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9th July 2021

Re: Consultation on Dispatch, Redispatch and Compensation Pursuant to Regulation (EU) 2019/943

Dear Gina and Kevin,

I am writing to you on behalf of the Demand Response Association of Ireland (DRAI), the trade association currently representing Demand Side Unit (DSU) providers in the all-island Single Electricity Market (SEM). By aggregating the 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 utilised by system operators to meet the near-time needs of the power system.

Today, we represent approximately 600 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. In the coming years as our membership grows, we envisage a future where the DSF solutions offered by our members expand to include energy storage and new distributed generation technologies. As Ireland strives to achieve the 70% renewable generation by 2030, 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 collectively we welcome the opportunity to respond to the SEM Committee's *Consultation on Dispatch, Redispatch and Compensation Pursuant to Regulation (EU) 2019/943* (SEM-21-026) and trust that you will consider it in your deliberations.

Summary

The DRAI recognises the importance of this consultation. It has wide ranging ramifications for investment in new renewables (noting the sister Proposed Decision SEM-21-027). The DRAI wishes, however, to focus on the specific queries raised by the SEM Committee within the consultation around the classification of "Instruction Sets" within the meaning of Article 13 of the Regulation. We thank the SEM Committee for raising this issue to our attention.

As you are aware, Instruction Sets are applied by the DSO / DNO to the ability of aggregators to use Individual Demand Sites (IDS) flexibility where it is assessed such flexibility as part of an aggregated unit (AGU / DSU) could cause an unacceptable condition on the distribution network. These Instruction Sets apply varying degrees of static restriction on the periods an IDS can participate within a DSU / AGU.

It is important to note that Instruction Sets are not reflected within the connection agreement of the user. They are a scheduling restriction on the activities of an aggregator.

The DRAI are of the view that Instruction Sets are a form of non-market based redispatch, which places new obligations on DSOs on the operation, reporting, mitigation, and (dependent on the connection offer) compensation of same.

Analysis of Instruction Sets under the Regulation

The specific text from the consultation is as follows:

"On the issue raised concerning instruction sets applying to Demand Side Units, DSUs' PNs, forecast availability and declared availability prior to Balancing Market gate closure and in real-time operation reflect these DSO/DNO Instruction Sets. This affects the dispatch quantity for a DSU in order to manage congestion at a distribution level and the RAs are of the view that where any changes are introduced at a distribution level to provide market-based solutions for congestion management, this issue will need to be considered further. The Balancing Market Principles Statement notes that where constraints arise on distribution network connected units which impact on the TSOs' ability to dispatch or control such units, the constraint is reflected in the scheduling and dispatch process. Where a distribution connected generator, participating in the SEM, is subject to a TSO constraint the RAs' understanding is that there is no distinction between the treatment of such units in terms of bid offer acceptance or balancing market settlement.

As more generation connects at the distribution level, the management of constraints which limit access to the energy market will need to be addressed. Feedback is invited from Demand Side Units and System Operators on this point in particular as part of this Consultation Paper and how it may best be managed in terms of Article 13 of the Regulation."

In the DRAI's view, instruction sets are a measure, activated by the DSO/DNO, which curtails a demand site's load pattern (vs. that which it would have been in the absence of the instruction set) in order to change the physical flows on the power system to relieve physical congestion. Therefore, instruction sets are clearly a form of redispatch as per the definition in the Regulation 2019/943.

Instruction sets are also not market-based. The SEM Committee's own text recognises this fact. Indeed, instruction sets clearly meet the test of Article 13 (3) (c) to be classified as non-market based, as there is no functioning market to allow for local distributed connected resources (demand and generation) to compete to resolve the distribution network congestion issues which require their imposition.

We note the SEM Committee's proposal within the consultation:

"The Regulatory Authorities acknowledge that future market developments may include new forms of dispatch and redispatch at the distribution level."

It is the DRAI's view that these redispatch actions are being taken today implicitly through changing the availability of aggregators of IDSs (where the IDSs have signed up to no such restriction of their behaviour under their own connection agreements).

