

To: Lesley Robinson
Utility Regulator (NI)
Queens House,
14 Queen St,
Belfast,
BT1 6ED

Mo Cloonan
Commission for the Regulation of Utilities (CRU)
The Exchange,
Belgard Square North,
Tallaght,
Dublin 24

2nd May 2019

Re: SEM-19-013 – CRM DSU Compliance with State Aid

Dear Lesley and Mo,

I am writing to you on behalf of the Demand Response Aggregators of Ireland (“DRAI”), the trade association representing Demand Side Unit (DSU) and Aggregated Generating Unit (AGU) providers in the SEM. The DRAI believe there is a significant role for demand-side participation to address the increasing requirement for system-wide flexibility and we are committed to the development of both demand response and system services in Ireland. Our purpose is to provide a single voice on policy and regulatory matters of common interest, and we are also interested in adopting a proactive approach to overcome the market barriers that inhibit growth in this sector.

The DRAI response to the recent consultation is provided overleaf and I trust that you will consider it in your deliberations. However before discussing the specifics of the proposed solutions I would firstly like to take this opportunity to highlight the value of the demand side flexibility offered by DSUs, which can be utilised by the TSO to balance the system at times of stress and through doing so facilitate greater volumes of variable, non-synchronous renewable generation. In doing so, a share of the market value is returned to the consumer for playing a positive role in the support of the power system. The efficiencies created through effective system balancing also reduce the overall system operation costs and ultimately deliver financial savings to all consumers.

Fundamentally, a DSU is an aggregated group of Individual Demand Sites (IDS) which have the ability to reduce demand through any or all of the following ways:

- End consumers who have the capability to reduce demand at times of system stress. This could include large industrial customers, small and medium sized business customers, and residential customers, if they have the capability to respond to price or other signals of system stress.
- Generation capacity which does not have the capability to export to the grid (and hence may be treated differently from other generation), but which has the capability to reduce the end consumers’ net demand from the grid at that site if it generates, e.g. back-up generation.

- Generation capacity with the ability to export its generation, and also has the capability to reduce end consumers' net demand if it generates¹.

A Demand Side Unit aggregator utilises highly sophisticated technologies, which include high-speed control systems and communications platforms, and are capable of responding to instructions from the TSO or changing system conditions within milliseconds. Indeed, it is the collective response of the various load reduction technologies within each DSU that enables the complex and tightly controlled flexibility solution that is of value to the TSO. This flexibility will become increasingly important as the proportion of generation from variable, non-synchronous renewable energy sources continues to grow, and we believe that the regulators need to give further consideration to how DSUs can be facilitated.

Across Europe, demand side participation is increasingly recognised as an effective and highly efficient means of balancing the supply of electricity with consumer demand. And the DRAI note that the consultation paper makes reference to the recently published Electricity Regulation (part of the new EU "Clean Energy for all Europeans" package), and specifically the obligations designed to fully integrate DSUs into electricity markets, which go beyond the requirements of the State Aid decision. We also understand that both the requirements stipulated in the State Aid decision and those signalled within the draft Electricity Regulation have been introduced to support delivery of the EU 2030 energy targets, and we believe that these requirements are intended to fully integrate DSUs into electricity markets is to encourage demand side participation.

The DRAI recognise that in order to comply with the Capacity Remuneration Mechanism State Aid Decision difference charges will need to be introduced for DSUs as and from October 2020, and for this reason DSUs will need to receive energy payments to improve overall alignment in the treatment of all market participants. However, we would also emphasise that need to engage with the industry and to give careful consideration to the potential impact of any proposed solutions prior to their introduction.

