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Contribution to the public consultation on a legislative change in the Netherlands on the Participation of demand response through aggregation

This contribution is focusing on the parts regarding demand response (DR) aggregation, particularly those in Chapter 2, articles 2.1.2 and 2.5.1, among those intended to transpose the provisions of the European Clean Energy Package (CEP).

This contribution is provided by DR4EU, a coalition of innovative companies operating DR already in some twenty European countries, whether as aggregators, be they independent or also suppliers, and/or as solution providers to such companies. Members most involved in the discussion regarding the Netherlands are mentioned below (*in fine*).

We do understand that the intention of the proposed legislation is to open the Dutch market to demand response, including via aggregation, and rely on the market to develop DR. However, our concern is that the current draft would create very anti-competitive provisions that would have a dramatic impact on the development of DR in the Netherlands. Such consequences could be avoided by a closer approach of the text of the CEP regarding:

- (1) balance responsibility of a DR aggregator,
- (2) balance responsibility of suppliers of participating consumers
- (3) possible 'compensation', if any, paid to suppliers, and who should pay it.

Based on this analysis provided below, we would respectfully recommend that the provisions of articles 2.1.2 (§3) and 2.5.1 (§3 & §4) be revised in order to ensure that:

• the responsibility of a DR aggregator is related (only) to the volume of changes he triggers in the loads of consumers participating to DR, and his imbalance is calculated as the difference between this volume and the DR volumes he sells (i.e. DR volume accepted in the market), as set forth in the CEP (cf. in particular the Electricity Regulation - art. 5 clarified by recital 15);

• the responsibility of suppliers of participating consumers is clear separated, related to the remaining load, be it as it occurs physically (so called 'uncorrected') or as it would have occurred should DR not have been triggered (so called 'corrected'), both models being allowed by the CEP (cf. in particular the Electricity Directive - recital 39);

• if ever a compensation were to be paid to the suppliers of participating consumers or their BRP (depending on the model used), this shall not create a barrier to demand response participation in all electricity markets, hence the compensation cost cannot be charged to the DR aggregator only, and must be spread among market parties (cf. in particular the Electricity Directive - article 17-1 & 4).

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1. Balance responsibility of the DR aggregator as defined in the CEP

The principle of a balance responsibility of DR aggregators is established by art.17-3 (d) of the Electricity Directive, using the same words as and referring explicitly to art.5 of the Electricity Regulation, whereby DR aggregator, as any market participant, should be responsible for the imbalances they cause in the electricity system. The same words are used in Recital 39 of the Regulation, intended to clarify the notion of imbalances, and how it applies to DR aggregators.

Indeed, imbalances are defined therein as the difference between volumes delivered and sold, precisely: the 'allocated volume' and the 'final position in the market'.

For a generator, the volumes delivered are those MWhs he generates and injects in the grid. For a DR aggregator, the volumes delivered must be calculated using the measurement of the actual consumption and a baseline, i.e. a counterfactual consumption:

- the baseline is calculated in order to reflect what the consumption would have been without DR, i.e. should the aggregator not trigger any change in loads;

- hence the difference with the actual loads is the change achieved by DR; this difference is counted as the 'allocated volume' for the DR aggregator.

Should a generator sell 20 MWh and deliver only 15 MWh, this would create physical imbalance of (-5MWh) in the system, and such imbalance would have to be tackled by the TSO in his duty to balance the grid, at a cost. Therefore, the generator is 'financially responsible' for such imbalances: the TSO will charge him an imbalance charge for the missing 5 MWh.

Similarly, should a DR aggregator sell 20 MWh and reduce demand by only 15 MWh, this would create the same imbalance (-5MWh), requiring the same intervention by the TSO: the definition in recital 39 ensures that the aggregator would bear the same imbalance charge.

 \Rightarrow This definition set forth in the CEP should be reflected by clarifying §3 of article 2.5.1.

2. Balance responsibility of suppliers and various models complying with the CEP

The balance responsibility of a supplier is symmetrical to that of a generator: the supplier should buy the volume his customers consume. However, in case some of these customers participate in DR aggregation, their consumption will be changed by DR. For instance, if a DR aggregator triggers a reduction of their loads of 10 MWh, this will result in a positive imbalance of +10MWh for the supplier (or, more accurately, for his BRP).

