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22 September 2023

DRAI Response to SEM-23-047 Consultation on Administered Scarcity Pricing Review

Dear SEM Committee,

I am writing on behalf of the Demand Response Association of Ireland (DRAI), the trade association representing Demand Side Unit (DSU) providers in the all-island Single Electricity Market (SEM). By aggregating the otherwise passive electrical loads of individual consumers into substantial load portfolios, our members create predictable, reliable, and controllable assets, which provide a valuable source of Demand Side Flexibility (DSF) that can be actively used by system operators to meet the needs of the power system.

Today, the DRAI represents approximately 700 MW of demand and embedded generation response across hundreds of industrial and commercial customer sites throughout the island of Ireland. These sites are managed by our members each of whom actively participate in the capacity, DS3, and energy markets. DRAI members are committed to shaping the future of power system flexibility through advancing DSF on the island of Ireland. As Ireland strives to achieve its renewable generation targets for 2030 and beyond, our promise as an industry-led organisation is to champion the development of innovative DSF solutions that are designed to address the system-wide requirement for flexibility.

The DRAI expresses a single voice on policy and regulatory matters of common interest to its members, and we welcome the opportunity to provide feedback on the SEM-23-047 Consultation on Administered Scarcity Pricing Review. On behalf of the DRAI, I hope that you find our response helpful and constructive.

Conor Totterdell
Regulatory Analyst

Jon Sedgwick
DRAI Chair

Summary of the DRAI Response

The Demand Response Association of Ireland (DRAI) acknowledges the necessity for a review of Administrative Scarcity Pricing (ASP) in the context of Ireland's looming security of supply crisis and welcomes SEM-23-047. We are aligned with the core objective of improving unit reliability but emphasise that any modifications to ASP must be considered and implemented with caution.

Key Recommendations and Positions

Option 1 - Adjusting qSTR Definition: The DRAI supports removing TOR2 from the reserve calculation to make the ASP mechanism more sensitive. However, we advocate that such a change should only be implemented for future capacity years beyond years for which auctions have been run. This is for the following reasons;

- *Changing of Risk Profiles of Capacity Contracts* – By changing this parameter in the short-term would undermine investor confidence and potentially unwind any benefit such measures might bring.
- *Limited Short-term Benefit* – Capacity providers must be given time to respond to a substantial signal and improve their availability. Altering this mechanism won't bring significant additional availability in the short-term.
- *Increased Cost to the Consumer* - Higher investment and risk in capacity contracts will raise auction bids, ultimately increasing consumer costs and offsetting any benefits from improved ASP signals.
- *Historic Under-procurement of Capacity* - ASP changes should be implemented in the medium-term to allow for the historic under-procurement to be corrected, to avoid unfairly penalising current market participants for TSO and RA errors
- *A Lack of Secondary Trading* - Lack of secondary trading amplifies risks from ASP changes; enhancing this market before implementing ASP amendments can improve system reliability.
- *Overly Risk-Averse System Operators* – The absence of any load-shedding, despite having one of the highest LOLE standards in Europe has cost implications for supply-side, who are relied upon to prevent such cases.

Option 2a & 2b - Accounting for System Constraints: The DRAI opposes these options, arguing that they neither improve unit reliability nor properly account for locational constraints. We do not believe that these are not appropriate mechanisms for achieving the objectives set out by SEM-23-047.

While the DRAI supports the primary goal of the ASP review to enhance unit reliability, we insist that these changes must be undertaken carefully. Changes to key market mechanisms should have a clear path to implementation that doesn't undermine existing contracts or deter future investments. The DRAI also encourages the SEM Committee to explore additional avenues, such as improvements to secondary trading and DSU incentives, for achieving unit reliability without adversely affecting market participants or consumers.

Introduction

The DRAI welcomes this review of Administrative Scarcity Pricing. Ireland is facing a security of supply crisis, which primarily driven by reduced reliability of existing units, a lack of new generation coming onto the system, as well as unprecedented growth in demand, as outlined in CRU's Security of Supply Programme of Actions[1]. As outlined in EY's 2022 review of the CRM design[2], Administrative Scarcity Pricing (ASP) could be adjusted so that "*BM pricing better reflects market scarcity",* highlighting this as one of the potential solutions to the reduced reliability of existing units. The DRAI agree with this position but are conscious that recalibrating a key market instrument must be done carefully, and in conjunction with other solutions that address the two other underlying factors. Particular attention must be given to prevent undermining these other solutions and exacerbating the security of supply crisis. Such solutions include improving market incentives for DSUs, as highlighted in section 4.2 of the EY report, especially by enabling energy payments for these units. We strongly feel these solutions must be progressed before changes to ASP are implemented. It is in this context that the DRAI responds.