DRAI response to solutions proposed to achieve DSU compliance

Interim solution

Our members have considered alternative options and have concluded that the proposed interim solution presents a viable path to achieving compliance with the State aid decision in the time available. We agree with SEMC's disallowance of the alternative considerations set out in sections 2.2.30-34 of the consultation document and discourage any measures that would create an industry reliance on other market participants. Subject to agreement by the SEMC that this interim solution will not be succeeded until such time as a suitable enduring alternative has been developed and agreed in close consultation with industry stakeholders, the DRAI supports the implementation of the interim solution based on the following principles, as set out in the consultation document:

- Assume that the dispatched quantity for DSUs is equal to the metered quantity;
- Remove the TSSU for the DSU from the settlement algebra of the TSC;
- Socialise the DSU energy revenue across all suppliers through the Socialisation fund;
- Increase the FSOCDIFFP.

Enduring solution

However the DRAI members have major concerns with the proposed enduring solution, which sets out to achieve long-term compliance with the State aid approval conditions. We have in fact concluded

¹ I-SEM, Capacity Remuneration Mechanism, Detailed Design, Decision Paper SEM-15-103, 16 December 2015

that the solution presented is in fact a counter incentive for DSU participation, and we consider that its implementation would set DSUs at significant disadvantage to other market participants. Fundamentally, we have significant concerns about the two main tenets what underpin the proposed enduring solution:

1. **Settlement Quality Metering**

The proposal to mandate settlement quality metering on participating IDSs suggests that the challenges associated with the measurement of demand response are not clearly understood. The provision of response by an IDS is already assessed on the basis of a settlement quality meter, the IDSs revenue meter. However, as DSUs comprise load shedding and on-site generation, the methodology for assessment is the key challenge as it must be capable of fairly measuring a demand reduction. In essence, this is the measurement of “what didn’t happen”, a metric that is not directly measurable. As such, any short-comings of the current methodology must be clearly understood and the ways in which these will be addressed by the addition of further settlement quality metering must be evident prior to a costly technology change being mandated. It should also be noted that the metering systems employed by DSUs are often designed for high-speed measurement to align with the services they provide. Such meters often differ technically from meters that are used for settlement and, as such, settlement quality metering may not operate at the resolution required to adequately assess a DSUs range of services.

2. **Netting of DSU Response and Fiscal Meter Values**

The proposal to add an IDSs measured response back on to its metered demand for settlement purposes, as proposed in the consultation document, will place DSU participating IDSs at a considerable disadvantage when providing response and threatens the future of DSU participation.

Load Shedding sites that provide response will be charged

$$\text{DUoS} + \text{Supplier Margin} + ((\text{Energy} + \text{TUoS} + \text{MO Charges} + \text{Supplier Capacity}) \times \text{DLAF})$$

by their supplier while they can only recover the Energy portion of these costs from their DSU. This will prevent the site from being able to earn inframarginal rent, placing them at a disadvantage to generator units operating in the market. This also acts as a penalty for being ‘dispatchable’ as all supplier charges are avoided when ‘non-dispatched’ actions are taken. This removes control from the TSO and provides an unfair advantage to vertically integrated DSU-Suppliers.

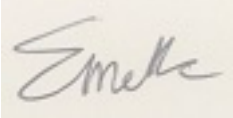
Exporting/Partially Exporting sites currently receive netting benefits for energy provided under supplier power purchase agreements. These netting benefits exceed the energy-only payment that would be recovered through a DSU and, as such, penalise sites that participate in a manner that is dispatchable and delivers much needed renewable-supporting flexibility to the TSO.

The DRAI is therefore concerned that tenets of the proposed enduring solution do not address the challenges associated with achieving compliance with the State aid decision in a manner that also delivers the required support of increased demand-side participation. In fact the DRAI consider that the proposed enduring solution represents a counter incentive, and that its introduction would result in an erosion of the DSU industry in Ireland.

The DRAI emphasise the need for the RAs to initiate engagement with our industry as we believe that proactive discussions would facilitate sharing of views and enable the development of solutions designed to fully integrate DSUs into electricity markets without setting them at a disadvantage to other market participants.

On behalf of the DRAI I hope that you find this communication helpful and constructive, and we look forward to hearing from you.

Yours sincerely,

A rectangular box containing a handwritten signature in dark ink. The signature is cursive and appears to read "Emeke".

EMEKA CHUKWUREH
DRAI Chairman