Such imbalance must be 'settled' or a 'perimeter correction introduced'; according to Recital 39 of the Electricity Directive, the choice is up to the Member State:

- either standard balancing rules are applied, and the imbalance is settled by a payment from the TSO to the supplier's BRP, where the +10MWh will be paid at the positive imbalance price; - or a 'perimeter correction' is introduced, i.e. the DR volume is added to the real consumption; such 'correction' of the BRP's position would deprive the BRP of his positive imbalance and related payment; hence such arbitrary modification by the TSO is likely to justify a 'compensation' be paid by the TSO (see discussion of this issue below).



Whatever the model adopted, the rules should apply, and there is no need for any agreement between the aggregator (or his BRP) and the supplier (and his BRP).

Besides, requiring such an agreement, as set forth in the draft legislation proposed, would entail huge practical and legal competition issues. Indeed, electricity suppliers and DR aggregators are direct competitors. In particular, an electricity supplier may develop a DR business, i.e. become a DR aggregator himself. Then, there is no way to ensure fair competition with other aggregators: as soon as he is aware a consumer is ready to participate in DR, the supplier will naturally propose his own contract, and it will be too easy for him to convince his customer, all the more if the supplier has the power to delay the conclusion of a contract that would be necessary for any other aggregator to operate.

Such harsh competition from the supplier is not pure theory: it did happen frequently in countries where DR is already allowed, to see the supplier turn up 'spontaneously' and propose a DR contract to customers wishing to engage with other aggregators. There is no reason why the supplier should not do it, but it would be biased competition to provide him information and rights to preempt consumers from choosing other aggregators.

This was highlighted by the French competition authority in its decisions published in 2013, based on the general Directive on Services. It is now directly stated in the Electricity Directive that no agreement should be required from any third party but the aggregator and the consumer. In particular:

- article 17-3 (a) excludes any "*consent of other market participants*"; hence DR aggregator should not need to conclude an agreement with suppliers;

- article 13-1 & 2 ensure that any consumer can enter a DR aggregation contract "independently from their electricity supply contract and from an electricity undertaking of their choice" and "without the consent" of their supplier.

Besides, an additional provision in article 17 intends to forbid any such bias, including the risk of simply *informing* the supplier: to this end, art.17-3 (d) requires to "*fully protect commercially sensitive information and customers' personal data*", and of course the existence of a new aggregation contract with a given consumer is sensitive in this respect.

We do acknowledge that the draft Dutch legislation would require an agreement with the supplier only after the DR contract is signed between the consumer and the DR aggregator. However, this does not solve the competitive issue at all. Indeed, contracts are not forever; and, more precisely, consumers should be allowed to terminate a contract easily and very shortly, as per article 12 of the Directive. Hence, having a DR contract signed before involving the supplier does not prevent from anti-competitive bias.

⇒ To avoid any such risk, we would respectfully suggest to amend article 2.1.2 (§3) and article 2.5.1 (§4) so that no agreement would be needed between DR aggregators and suppliers, nor their BRPs. Again, we emphasize that no agreement is needed as soon as balancing responsibilities are properly defined according to the CEP. We will also recommend to amend article 2.5.1 (§4) regarding the 'compensation' issue as described below.



3. How to deal with a 'compensation' paid to suppliers and who should pay it?

According to the draft article 2.5.1 (§4), the supplier's BRP of a consumer participating in DR "shall provide the BRP of the DR aggregator with a reasonable offer regarding the conditions under which <u>electricity can be transferred</u> between their electricity schedules, distribution of any <u>imbalance costs</u> and the <u>exchange of relevant data</u>".

As described above, there is no imbalance cost to be settled among those BRPs. Each BRP has his own responsibility in the system: the BRP for DR is responsible for DR volumes (and should match them with sales in the market); the BRP for supply is responsible for supplied volumes (and should match them with purchases in the market). If they do not ensure the said match and thus create imbalances, the TSO will settle these imbalances physically and financially. Hence, these balance responsibilities are clearly separated and no "imbalance costs" need be charged from one BRP to the other.