Consultation Options

Option 1– Adjust the definition of qSTR in the TSC to comprise Replacement Reserve only

The DRAI is in favour of this option, providing it is accompanied with associated policies, and is implemented for Capacity Years for which an auction has not been run, the soonest of which is 2027/28.

The DRAI recognises the RAs consideration that reliability is the key objective of ASP in the SEM. By reducing the reserves used to calculate the qSTR, thus causing a higher frequency of periods whereby ASP could be triggered, this option would incentivise unit reliability. It would also succeed in shifting the signal towards adequacy scarcity rather than reserve scarcity.

However, there are several other considerations to be made when evaluating the impact of a sharper ASP signal on unit reliability, as well as reviewing the option in the wider context of security of supply. This is why we believe it appropriate for the SEM Committee to outline changes to ASP and implement said changes in capacity years for which auctions have not yet been conducted.

Changing of Risk Profiles of Capacity Contracts

The most apparent reason to implement these changes for capacity years for which auctions have not yet taken place, rather than immediately is that of the changes it implies for the risk profiles of the capacity contracts. Despite being addressed the Consultation Paper as an "anticipated" parameter, it remains a reasonable argument that by adjusting, *ex post*, a key factor of the capacity contract held by participants, the RAs would damage investor confidence. On a wider scale, weakening this trust would be detrimental to the system in the long run, given existing unit reliability is only one solution to the security of supply issue, with the additional need for greater levels of investment in new generation.

Limited Short-term Benefit

Market signals such as ASP serve to incentivise participants to act in a certain way. In this instance, as the Consultation Paper states that "*with a robust reliability signal in place, existing units can take action to improve performance, particularly during periods when the system margins are forecast to be tight.*" While this is true, such market signals cannot be responded to on a short-term basis. Improving reliability, for many participants, will require greater levels of investment, only possible in the medium-

[1] CRU/21/115

[2] Ernst & Young, Performance of the SEM Capacity Remuneration Mechanism, 28 June 2022

term. EirGrid, in their response to SEM-21-083 makes the point that they "*expect that generator and demand side unit participants already seek to maximise their availability insofar as is possible, noting that all units with capacity contracts are required to be available at their awarded de-rated capacity for the duration of the contract.*" This is certainly the case in the short-term, and changes to market signals should be implemented with a longer time horizon to allow for the substantial investment required to improve availability.

It should also be noted that by creating a 4-year implementation path, units will begin to make efforts to improve reliability before the date of implementation. As such, benefits to the system of increased availability and reliability are likely to be realised in the medium-term, even before changes to ASP are activated. This furthers the case for a clear, long-term implementation timeline.

Increased Cost to the Consumer

The substantial investment, match with the greater risk profile of the capacity contract, both outlined above, will force auction bids to become more expensive. This will be further exacerbated by the perception of participants surrounding RA *ex post* actions that may have to be factored into the offer price. These increased auctions bids will be passed on to the consumer indirectly, negating any benefit increased ASP signals might offer to the market.

Under-procurement of Capacity

As highlighted in Section 1.3 of the EY review of the CRM, several factors such as TSO forecasting and RA adjustments have led to insufficient capacity being procured through the CRM. Given the implications of such under-procurement on adequacy, and given the desired link between ASP and adequacy, the DRAI believes it would be reasonable to delay the implementation of changes to ASP until the CRM has been able to correct this situation, to prevent current market participants from being unduly penalised due to this RA and TSO forecast adjustment approach.

A Lack of Secondary Trading

As highlighted by respondents to SEM-21-083, the lack of a secondary trading mechanism prevents participants from managing their risks, including the additional risk any amendments to ASP would bring. The period between a decision to amend the structure of ASP and the actual implementation of such changes should be used to enhance the secondary trading market, allowing participants to reduce risk. This will also enhance the overall reliability of the system, as units with worse reliability will trade their positions away to more reliable generators.

Overly Risk-Averse System Operators

The link between system reserves, ASP, and Loss of Load Expectation (LOLE) is an important one. Reliability Standards are determined to establish the accepted trade-off between the cost of increasing resource adequacy and risk of load shedding on an electricity system. Ireland has never experienced any hours of lost load since the introduction of the CRM. One could argue that by being overly risk-averse, in order to prevent load shedding, the system operators have prevented ASP from being triggered. Furthermore, given the trade-off, and the market dynamics of ROs, the cost of increasing resource adequacy through a sharper ASP signal is passed directly onto the supply-side. Rather than adjusting the mechanism of ASP to incentivise reliability in the short-term, thus increasing the cost for generators, the system operator should consider allowing the market to dip closer to ASP more often.

