DR4EU
DEMAND RESPONSE FOR EUROPE

13th September 2024

Consultation on the draft royal decree and related regulation
Contribution regarding Demand response through Aggregation

DR4EU is grateful to the Spanish authorities for the public consultation on the draft royal decree and related regulation (altogether hereafter the Draft). DR4EU apologizes for contributing in English.

DR4EU is a coalition of innovative companies involved in the development of demand response (DR) across Europe and beyond (some of them specifically involved in Spain). Hence, this response focuses on aspects regarding DR, and the opportunity to develop flexibility from the consumers' side, particularly via *Demand response through aggregation,* as referred to in article 17 *Demand response through aggregation* of the Directive (EU)2019/944 and related European legislation.

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Strong support for the proposed goal and strategy

First of all, we would like to strongly support the overarching view (presented in part II of the introduction of the Draft) that:

(i) the energy transition requires developing large volumes of flexibility to be delivered daily;
(ii) independent DR aggregators will have a major role for this, alongside innovative electricity suppliers who may also wish to become DR aggregators;
(iii) demand response through aggregation will introduce important economic benefits for final consumers, when participating in wholesale electricity markets, and thus reducing wholesale prices and their volatility – thus benefitting directly to all suppliers (or, in the case of balancing services to the TSO, via their balancing responsible party).

Hence the Draft aims at implementing the common European framework established to ensure that DR through aggregation can participate in all electricity markets, as an alternative to generation, without discrimination (as set forth by article 17-1 and 17-2 of Directive (EU)2019/944).

DR through aggregation, an alternative to generation

To this end, DR aggregators need be allowed to bid volumes (MWh-s) in the wholesale market, just as generators do; and DR aggregators should deliver these volumes, by modifying demand of a set of consumers they operate: while a generator delivers 100 MWh by having power plants generate electricity and inject it in the grid, a DR aggregator delivers 100 MWh by reducing the consumption.

Therefore, we would respectfully suggest to clarify the definition of aggregators provided in the Draft (cf. *Reglamento, Articulo 2. Definiciones & Articulo 20. Definición de agregación de energía eléctrica*). Indeed, it should be clear that DR through aggregation is sold in the market as an alternative to generation, i.e. demand reduction avoids generation and is sold instead of *energía eléctrica.*

Hence, the requirement for aggregators to acquire energy is not relevant, since no such energy is neither needed nor generated; related provisions should be deleted – in both art. 22 (e) & art. 23 (e).

As they stand, any such provisions would create confusion regarding the financial compensation that may be granted to suppliers of participating consumers.

The wording adopted in art.20 (5b) is preferable, i.e. referring to "*energía activada*", or even more clearly, "*activación de la respuesta de demanda*" (as referred to in art.17-4 of Directive (EU)2019/944).

Consistently, the wording used for such compensation should be clarified in art.22 (h). Indeed, there is no such thing as "*energía empleada como respuesta de demanda mediante servicios de agregación*": again, DR is delivered as an alternative to generation, so that no energy is used – neither generated nor consumed, thanks to DR aggregators reducing demand rather than generators injecting energy.

Along the same line, the end of the sentence in paragraph 5(1) of *Disposición transitoria cuarta. Modelo de agregación* should be deleted: "*cuya energía programada haya sido posteriormente movilizada por el primero en los mercados mayoristas de electricidad* ". Indeed, the DR aggregator does not engage energy provided by any third party: he simply delivers by reducing the load of participating consumers, thus substituting any need for energy. The fact that the supplier made a forecast on the load entails that he bought volumes in the markets accordingly. But volumes bought by suppliers include both energy delivered by generators, and demand response delivered by DR aggregators instead of energy. Both are bought by suppliers to match the overall demand (be it by supplying demand or changing it). But the part they buy from DR aggregators is an *alternative* to generation, which is not bought and does not occur – and indeed the delivery of demand response does not rely on any generation: to the contrary, DR provides an alternative to generation.

Correction and compensation without creating a barrier to DR

As a consequence, there is no basis for requiring DR aggregators to pay for any financial compensation that the Spanish authorities may wish to award electricity suppliers. The Directive allows such compensation be paid to suppliers, but it requires not to create a barrier to DR and aggregators.

To this end, the Directive allows Member States to require various "*empresas eléctricas*" to pay for this compensation – rather than specifically DR aggregators.