Similarly, no data should be exchanged among them. Any individual data would be commercially sensitive, and should be protected. Besides, no data exchange is useful to either BRP (except for anti-competitive reasons). The only data that may be needed by the BRP of a supplier could be the total volume of DR taking place among all his customers, operated by all aggregators. Such need may depend on the 'model' used: if a 'perimeter correction' is imposed to a BRP, it is likely that he would be entitled to know the volume of such correction. But this is only aggregated data (adding DR volumes from all his customers, regardless of their aggregator). In no case would it be justified to provide the BRP with data per customer and per aggregator. Hence, there is no "*relevant data*" to be exchanged among them.

Finally, there is no "electricity transferred", and such notion does not comply with the CEP.

The concept of 'transfer of energy' was designed before the directive was adopted, and it was intended to justify a payment 'or the energy transferred'. This lead to require a 'compensation payment' from customers or their DR aggregator or his BRP, to their supplier (or their supplier's BRP). This concept is now precluded by the Directive.

Indeed, establishing any compensation payments to suppliers is now only an option for Member States, and anyhow such mechanisms are strictly limited by the directive. In particular, they '*shall not create a barrier*' to DR participation in the market; hence compensation costs can no more be charged fully to the aggregator, but should be spread among various market parties ('*electricity undertakings*').

If energy were transferred to the aggregator, he should obviously pay for it: it should not be an option, and at least, there would be no reason to spread the cost among market parties. The directive would say that Member States should require aggregators to pay suppliers (or their BRPs). This is not the text of the directive, for a simple reason: there is no transfer or energy related to DR, because there is no energy to be transferred - thanks to DR. This is a physical fact as well as a market fact.

Indeed, suppose suppliers buy altogether 100 MWh in the market, and suppose the market settles with x MWh of demand reduction offered by aggregators, and of course the rest from generators, i.e. (100 - x) MWh of energy. Obviously, the more DR is bought (the greater x), the less energy is available (the smaller 100-x). And this is exactly what is needed for physical balance; because with x of the actual consumption will not be 100 but 100-x, perfectly



balanced by the 100-x generated. The more DR, the less energy is both generated and used. At most, DR is used only, no generation is sold, and no consumption occurs: there is no energy.

In all cases, DR is not based on energy: it is an alternative to generation. The more DR, the less energy. Obviously, no payment can be required for energy that does not exist; and the volume x of energy cannot be transferred to the aggregator, because it is neither generated nor used.

Besides, it is precisely because the volume x of DR is not made of energy, that the 'compensation' issue arises. Indeed, when DR is sold in the market, it means that suppliers buy it, and pay for it; but they cannot bill it to consumers who do not consume this volume, because this volume is not energy, but a reduction of their demand. Then suppliers claim it is not fair that they should buy this volume x and not have any revenues (as opposed to the volumes of energy they buy, and bill to consumers). Then, member states may decide to pay them a compensation for this. However, this also depends on the 'model' chosen by the member state: with an 'uncorrected model', the supplier receives a compensation from the TSO, or more accurately his BRP receives it, for his positive imbalance entailed by DR. But with a 'perimeter correction', the BRP is deprived of such payment, and will request a compensation for the correction. Ultimately, the cost is thus transferred from suppliers or their BRPs to the TSO. And in turn, the TSO may wish to recoup this cost.

Finally, the directive prohibits charging it all to the aggregator, because this would create a radical barrier to DR participation in the market. Indeed, it would mean that DR would sell in the market (e.g. at spot price) but would have to pay the 'compensation', thus basically be deprived of its market revenues. This is why the directive allows spreading the cost among market parties: it does not say that compensation would be paid by the aggregator, but by various "*electricity undertakings*", so as not to create a barrier to DR. And to define how to spread the costs, the directive provides a solution, using the so-called net benefit rule, as described in article 17-4.

 \Rightarrow As a consequence, to comply with the CEP (and with physical and market realities), we would respectfully suggest to delete §4 of article 2.5.1.

In addition, should the Netherlands wish to require a compensation be paid to suppliers of participating consumers (or their BRPs), the principle should be set forth in the Dutch legislation and need comply with the directive. The key requirement is that it shall not create a barrier to demand response participation to all electricity markets (as per articles 17-1&4 of the Electricity Directive). This requires spreading compensation costs. The single recommended solution is then to use the net benefit rule (as per article 17-4).

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DR4EU members most involved in the discussion regarding DR in the Netherlands

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