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Oesterreichs Energie comments on CEER public consultation on “Draft advice on the take-off of a demand response electricity market with smart meters”

Dear Ms McCoy,

the Association of Austrian Electricity Companies (Oesterreichs Energie) appreciates the opportunity to comment on CEER public consultation on “Draft advice on the take-off of a demand response electricity market with smart meters”. Oesterreichs Energie represents more than 130 energy companies operating in the areas of generation, trading, transmission, distribution and sales and covers more than 90 percent of the Austrian electricity generation and the entire distribution.

Following our comments to the questions:

Q1.- Do you agree to the stakeholders chosen as the focus of CEER’s advice (micro generators, DSOs, metering operators, suppliers, energy service companies and regulators)?

Oesterreichs Energie agrees with the stakeholders identified by ACER as the main stakeholders to focus on. However, we suggest that TSOs to be more deeply involved when discussing future market of Demand Responses (DR). When deploying DR in the distribution grid, this could have strong impacts on other parts of the grid system as other distribution grids, regional grids or the transmission grid. Micro-generators should not be included.

Q2.- Do you agree to CEER’s definition for demand response?

Oesterreichs Energie considers the definition provided by CEER is too narrow as it limits DR to the response of the consumer to changes in electricity pricing or to incentive payments

only. Oesterreichs Energie supports and prefers the wider definition “the mechanisms to manage consumer consumption in response to supply conditions”, adopted by the Commission in its Communication on Smart Grids from 12th April 2011 as, this definition also includes the concept of mechanisms of direct load control of the system. This approach is also on line with CEER paper that states “Demand Response can be divided into two parts, direct load control on the one hand, and innovative pricing on the other hand (see page 12)”.

Oesterreichs Energie regards Demand Side Management as part of the DR scheme. It refers to the direct load control of devices and interruptible load which aim to affect both timing and level of electricity demand. It responds to a price or a technical signal.

We suggest a further clarification that DR is part of energy efficiency measures. It provides for a range of new services and functions that will enable not only the reduction of the energy required during critical periods as peak demand, but also savings in overall annual electricity consumption through facilitating changes in consumer behaviour.

Moreover DR may defer or negate the need for network expansion or reinforcement which can lead to reduced costs for the consumer. DR can not be introduced with the risk that the cost of the grid will increase and be a major part of the total electricity cost.

Q 3.- Do you see a need for extra measures in this area?

No.

In Austria we have several obligations and monitoring mechanism of the relevant competent authority – that already corresponds to the 3rd package. Besides these obligations, further market monitoring is carried out by the regulator, chamber of Commerce, chamber of Labour, and the federal state governments etc.

Q 4.- Do you agree with the above? Offer reflecting actual consumption patterns: customer

Oesterreichs Energie agrees with the statement that DR requires the active involvement of consumers, including market offers such as time-of-use tariffs and dynamic rates or pricing. In our view suppliers have to provide information on their offers to customers as it is in their own interest to attract costumers. Further information obligations would cause additional costs which would make energy for everyone more costly finally. . Therefore Oesterreichs Energie does not support the introduction of obligations regarding the ways of providing information .

Q 5.- Do you agree with the above? Offer reflecting actual consumption patterns: micro-generator

Micro-generators should not be included (not a scope of demand response)

Q 6.- Do you agree with the above? Offer reflecting actual consumption patterns: metering operator

Oesterreichs Energie welcomes the CEER recognition that in the majority of the European countries the DSO is responsible for this activity (see page 13). The described functionality does not fulfill the requirements of demand side management.

Q 7.- Do you agree with the above? Offer reflecting actual consumption patterns: DSO

Oesterreichs Energie does not consider CEER recommendations as sufficient. The DSO has a central role in DR, not only as a market participant but also as a facilitator of that market. Oesterreichs Energie regrets CEER's inadequate approach that "DSO has a privileged position in comparison with other service providers". DSOs have no intention to monopolise the market but DSOs need to be more strongly involved when demand response is carried out, otherwise security and quality of supply are jeopardized.

