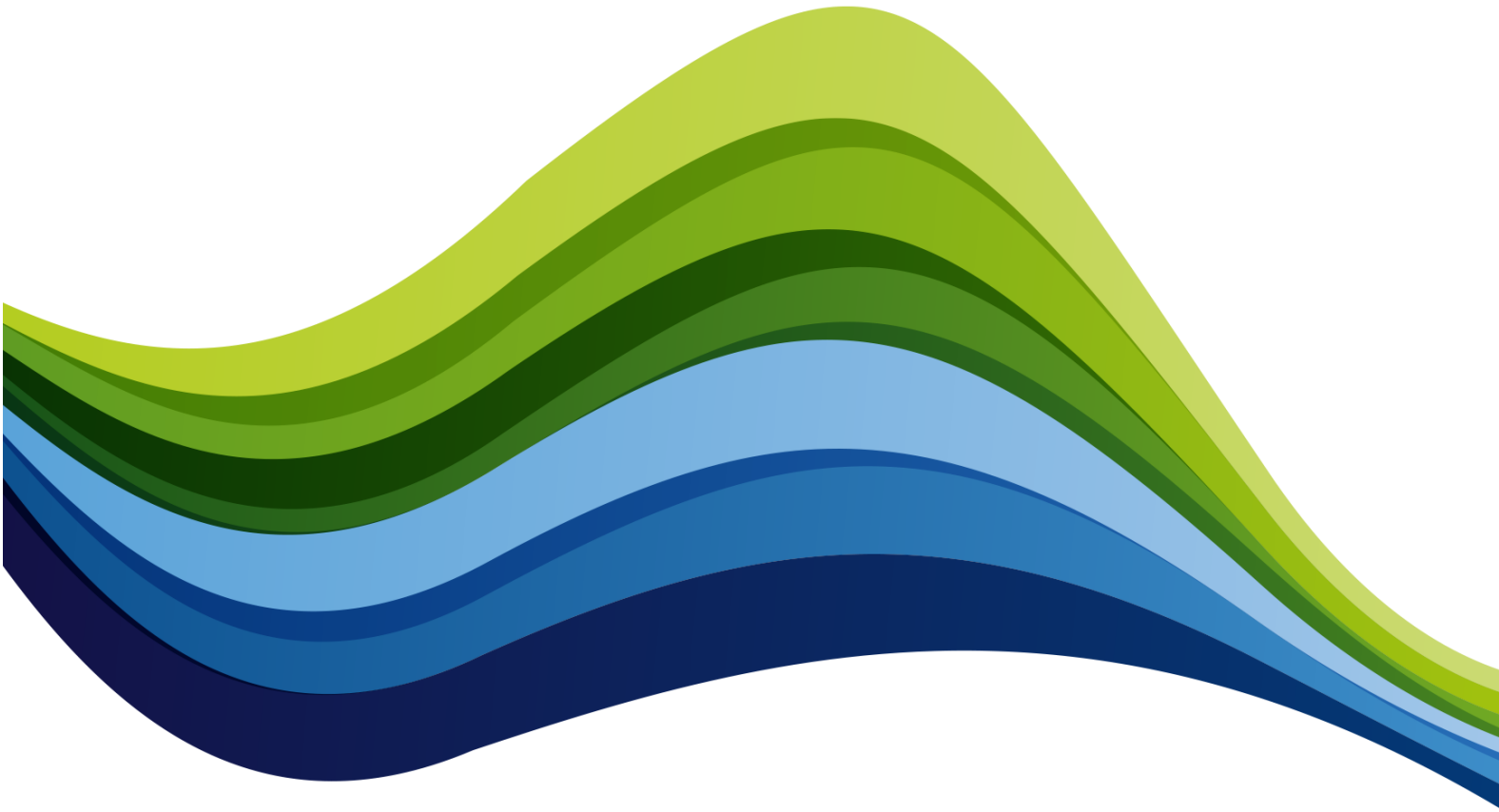
Capacity Remuneration Mechanism 2023/24 T-4 Locational Capacity Constraint Areas

SEM-19-048



Introduction

SSE welcomes the opportunity to comment on the SEM Committee consultation regarding the Locational Capacity Constraint Areas (LCCA) planned for T-4 2023-24.

