

# **Svar från Oberoende Elhandlare (Independent Electricity Retailers in Sweden) på CEER Consultation on Flexibility Use at Distribution Level**

## **1. What are, in your opinion, the main drivers for flexibility use by DSOs going to be in the coming years?**

Independent Electricity retailers in Sweden (OE) mean that the main drivers are that the increased element of intermittent electrical power generation causes a higher degree of variation in the electrical power production and these variations in energy production volumes will create increased price volatility in the market. Smart meters, digitization and growing volatile price signals on the wholesale markets, many network users (= end consumers) will increasingly respond to market price signals at the same time and with similar consumption patterns. This change in consumption and simultaneous change of electricity demand on low and medium voltage levels and the related increase of can lead to an increased demand for reinforced capacity in distribution networks. In order to avoid too expensive and investments which are unnecessary it is important to carry out different measures to give the consumers incentives to be flexible and decrease their demand of energy when the burden on the networks tends to too high. Network charges based on hourly measurement instead of power tariffs will help to increase customer demand elasticity and thus transition to smart homes and smart networks. It will also greatly simplify information management, as the same hourly values used for electricity trading are also used for the networks.

## **2. Please provide any alternative definitions for flexibility that you think capture the focus of this paper.**

In our understanding, flexibility on the distribution level means the **ability of market parties** (energy supplier, service provider or independent aggregator) **to manage the customer's consumption and generation** (including the customer's participation in wholesale and balancing markets) while following **reasonable restriction requirements** set by the DSO **at the point of interconnection with the electric grid**. Those restriction requirements are based on congestion forecasts and should be defined very narrowly. The restriction requirement limits the possibility to use the electric grid compared to the technically possible capacity at the point of interconnection with the local distribution grid, thereby reducing the degree of freedom for using the electric grid by the customer (= end consumer).

## **3. Should DSOs be encouraged to use flexibility to manage the distribution network where this is more efficient than reinforcing the network? Please provide an explanation.**

Yes, DSOs should definitely be encouraged to use flexibility to solve capacity constraints on the local distribution network and to avoid or defer reinforcement, if this is the most efficient option. We mean then that it is necessary that the DSOs must act on the local level in a similar way as the TSOs do on more aggregated level. This issue may also raise the issue of the need for new forms of cooperation between network owners and the grid operator. At the same time, a clear framework which is setting the conditions and boundaries on how the DSO is allowed to use flexibility is needed in order to keep market mechanisms functioning. There are two important pre-conditions that need to be fulfilled for DSOs to be able to use flexibility: First, DSOs need to be fully unbundled and second, DSOs need to

have a solid network structure at their disposal, including sufficient knowledge about the status of their network. This includes enhanced monitoring and control techniques to manage the network and provide data of network quality on the distribution level.

**4. Should all sources of flexibility be treated equally in the market and by system operators?**

Yes, our opinion is that all sources of flexibility (demand, generation and storage) should be treated equally and under cost-efficient aspects, competing against each other in the market on equal terms. However, today equal treatment is not given, as different incentive schemes and other measures and exemptions granted under national regulation (for example with respect to network charges and other fees and levies) often are contradictory to this principle and prevent a level-playing field between all market participants.

**5. Are there any uses for flexibility that you think we have missed and should be considered? If yes, please provide an explanation.**

The use of flexibility in CEER's paper is rather broad and from our point of view, has not missed any use case for flexibility.

**6. Do you think it is important for Member States to establish standardised EU definitions of the various flexibility products, to facilitate market participation in flexibility use at distribution level?**

We think that it will be of utmost importance to define a limited and clear set of valid flexibility products on the distribution level in order to keep transaction costs for market participants as low as possible while ensuring high transparency and market liquidity. The framework conditions for flexibility products should be similar in different Member States in order to prevent market distortions, but the situation of DSOs in different regions and different EU Member States vary extremely, which need to be accounted for.

**7. Should regulators seek a regulatory framework that can accommodate a range of models that would enable DSOs to access and use flexibility, while ensuring that competition and markets are not distorted?**

Any range of models needs to be kept as lean as possible. In a first stage of implementing market based procedures for flexibility use at the distribution level, where the DSO restricts energy producers and consumers based on the congestion forecast.

Because the increased element of intermittent power generation causes an increased need for control power. It would be good if several players became active in this market. OE believes that the issue of developing the regulatory power market could be used to create incentives for more major consumers to be active and thus increase demand elasticity. The first step to attract more players to this market may be to publish prices on the regulated power market for those who are not players there.

OE considers it not to be reasonable that only pay power producers for their contribution to the network benefit by increasing their production when it is needed. We think that it is to also provide greater energy users with incentives to contribute to the net benefit as well when it is a need for decreased demand. We think that could be solved in in a similar way as the Nordic power reserves have been designed. We also mean that such agreements with producers and consumer shall be based on public procurement and competitive conditions.

**8. What do you consider to be the key benefits and key risks of particular models (rules-based, network tariffs, connection agreements, and market-based)?**

**Rules-based approach:** may make sense in very specific local situations (e.g., in relation to reactive power needs and other non-frequency ancillary services) since market based procedures may lead to a market with oligopolistic or even monopolistic structures and very high transaction costs. On the other hand, there is a risk of unequal treatment in different EU Member States and investments in flexibility may not be encouraged if no reward/compensation/remuneration is foreseen (which may lead to undermining the ability of competition).

**Network-tariff approach:**

OE means that it is important to design the charging structures in a way that they encourage the network users to alter their behavior for a more efficient use of the distribution network.

We prefer a dynamic network tariff i.e. network charges based on hourly measurement instead of power tariffs will help to increase customer demand elasticity and thus transition to smart homes and smart networks. It will also greatly simplify information management, as the same hourly values used for electricity trading are also used for networking.