Instruction Sets: Examples

It is the DRAI's position that Instruction Sets are a form of non-market based redispatch in scenarios where Demand Side Units (DSUs) , due to an instruction set, are prohibited from delivering an ex ante market position, or prevented from being dispatched in the Balancing Market as they would otherwise have been. Taking the following example:

- A capacity reliability option event occurs in the Balancing Market (the ex-ante market clearing prices for the same period were below the reliability option strike price).
- A DSU with a Short Run Marginal Cost greater than the ex-ante clearing prices but less than the reliability option strike price would not have an ex-ante traded position but would be called on in the Balancing Market to deliver below the reliability option price.
- However, where the DSU contains an IDS that is subject to an instruction set, defined and implemented by the DSO, which prevents it from providing coordinated demand response, that would result in the DSU being redispatched away from its desired running level.
- This would result in the DSU having an exposure to uncovered reliability obligation Difference Charges, even if the IDS subject to the instruction set was fully available to respond, as well as foregone DS3 System Services revenues.
- The current market design results in a material risk exposure for Demand Side Participants as a result of instruction sets which are wholly outside of the control of the DSU or the IDS.

The fact that in the case of instruction sets this redispatch arises through an obligation for a unit to declare its availability in a manner that reflects the instruction set is besides the point: that is an implementation approach which allows the DSO to communicate the presence of its redispatch to the TSO through forced market participant declarations.

Consequences of Instruction Sets being a Form of Redispatch

As Instruction Sets are a form of redispatch, this places an obligation on the TSOs / DSOs to report on the level of instruction sets and the level of non-market based redispatch arising (Article 13(4)(b)), and to take measures to reduce the level of redispatch.

The DRAI supports these obligations. Instruction sets appear to be often crude and wide-scoping in nature. For example, they require non-delivery of response on a seasonable basis to static MW limits. This is far below the standards envisaged in Regulation 2019/943 and the requirement that non-market based re-dispatch should only be used insofar as no market-based alternative is available or all available market-based resources have been used.

Compensation for Non-Market Based Redispatch

Article 13(7) sets out the requirements for compensation for generators which are subject to redispatch:

"Where non-market based redispatching is used, it shall be subject to financial compensation by the system operator requesting the redispatching to the operator of the redispatched generation, energy storage or demand response facility except in the case of producers that have accepted a connection agreement under which there is no guarantee of firm delivery of energy."

We note that the IDS have not accepted a connection agreement under which there is no guarantee of firm delivery of energy. Therefore, compensation must apply.

Article 13(7) continues:

"Such financial compensation shall be at least equal to the higher of the following elements or a combination of both if applying only the higher would lead to an unjustifiably low or an unjustifiably high compensation:

(a) additional operating cost caused by the redispatching, such as additional fuel costs in the case of upward redispatching, or backup heat provision in the case of downward redispatching of power-generating facilities using high-efficiency cogeneration;

(b) *net revenues from the sale of electricity on the day-ahead market that the power-generating, energy storage or demand response facility would have generated without the redispatching request; where financial support is granted to power-generating, energy storage or demand response facilities based on the electricity volume generated or consumed, financial support that would have been received without the redispatching request shall be deemed to be part of the net revenues."*

DSUs' financial support flows through the Capacity Mechanism, being the net revenues from Capacity Payments and Difference Payments. The intent of the Regulation compensation is clear: demand response facilities should be made financially whole to the level of revenues they would have received were it not for the non-market based redispatch.

This compensation must be coordinated with capacity mechanism Reliability Option payments to ensure that a unit with sufficient availability does not fall short of meeting its delivery obligations solely due to the impact of an instruction set. For example, a market unit which is restricted from delivering energy in the Balancing Market to meet its Reliability Obligation and which was otherwise available at a level in excess of its adjusted load-following obligation should be compensated for any Reliability Obligation Difference Charges associated with under-delivery directly attributable to an instruction set.

Conclusion:

When instruction sets on IDSs within DSUs were first introduced in 2015 it was clearly stated by the CRU (the Commission for Energy Regulation at the time) that such instruction sets should restrict dispatch only so far as required to mitigate risks to system security and should set out as specifically as possible the conditions under which they are required (vs. 'all year, all the time' restrictions). The guiding principle that instruction sets should become less restrictive over time was also clearly enshrined.

It is important that Instruction Sets should be as dynamic as possible (reflecting actual system conditions and only applying restriction when, and as much as required to protect the network) and the DSO/DNO should be incentivised to remove / reduce their use as much as possible. The DRAI believes that correctly classifying instruction sets as non-market redispatch, with the associated reporting and compensation requirements, will clearly allocate the associated financial risk with the DSO/DNO which is responsible for alleviating the network constraints / conditions that require their imposition (vs. this financial risk sitting with the AGU/DSU as is currently the case).

On behalf of the DRAI I hope that you find our response helpful and constructive, and as always, we welcome any request from the CRU to further clarify any aspect of our response.

Yours sincerely,

Paddy Finn

Paddy Finn,

DRAI Chair