Locational Capacity Constraint Areas are included in the Initial and Final Auction Information Packs for the auctions and provide an important signal with regard to capacity requirements and potential system services needs for the market. As a market signal for the forthcoming future 4-year period, this is an important parameter for pre-qualification applications and auction processes.

For the avoidance of doubt, this is a non-confidential response.

SSE Response

We provide general comments on the following topics, in addition to responding to the three questions posed in this consultation.

1. Timing of the consultation
2. Rationale and context for the change
3. Treatment of Northern Ireland T-4 2023-24
4. Consequences of the new LCCA

1. Timing of the consultation

We note that the new LCCA was already inserted into the IAIP without any context or prior consultation. It is our view that this does not represent good governance practice and represents perhaps an oversight by the TSOs in relation to auction processes for the T-4 2023-24. We are disappointed that industry did not get an opportunity for consultation prior to 13th September (publication of the IAIP)[1], or in good time for the pre-qualification window which closed on the 10th October. This would have provided time to justify such a significant change, receive feedback including potential alternative solutions, and an opportunity to then decide on whether to insert this LCCA into the IAIP. Rather, the action has been to insert the LCCA first and seek industry views after the fact. The only option open to industry to provide this time to explore the effects of this action now, is for the LCCA to be set to zero for T-4 2023-24. Setting the LCCA to zero will still provide a signal that this may change in the future. Therefore, we are not in favour if this approach. Rather we consider that the LCCA should not have been inserted into the IAIP, without prior consultation.

2. Rationale and context for the change

The new LCCA "Rest of Ireland" represents all other nodes in Ireland, excluding Northern Ireland which remains a level 1 LCCA. However, there is not sufficient background as to what specific issues are being resolved, why this is considered to be the best option and how the identified issues themselves will be resolved with this action. For the avoidance of doubt, this lack of clarity should not be taken as advocacy for this value being set to zero. Our view is that the new LCCA, in the absence of this context and given this is a significant addition to the constraint profile of the island, should not have been inserted into the IAIP in the first instance, without prior consultation.

We acknowledge that the TSOs perceive a risk that there will be a too high concentration of generation for Greater Dublin. However, we consider the effect of setting of new locational capacity constraint areas (LCCAs) also sets expectations for risks and opportunities of new investment in certain regions, encourages consideration of constraint costs within auction bids

[1] https://www.sem-o.com/documents/general-publications/Initial-Auction-Information-Pack_IAIP2324T-4.pdf

and represents a signal relating to expected capacity shortfalls or higher than expected increases in demand, for the auction delivery year to which the LCCA relates.

We also note other related consultations and decisions have also set competing expectations regarding Greater Dublin LCCA[2], which conflict with the intent of this new LCCA proposal. For instance, the key focus with these papers has been to signal the continued need for Greater Dublin to be a constraint and that generation siting in Greater Dublin should receive preferential treatment to address security of supply issues (DMILC process)[3]. Rather than addressing these signals, the proposal in this consultation is to set a new LCCA, without addressing the background signals which will likely still incentivise applications to provide capacity for Greater Dublin.

Furthermore, these related papers may create certain expectations regarding treatment in the new LCCA—i.e. system services scalars being proposed to be set to 1 in the Greater Dublin to encourage generation to remain and confirmation that connection offers can continue to be offered to the LCCA level 2 of Greater Dublin. The approach to encourage generation to remain (since a concern outlined in this paper is the exit of generation sited outside of Greater Dublin), and treatment for connection offers, could both reasonably be expected to be extended to another LCCA level 2, in the absence of a better explanation as to how this LCCA is different from Greater Dublin.