In summary, the DRAI support the removal of TOR2 from the reserve calculation for the purposes of ASP. However, given the limited short-term benefits, and many negative consequences for capacity contract holders, we firmly believe this can only be done with a long lead time, allowing for certified capacity to react to a sharper signal, as well as appropriately accounting for risk in auction bids for relevant capacity years.

Option 2a

The DRAI does not believe it necessary to account for system constraints in the context of ASP. Specifically, despite the North South constraint being a significant source of transmission system limitations, it does not seem reasonable to only address one constraint in such a way, especially given the on-going work that may result in such a measure being redundant as soon as 2026. As per the previous section any change to ASP must happen over a period of at least four years. This applies for Option 2a and Option 2b, despite our reluctance to support these measures. Given the need for this longer timeline, matched with the expected completion of the North-South interconnector prior to 2027, the proposed Option 2a does not seem a viable option that would benefit the system in the long run.

Furthermore, the inability of the TSO to enhance the transmission system and thus utilise all available generation should not have negative implications for market participants. The precedent this would set for future investment decisions would be inappropriate, and fundamentally counterproductive to the objectives of the system.

Finally, given the SEM Committee's primary goal of improving reliability of existing generators, this option seems to be a separate issue of congestion management. As such, any suggested changes to this management should be discussed in a separate forum, rather than adapting a signal intended to achieve a different objective.

Option 2b

The DRAI does not support the method proposed for accounting for the impact of constraints across the system. Without having insight into the SEM Committee analysis, the proposed multiplier does not appear to accurately account for the locational issues experienced by the system. The complex and variable nature of reserves from a locational perspective could not be captured by a single multiplier figure, and attempting to do so would weaken the efficacy of ASP as a mechanism. We also believe that a multiplier would not achieve the intended objective of ASP to improve the reliability of capacity.

With respect to the supplementary objective of location-specific investment of flexible resources, a fixed multiplier for ASP would fail to send the correct signals for such investment. Other methods such as tariffs and locational capacity constraints should continue to be utilised and enhanced to encourage location-specific investment.

Once again, while the DRAI disagrees with approach set out in 2b, we would like to reiterate that should this approach be selected, it must be implemented over a 4-year period, as per our points in previous sections.

Other Considerations

The DRAI acknowledges that adjustments to the ASP mechanism were recommended by Ernst & Young in their review of the CRM. However, several related issues were also highlighted as areas needing to be addressed. Specifically, solutions with a similar objective to the proposal set out in the consultation paper include providing adequate incentives for DSUs, enabling secondary trading for market participants, and refining the principle of flagging interconnector actions.

The DRAI strongly believes that the issue of inadequate DSU incentives is one that needs to be addressed in the short-term. The enablement of energy payments, as proposed in Mod_02_23, should be the first step in this process. As highlighted in the EY report, this has significant benefits, including greater incentives to be available, as well as greater competition and reduced costs in the balancing market. The report also states that it is very feasible to implement.

Finally, the role that interconnectors play during times of system stress needs to be reviewed in conjunction with adjustments to the ASP mechanism. At least one period referenced in Annex 2 of the Consultation paper as times of scarcity, nearly leading to a triggering of ASP, was exacerbated by exports to GB from the SEM. Given EY's recommendation to monitor technology performance in stress events to inform future de-rating factors, it seems appropriate to review the net export profile during these events before penalising other capacity providers with a sharper ASP signal. Interconnector de-rating factors have been fixed since the introduction of the I-SEM, and as such, have failed to account for their real contribution to the system in stress events.

Conclusion

The DRAI supports the review of Administrative Scarcity Pricing and agrees that removing TOR2 from the reserve calculation would be a suitable measure to increase the sensitivity of the mechanism. However, we firmly believe that this change must be laid out in a decision, with a path to implementation for capacity years for which auctions have not taken place. Despite the "anticipated" nature of the parameters contained in the IAIP, the DRAI have outlined several reasons as to why changing a fundamental aspect of the market should be taken in the medium, and not short-term. These reasons are in line with the stated objective of enhancing unit reliability, as well as the holistic goal of diminishing the security of supply crisis.

We also believe that Options 2a & 2b are not suitable adjustments to the ASP mechanism, neither in the short or medium-term. We do not support the view that accounting for locational constraints, either by isolating one of many constraints, or adding a multiplier into the calculation, is a suitable approach to achieve the objectives set out by SEM-23-047.

Finally, we urge the SEM Committee to consider other solutions that will enhance unit reliability such as enabling energy payments for DSUs, improving the secondary trading market, and reviewing the net contributions of interconnectors during system scarcity. These will be a vital part of the solution to the security of supply crisis, by supporting, rather than penalising capacity providers.