The primary task of the DSO is to ensure the security and quality of energy supplied via their networks. In a vision in which DR is carried out by market actors without the involvement of the DSO (e.g. via a centralized communications provider that sends DR signals to smart meters/appliances in consumers' homes), the grid may be affected (potentially to quite a large degree) by the reduction or increase in energy demand which would jeopardize the aforementioned criteria significantly

The capacity of today's grid has been designed in such a way that it can accommodate the maximum demand consumers would place on it. When non-DSO market actors utilize DR, particularly when this is done due to energy prices (e.g. when there is an abundance of wind generation and energy prices fall encouraging users to consume more energy) there is a risk that this may coincide with existing times of grid peak demand for that particular section of the network which may in turn introduce a risk of overloading. In such a situation the DSO has to influence the demand being placed on the grid. This could be done either via price signals (e.g. time-of-use tariffs) or DR initiated by the DSO.

This will also create some new demands from the DSOs to be able to facilitate the market of DR:

- Information about planned market activities, e.g. expected/predictable substantial energy price drops.
- Grant the DSO the responsibility to decide if the DR can/cannot be executed on their grid to maintain security of supply.
- Information about market operations to be able to do predictions of the returning load after DR.

The second role for DSOs in DR is the provision of information to market actors in an efficient and unbalanced way to enable the final customer to obtain DR products that are as effective and efficient as possible. The DSO may need to provide;

- Information of DR to suppliers and customers
- Status of the grid, can DR be 'safely' executed or not. Again, this could be accomplished via the provision of actual network loading information or via price signals.

In order for DR to be successful under these circumstances some investments will need to be undertaken by the DSO:

- Installation of Smart meters
- Installation of some smart grid-type ICT within the DSO networks.
- Development and installation of DR software .
- Renewal and extension of the existing grid components

The third role where DSO involvement in DR is critical is the use of DR to defer or possibly negate network reinforcement investment. To put it simply, if DSOs can use DR to manage the peak demand on their networks there is potential to defer or avoid costly network reinforcement work (i.e. putting more cable into the ground). The savings from these deferred investments would then be passed onto consumers via their network tariffs. Additionally TSOs will be seeking to maximize the efficient use of their networks in much the same way, and allowing DSOs to use DR will allow the DSO to assist the TSO in this. There are some challenges ahead; high demand on the grid will not necessarily coincide with lack of production or high prices on the electricity market.

Therefore there is a need for cooperation and coordination between suppliers/aggregators and DSOs as it is likely to be suppliers that are offering DR products/tariffs to customers. There is also a need to understand the value offered by on-demand reduction of power demand from a TSO perspective – what value would a TSO place on the ability of a DSO to reduce their network demand upon request?

Q 8.- Do you agree with the above? Offer reflecting actual consumption patterns: Supplier

The DSO plays a major role to enable the take-off of demand response.

Oesterreichs Energie wants to outline that on the one hand suppliers want to offer, enabled through smart metering systems, innovative tariff products (e.g. to react on market developments) in order to optimize their portfolio and, on the other hand, DSOs want to send price signals to customers to optimize the utilization of the local grid and secure system stability.

This situation has the potential to produce contradicting price signals to the customer. A regulation is required to avoid confusing situations for the customer and to consider the interests of the different parties (especially DSOs and suppliers).

**Q 9.- Do you agree with the above? Offer reflecting actual consumption patterns:
ESCOs**

Oesterreichs Energie considers that no further regulation is necessary in this competitive part of the DR market that has to be clearly distinguished from the regulated part. The information the ESCOs obtain depends on their agreement with the consumer. A central data hub is therefore redundant.

**Q 10.- Do you agree with the above? Offer reflecting actual consumption patterns:
NRA**

The implementation of Smart Meter and Smart Grids are the pre condition for DR, so the energy can be measured, settled and priced at least hourly and grid conditions can be monitored and managed in an adequate manner.

The DSO is the most vital party in assuring the development and implementation of Smart Grids. Smart Grids imply huge investments and the network companies will never reap enough internal benefits from these investments to cover the costs of implementing a Smart Grid. Oesterreichs Energie believes that network companies have to be incentivised to pursue innovative and smart solutions. Clarity about cost recovery is essential. It is very likely that there will be no smart grids without a strong engagement of DSOs.