In summary, it is our view that the perceived risk has been created by these strong signals for generation to remain and locate in the Greater Dublin LCCA and that the remedy for reducing the Greater Dublin concentration risk is not to increase the level of constraints across the whole island.

3. Treatment of Northern Ireland T-4 2023-24

SSE is unclear as to why the approach has been to essentially designate the majority of the island as a constraint zone, (this new nested category at the same constraint level as Dublin) whilst still excluding Northern Ireland. If Rest of Ireland is designed to avoid over-procurement in Dublin, then the signal to locate outside of Dublin should also extend to locating in Northern Ireland.

Furthermore, we are concerned that Northern Ireland LCCA hasn't been re-evaluated given expected generation shortfalls and the delivery of the North-South tie-line, both scheduled for 2023. Under SEM-17-040a, a non-mesh area would represent a Level 1 LCCA. A meshed area would represent a Level 2 LCCA. At present, given only one North-South interconnector, Northern Ireland is designated as a level 1 LCCA non-mesh area, in line with the methodology. However, the delivery of the North-South tie-line, confirmed for delivery within the T-4 2023-24 delivery window, would result in a mesh area located in Northern Ireland. We are surprised this has not been of consideration in this consultation, which considers the Locational Capacity Constraints for T-4 2023-24.

In the Generation Capacity Statement 2019[4] it has been reported that Kilroot ST1 and ST2 are due to close in 2023. This would appear to result in a 9-month capacity gap until new generation could be energised to cover the capacity left by the closure of these units, as per T-4 2023-24 delivery deadlines. Following the potential DMILC situation in Greater Dublin, significant effort has been made to ensure that generation remain and locate in the Greater

[2] https://www.cru.ie/document_group/dublin-security-of-supply-locational-scarcity-scalars-for-system-services-in-the-dublin-region/
https://www.cru.ie/document_group/dublin-region-level-2-locational-capacity-constraints-for-the-upcoming-t-4-capacity-auction/

[3] https://www.cru.ie/document_group/dublin-security-of-supply-measures-to-mitigate-the-risk-of-disorderly-exit/

[4] www.eirgridgroup.com/site-files/library/EirGrid/EirGrid-Group-All-Island-Generation-Capacity-Statement-2019-2028.pdf

Dublin region to provide generation capacity. We cannot see how an expected set of closures in Northern Ireland, would not lead to a similar approach to manage the capacity gap in Northern Ireland, and which may precipitate an evaluation of constraints in Northern Ireland, for T-4 2023-24.

Finally, it is worth considering that as a result of Brexit, the status of the existing and new North South interconnector and tie-line, to a country outside of the EU, may be in question and may lead to a need for investment signals to ensure that generation will in fact site in Northern Ireland as required, to meet the capacity gap for 2023.

4. Perceived consequences of the new LCCA

The consequences we can see of this new LCCA are as follows:

- ***This change signals a significant shortfall in grid investment.*** The new LCCA essentially designates all of Ireland except Northern Ireland as highly constrained, and highlights that there has been historic and chronic lack of investment in grid infrastructure. The current progress of network development is unacceptable. The approach of building infrastructure only based on need may have been prudent in a less active market. We appreciate it also avoids the risks of gold-plating the network or stranded assets. However, we consider that the need to create this new LCCA, the degree of activity in capacity auctions to date, the capacity shortfalls forecast for 2023 and 2026 and the ambitious and time-bound objectives under the Climate Action Plan, together signal that the network is clearly not physically sufficient. Setting of the new LCCA will not result in an incentive for the TSOs to complete grid investment to resolve transmission constraints, as envisaged in the State Aid Decision.