**Connection agreements approach:** A reduced connection cost in exchange for following restriction requirements set by the DSO can be some form of reward analogically to the quota model introduced above. However, it should be stressed that the DSO never should be in charge of operating the customer's flexibility. This should always be carried out by the customer's energy service provider (e.g., his energy supplier or an independent aggregator) while following certain restriction requirements set by the DSO. Those restriction requirements are based on congestion forecasts and should be defined very narrowly. Furthermore, it is crucial that all customers are treated equally and in a non-discriminatory manner. In this respect, we would like to raise caution with this approach, as there is the danger of special contractual arrangements which could give an advantage to individual customers.

**Market-based approach:** As we answered on question number 7 OE considers it not to be reasonable that only pay power producers for their contribution to the network benefit by increasing their production when it is needed. We think that it is to also provide greater energy users with incentives to contribute to the net benefit as well when it is a need for decreased demand. We think that could be solved in in a similar way as the Nordic power reserves have been designed. We also mean that such agreements with producers and consumer shall be based on public procurement and competitive conditions.

**What are the relative merits of a contracting strategy (competitive or otherwise) versus a real-time market approach to procurement of flexibility? Is the latter approach practicable?**

A real-time market approach is desirable, but realistically may only be implemented in a distant future. Again, smart meter roll-out with a broad range of functionalities on a wide scale will be required first. Also, on part of the DSO there would be a need for monitoring and control techniques that have only been tested in very few pilots yet – a massive roll-out of those technologies in the local distribution networks will not happen any time soon.

**10. Are there any models that would enable DSOs to improve system flexibility that you think we have missed and should be considered?**

OE believes it is crucial that the regulations must be simplified and adapted to the future electricity market, with hourly measurement and smart electricity meters before 2025, customer-owned local power generation and battery storage.

OE is open to the interaction between electricity and other energy carriers can be an opportunity to increase the flexibility of the electricity system.

**11. Are there case study examples of approaches to improve flexibility on the system that you think should be considered in this work? If so, please provide a summary of the key information and findings.**

**12. Beyond impartial provision of data to market participants, do you consider that there are any other tasks for DSOs to carry out to enable the competitive provision of and access to flexibility by others?**

It is important to keep in mind that the metering operator is not necessarily the DSO. Competitive metering operators may also be possible in some EU Member States. Other forms of neutral data coordinators are possible, too. In order to allow for true competition, we deem it necessary to distinct between the market role of the metering operator and the market role of the DSO.

As for tasks of DSOs to enable the competitive provision of and access to flexibility by others, we strongly recommend the implementation and use of ICT-based standard electronic message formats for transferring the information regarding the restriction requirements at the point of interconnection to the end customer (or respectively his service provider /energy supplier /independent aggregator).

The following information needs to be transferred via standard electronic message formats: a) minimum thresholds for capacity usage and b) concerned time slices (= time intervals in which restriction requirements related to using the electric grid apply).

**13. Do you think there are situations where DSOs should be allowed to provide flexibility beyond the distribution network component, where economically efficient to do so? Please provide an explanation.**

DSO should not be allowed to provide flexibility in a way that have a negative impact on the competition or in another way would violate basic rules and principles with respect to unbundling.

**14. Are there other examples where the DSO could provide flexibility to help to reduce the overall costs of the system?**

No, the DSO should never become a market participant providing flexibility products to the TSOs or any other use case. This would blur the line between market operations and network monopoly. Such a development would affect transparency and competition in a negative way.

**15. In principle, can the regulatory tools listed be used by regulators to remove barriers and facilitate the use of flexibility at distribution level?**

Yes. The challenge consists in changing the tools such as economic incentive schemes or revenue control effectively in order to allow for DSOs to use flexibility services as an alternative to traditional reinforcement where more efficient.

Though, the best regulatory toolbox will not help, if it is impossible to measure the output of DSO activities or even before measuring output being able to define what the benchmarks for DSO activities should be. In order to incentivize efficient behavior, it is necessary to define what efficient behavior means. Today, it is impossible to determine efficient behavior in terms of network management and use of flexibility, because there is no data available which constitutes a solid basis for benchmark setting and comparison.

**16. Are there particular tools that you think would be the most effective in achieving flexibility use at distribution level? Please provide reasoning for your answer.**

OE consider dynamic network tariff as the most important tool.

**17. Are there any other regulatory tools that have not been included and should be considered?**

The regulatory framework discussion around curtailment of renewable energy should be included in the list of regulatory tools.

**18. Should the regulatory framework allow different solutions and combinations of tools to address the specific needs of the network?**

As described above, we strongly recommend the implementation of one coherent framework on the EU level and within that framework there should be possible with regional and national variations with regard to the conditions of restriction requirements which would suit the specific needs of each DSO.

The regulatory framework should use a holistic approach that is valid for all DSOs, but has some variation within the applied regulatory tools which allow a differentiation regarding specific network needs.

**19. Is a principles-based approach (rather than one-size-fits-all) the correct one for national regulators developing a framework for facilitating flexibility use by DSOs at distribution level?**

OEs opinion is that a principles-based approach the correct one for national regulators developing a framework for facilitating flexibility use at distribution level, but this context we also raise the question if there is a need for new forms of cooperation between network owners and the grid operator due to the DSOs obligation to contribute to an increased flexibility.

**20. Are the principles outlined appropriate? Are there any fundamental principles that you think are missing in order to deliver maximum benefit to customers?**

All regulations need an efficient supervision. Those DSOs that are implementing the framework correctly and have an efficient operation should receive additional rewards. Whereas DSOs, that are not implementing the framework or have a bad implementation and inefficient operation, should be

subject to a non-compliance mechanism. Any failures and infringements on part of the DSO need to be sanctioned by clearly defined penalties.