



Electric Ireland Response:
Proposed Location Capacity Constraints Methodology
Consultation Paper

SEM-17-027

17th May 2017

Respondent's Details

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General Comments

Electric Ireland (EI) welcomes the opportunity to respond to the Consultation on the Proposed Locational Capacity Constraints Methodology. Consistent with our previous CRM responses, Electric Ireland views the consultation proposals from the perspective of a standalone supplier and as a representative of the consumer.

Our views on this consultation remain consistent with those of other consultations, particularly SEM-16-051 (Capacity Requirement and De-Rating Consultation Paper) and SEM-16-052 (CRM Locational Issues Consultation Paper).

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

- Alternative means of resolving locational capacity issues (such as network reinforcement for T-4 & T-3 auctions and customer interlocks for nearer term auctions) should also be examined when assessing areas which may have a capacity constraint. A cost benefit analysis should be carried out to ensure that constraints are being addressed in the most cost effective way possible from a customer perspective.
- Non-zero tolerance bands for De-rating of DSUs, in particular, would be beneficial given the very different technologies involved..
- Final constraint zones and De-Rating Factors should be published as soon as reasonably practical. Foresight of dates when this information will be made available / published would be favourable.
- There must be limits on the number of constraint zones in place to ensure a largely market based solution prevails.
- Using 2021/22 demand with the current network system is likely to overstate constraints as the network has not yet been reinforced to support the forecasted 2021/22 demand so that adjustments **will** be required to the current network assumptions to avoid this flaw.

Our detailed views on the consultation proposals are presented below.

Appendix A - Proposed Locational Capacity Constraints Methodology

The proposed Capacity Constraints Methodology appears to be comprehensive and rigorous but seems to have moved further away from a market based solution for a single capacity zone. The proposals appear to be less transparent than anticipated. Beyond the meshed / non-meshed assessment, it is unclear as to whether there will be any limit to the number or extent of locational constraints identified in the detailed assessment phase. In addition, in section C2.2.2.(b) of SEM-17-27a a Locational Capacity Constraint is: "defined by reference to nodes on the Transmission System (and Distribution System, as applicable)". Previously it was indicated at a Dundalk seminar that "only the two biggest" constraints would be considered. What is proposed in the text is very different and appears to be without limit and might even extend into the distribution network. Congestion in the distribution network should very much be a 'network' problem and not requiring resolution via a whole-market capacity mechanism.

While locational constraints need to be considered in the CRM transition period, these should not allow for the CRM exit signal to be significantly diminished - consumers should expect significant efficiencies over the transition period to the new Capacity Market.

No such limits are proposed to be applied in the detailed assessment approach. Consequently, to avoid the market-based solution becoming a technical failsafe mechanism, macro limits should be applied to Level 2 Capacity Constraint Areas such as:

- de minimis: max demand in a constrained zone must be greater than X;
- constraint limit: Local Capacity Constraints should be limited to the transmission network only; or
- constraint limit: only the two biggest nested constraint zones should be considered.

For some consistency reasons it has been proposed to use 2021/22 demand together with the current network system. However this is likely to overstate constraints as the network has not yet been reinforced to support the forecasted 2021/22 demand as is acknowledged in section 5.1.2 of the consultation document:

"If Locational Capacity Constraints are to be included in the T-4 Capacity Market auctions special consideration may need to be given to changes to the transmission infrastructure whose timing is likely to have a significant impact on network constraints."

Consequently it is imperative that appropriate adjustments **are made** to the current network assumptions to avoid this flaw. It is open to debate whether the errors introduced in this process are sufficient to undermine the proposal to use 2021/22 demand.

To enhance transparency and to build credibility for CRM amongst participants, the rationale behind the selection of particular constraint zones would need to be made clear as well as what constitutes a "large" locational constraint. Consequently, the chosen macro limit criteria must be clear and transparent.

It has been proposed to use an 8hr LOLE standard for BOTH NI and RoI. This is likely to reduce the local capacity requirement for NI which is currently 4.9Hrs LOLE. The inconsistency of having both different Grid Code security standards in each jurisdiction and having a common I-SEM security standard for the CRM has not been resolved in the High Level Design. Given that Locational Constraints have been presented as a temporary feature of the CRM, EI supports the proposal that they should be determined with reference to the common I-SEM 8-hour LOLE standard. This avoids the possibility of RoI consumers subsidising the cost of NI Locational Constraints to meet a higher standard of security while payments is shared between jurisdictions on the basis of demand.

The issue of whether locational constraints should be taken into account in T-4 (or any T-3 auctions) is not resolved in this paper. Electric Ireland reiterates its view that another guiding principle of the auction should be to solve locational constraints at the best value to the consumer. Consequently, a rounded view of solutions should be considered with a transmission cost-benefit analysis to ensure that no RO can be awarded via an auction to resolve a constraint where a more cost-efficient transmission solution to that constraint is possible. This approach would strengthen the competitiveness of the auction, reduce the chances of plant being labelled as required and holding an evergreen status of "must run" while most importantly ensuring the consumer is getting value for money.

Appendix B - Proposed Amendment to the Methodology for the Calculation of the Capacity Requirement and De-rating Factors

In previous consultation responses, Electric Ireland reasoned that the initially proposed De-Rating values for DSUs were too low and that the “DSU-AGU” grouping was not suitable. We are pleased to see that DSU De-rating values are ‘increasing significantly’ as this is more likely to accurately reflect the actual forced outage rates experienced by EI’s DSU portfolio. A lower De-Rating value for DSUs would have significantly hindered future development. Visibility of these De-Rating factors should be made available to participants in a timely manner.

EI maintain that non-zero tolerance bands for De-Rating DSUs should be allowed given the very different technologies of pure demand reduction and back-up generation employed. For DSUs, these could be based on the likely range of DSU outage rates according to the various types of DSU.

Electric Ireland cannot comment on the methodology in extensive detail without publication or more specific information regarding the final De-Rating factors.