- ***The new LCCA will likely lead to a high increase in capacity costs and imperfections charges.*** Given the capacity shortfalls falling within the delivery year for the T-4, there is a great degree of pressure for sufficient MW to be procured at this auction. While the proposed new LCCA helps to signal a capacity issue, it will not incentivise the root cause to be remedied, i.e. grid development. Instead, it could result in a huge increase in the cost of capacity and higher dispatch and balancing costs for the system, which could in turn push up Imperfections Charges, when these charges have markedly increased following the introduction of the new SEM. We acknowledge that a possible effect of high concentration of generation in Greater Dublin could also have been a risk of increased capacity costs at auction. However, the proposed new approach will almost certainly have the same result, in seeking to avoid this effect in the Greater Dublin LCCA. Therefore, the focus should be on creating real and biting incentives and penalties for proactive network development, streamlined connection offer and grid study processes and addressing of the current dampening effect of non-firm access as a connection approach. This could be achieved by setting a target for grid development against the cost to the TSO of redispatch to balance the system.

- ***The change appears to affect the eligibility of new generation for 10-year capacity contracts.*** The new LCCA seems to create an issue with the current auction format set as Pay-As-Bid for the T-4 auction. The current Pay-as-Bid sets one-year capacity contracts by default where constraints areas are binding and where there are no other solutions available to satisfy the minimum MW, (as reconfirmed in SEM 19-043). At the stage of the auction, it will not be clear which of all the nodes in the Rest of Ireland LCCA, would be binding, therefore, the possibility of a Pay-As-Bid contract will be one considered by all generation units considering applying to the auction.

- As outlined in the T-4 parameters decision[5]:

  Transmission Constraints - Option 1 (multi-year pay-as-bid Reliability Options only where there are no other solutions available to satisfy the minimum MW in the constrained area), is the appropriate solution to the issue of constraints in the auction.

- Pay-As-Bid was created to reflect that a unit is located in a constraint area, and that transmission constraints should (correctly), be treated as transitory. However, where the whole island, i.e. all nodes in Ireland represent a level 2 constraint, this appears to suggest that a high degree of new generation could by default, be awarded one-year, rather than 10-year capacity contracts. This could lead to a collapse of 10-year capacity contracts with a depressing effect on investment signals, potentially making any new investment untenable. We would welcome clarity on the impact of the new LCCA coupled with the current auction format.

- ***The change appears to contradict the context of the State Aid decision in relation to over-procurement and constraints.*** The capacity market was granted State Aid approval on the basis of certain conditions being fulfilled, i.e. over-procurement needs to be addressed by a specific auction year and that otherwise, the measures currently taken, are maintained until such time as transmission constraints are resolved. Therefore, there is an expectation that over-procurement will be addressed but that transmission constraints will also be resolved over time. We see no proactive evidence of transmission constraints being resolved. We note that Auction Format C is being retained for T-4 2023-24, rather than full combinatorial. The effect of this consultation is to introduce an additional constraint and to set a maximum capacity for the Greater Dublin region.

- The "locational issue" is therefore extended across all nodes in Ireland. This could lead to increased likelihood of over-procurement in capacity auctions, where the locational issue is addressed on top of the marginal capacity provider. The locational issue would now be spread across a larger region, i.e. a higher degree of plant could be considered necessary for security of supply, allowing for contracts set at the option fee of their original bid price. This provides a further incentive for units behind a constraint to price in the value of their constraint, in the hope that this is the result of being significant for security of supply (rather than a contract set at the clearing price).

  State aid No. SA.44464 (2017/N) – Irish Capacity Mechanism
  (48) The authorities explain that a key concern they need to take into account in designing the auction relates to the so-called 'locational issue'. In the short and medium term, there are significant capacity constraints in the transmission network. The system is therefore not indifferent to the location of capacity. At the same time, capacity that is necessary due to its location may not win in the auction.