Indeed, awarding a compensation be paid to suppliers is allowed by the directive; but it is not justified by the argument that they provide any energy to DR aggregators – in fact, they don't. The basis for a compensation (if any) should be costs, i.e. that, when "*perimeter corrections are introduced*" (as per recital 39 of the Directive), these corrections imposed on suppliers of participating consumers entail costs for them (the correction deprives them of positive imbalance payments they usually receive when demand is lower than the volumes they bought based on their forecast).

Accordingly, we welcome the idea that any financial compensation charged to DR aggregators should be limited. We agree that setting a maximum at 50% of the spot price is better than 100%; but as long as it may be charged to DR, this is still likely to create a barrier for DR and aggregators, and thus breach the directive, given that aggregators are to compete with generators, who would not bear such (huge) cost. Alternatively, there would not be any problem to award a full compensation to (corrected) suppliers, provided it is not charged to DR but mutualised among all suppliers. Indeed, all suppliers are those who benefit directly from DR reducing prices and volatility in the markets. The mutualised compensation ensures that all suppliers share fairly the costs, just as they share the benefits of DR. Then, as per the Directive, the maximum part of the compensation charged to DR would be, at worse, the difference between the benefits and the costs, only in the case the benefits would not exceed the costs. However, corrected suppliers could receive a "full" compensation, the cost of which would be mutualised among all suppliers, as benefits are. With this approach, all suppliers should be fine, because they would all receive net benefits thanks to DR, and these net benefits would be shared fairly.

Such mutualisation, while ensuring that the financial compensation does not create a barrier for DR, has three important and very useful consequences:

(i) all suppliers will benefit equally from DR, so that they can pass on these net benefits to their customers, i.e. all consumers will benefit from DR reducing prices and volatility.

(ii) no bias is created among suppliers, whether their customers participate in DR or not, so that competition among suppliers remains as is.

(iii) this includes suppliers willing to become aggregators: the mutualised compensation will keep their supply business whole, and ensure their aggregation business can develop (to compete without discrimination versus both independent aggregators and generators).

Therefore, we would respectfully recommend to exclude that the financial compensation awarded to suppliers be charged to DR aggregators, and therefore delete paragraph 5(1) of *Disposición transitoria cuarta, and stick to "Un esquema de compensación que mutualice el coste asociado (…)".*

Similarly, in the *Reglamento general*, the art. 20 (5b) should clarify how benefits of DR are to be taken into account, as follows (given the text of art.17-4 of the directive): "*En todo caso, el método de cálculo de dicha compensación podrá tener en cuenta los beneficios inducidos por los agregadores independientes a otros participantes en el mercado, de tal modo que se podrá requerir a los agregadores o los clientes participantes que contribuyan a dicha compensación, pero solo en la medida en que se demuestre que los beneficios para todos los suministradores, los clientes y sus sujetos de liquidación responsables del balance no excedan de los costes directos en que hubieran incurrido*."

Balance responsibility of DR aggregators similar to generators'

However, there should be no free ride for DR aggregators in the power system: DR aggregators must bear the same balance responsibilities as generators, i.e. to deliver the volumes they sell – or to pay the same imbalances charges for the difference (as mentioned in recital 15 of Regulation (EU)2019/943).

To this end, aggregators need to be allowed to prove they deliver, by referring to a baseline, so as to calculate their "allocated volume", this being defined (in the said recital) as the difference between this baseline and the actual consumption of loads they operate.

Baseline methodology and quality assurance to ensure accuracy and reliability

We acknowledge that the Draft provides for a *resolución de la Secretaria de Estado de Energía* to establish a methodology for the determination of the baseline. We assume that the full process would be based on quality assurance, in order to ensure the best reliability at lowest costs for consumers. This is consistent with the new EU regulation adopted as part of the electricity market reform, whereby aggregators may use dedicated measurement devices, subject to quality requirements.

To this end, the methodology should rely on aggregators to propose ways to calculate the baseline, given these calculations would depend on the way aggregators operate, on the kinds of loads they operate, and on the services they deliver. Hence, such proposals should be made by aggregators, and subject to approval by a neutral third party, be it the Ministry or the NRA (CNMC), possibly after some technical analysis by the TSO. Consistently, the calculations should then be run by the aggregators, under quality assurance, i.e. subject to audits mandated by a neutral third party such as the NRA.