  (49) The authorities have decided to address the locational issue through the design of the CRM and in particular through the design of the auction. Under the initial auction design as applicable during the transitional phase (i.e. until Capacity Year 2022/2023), the auction will be run without taking into account the location of the capacity provider. All providers up to the clearing price are awarded a capacity contract and entitled to an option fee at the level of the clearing price. However, if a plant that is crucial for security of supply because of its location was not successful in the capacity auction, this plant will also be awarded a capacity contract, with the option fee set at its individual bid price. In sum, the locationally important plant does not replace the

[5] https://www.semcommittee.com/sites/semc/files/media-files/SEM-19-043%20CRM%20202324%20T-4%20Capacity%20Auction%20Parameters.pdf

marginal capacity provider but is contracted on top of it. The authorities concede that this approach results in procuring more capacity than established in the capacity requirement that does not take into account any grid constraints. However, the authorities maintain that this approach better reflects the long-term needs of the system as it awards a contract to the marginal capacity that is competitive and will be needed once the transmission constraints are resolved.

Question 1. Do you agree in principle with the need for a Level 2 Rest of Ireland LCCA within the T-4 CY2023/24 capacity auction (being proposed by the TSOs in the T-4 CY2023/24 Initial Auction Information Pack and referenced in the RAs T-4 Parameters decision paper published 10 September 2019 (SEM-19-043)? Please provide rationale.

There is insufficient justification as to the need for this additional LCCA. Without this detail to justify the need, we cannot agree with the principle that this value is needed for this capacity auction. We are not in favour of this new LCCA remaining in the IAIP, or a value being set in the FAIP, to be published shortly..

SSE considers that constraints create an unfair playing field in the market and an incentive for those behind a constraint to take advantage of this benefit in terms of their prices in the market and at auction. We would consider there is a high risk of capacity cost increases for this forthcoming auction, where all parties could consider their local node a constraint and cost accordingly.

In addition, there is no clarity that the proposal is the only option, (or even an effective option) to manage the perceived risk of high concentration of generation in Greater Dublin, where the auction window only closed on 10th October. We appreciate that the auction creates a certain expectation and is designed to procure generation, however within a certain degree of discretion based on physical network and connection factors. Therefore, we are struggling to see how this issue could not be resolved by other means.

Question 2. Do you have any views as to the proposed calculation of the Level 2 Rest of Ireland LCCA minimum MW level?

The proposed calculation seeks to set a maximum MW for Greater Dublin, which isn't in line with this methodology as per SEM 17-040a, as outlined in our response to Question 3.

The Capacity Requirement is a method to set the maximum capacity for the T-4 auction. As per SEM 19-043, the Capacity Requirement is calculated all-island for each zone, i.e. level 1 Ireland and level 1 Northern Ireland, based on meeting the 8-hour LOLE. We would suggest that since the Capacity Requirement is the "ceiling" in the auction design, this could be the parameter manipulated to resolve the perceived risk of high concentrations of generation in Greater Dublin.

Question 3. Do respondents view the addition of a Level 2 Rest of Ireland LCCA as being appropriate within the methodology set out in SEM-17-040a? Please explain.

As per SEM 17-040a, locational constraints have a minimum MW set, e.g. the "Dublin Must Run" concept, to meet the capacity needs for security of supply. To provide for a maximum MW for Greater Dublin to be set via the proposed calculation, SEM 17-040 and the accompanying methodology SEM 17-040a would need to be amended to provide for

maximum MWs to be set under the LCCA methodology. We would not be in favour of considering the amend the current methodology to be able to apply the new LCCA.

The LCCA methodology is not a method to set an investment signal that no more capacity is required in a particular LCCA region to avoid over-procurement (i.e. a maximum capacity). The principle for setting LCCAs is to ensure that where there is a constraint issue affecting capacity and security of supply, that minimum MWs needed to mitigate these factors, are identified and can be procured in the auction. As per the decision itself, SEM 17-040, the "*TSOs were tasked with developing a methodology to identify significant capacity constraints and to calculate the levels of generation required in constrained areas to ensure security of supply"*, i.e. minimum MW required for security of supply.

It is also worth noting that the current LCCA methodology is consistent with the DMILC process for mitigating security of supply issues as well as the expectation of continued "locational issues" as expressed to the European Commission is a means to remedy security of supply issues, again indicating a focus on minimum MW not maximum MW.