In this context national regulators are the key facilitators of a smarter future – they have to empower DSOs to take an active part in developing smart grid solutions. The regulators need to be visionary in order to be able to construct regulation that will benefit the growth of the future Smart Grid without knowing today exactly how the grid of the future will operate.

In most Member States the implemented incentive based regulation models (like price cap = RPI-X) to set grid tariffs focus on short term cost reductions, leaving almost no room for innovation and are in general oriented on the past. These incentive based regulation models are NOT a facilitator of the deployment of Smart Grids. The pathway to a smarter future, having in mind the 20-20-20 targets, necessitates a paradigm shift of regulation methodology to set grid tariffs.

There is a need for regulatory principles that have to be taken into account as: sustainability, future orientation and investment and innovation friendliness.

An increasing number of decentralized generators and “prosumers”, electric vehicles, etc. are a new challenge and therefore neither considered in the implemented grid tariff schemes nor in the regulation models. The key figure for planning and dimensioning electricity grids is the expected load (kW) of customers. A capacity (kW) based tariff component including time of use aspects can be a step forward towards a cost and future oriented cause-fair tariff system.

In Oesterreichs Energie's view flexible grid tariffs using the opportunities and functionalities of smart metering systems are an essential tool for DSOs to cope with the future challenges. Member States should have the freedom to choose an adequate flexible grid tariff structure in accordance with local needs.

Q 11.- Do you agree with the above? Interface with the home: Customer

Oesterreichs Energie agrees that customers should have information regarding consumption that is fast, correct and of high quality. However it has to be taking into account that domestic customers around Europe have a differed location of the electricity meter and will therefore have various opportunities to communicate with the meter. Because of this, it is important that other ways of creating understanding of energy consumption have to be deployed on the market taking into account local conditions. In addition to that data security (cyber crime) has to be safeguarded.

Q 12.- Do you agree with the above? Interface with the home: micro-generators

Same as Q 5

Q 13.- Do you agree with the above? Interface with the home: metering operator

Oesterreichs Energie agrees. It should be further clarified who operates the gateway (DSO when being meter operator?). Data security must be an important issue.

Q 14.- Do you agree with the above? Interface with the home: DSO

See comments to Q7.

Q 15.- Do you agree with the above? Interface with the home: Supplier

Oesterreichs Energie agrees.

Q 16.- Do you agree with the above? Interface with the home: ESCOs

Oesterreichs Energie agrees.

Q 17.- Do you agree with the above? Interface with the home: NRA

Effective and secure DR will require the exchange of large volumes of data, most of which is already held by the DSO in most of the European countries. Data protection and data security becomes extremely important and legislation needs to be ensured.

Q 18.- Is there a need for such a national point of contact?

There is no need for a national point of contact. This would only cause more problems (e.g. data protection) and make things more complicated. Each DSO is the best point of contact for their grid area.

It has to be guaranteed that all market actors are getting the required data to do their business efficiently. Anyway the development and implementation of a national point of contact is creating additional costs - should be a means to an end and not an end in itself.

Oesterreichs Energie considers there is not a need to establish such a national data hub in order to develop Demand Response market, which could work without it as well. It should be decided on national basis.

Q 19.- Which stakeholder should be responsible for this?

This task could be carried on by the DSO. It has to be ensured that data are provided in a non-discriminatory, transparent and efficient way.

We think that

- The DSO as regulated entity is the only neutral player on the electricity market and in 25 out of 27 Member States responsible for the metering business. Currently in most countries DSOs are already acting as neutral and transparent information hubs.
- DSOs are working under supervision of the national regulators. That guarantees that the tasks of DSOs and especially the function as information-hub is fulfilled in a transparent and cost-effective way.
- All other actors in the electricity markets develop competitive activities. It requires strict rules and control institutions to avoid competitive advantage for one player among the others. Considering the organisation of the electricity market it seems logical and consequent that the DSO acts as information-hub as the neutral actor.

Q 20.- Do you see a conflict between issues of privacy and security of data with regards to demand response?

Privacy and security of data are of great importance and must be considered from the beginning.

Q 20.- Do you think that there are any recommendations missing to be able to launch demand response?

There is not an approach to check the sociological motivation of the customer/end user to “buy in” in such a system. Customers behaviour should be analysed for better predictability. There will be low economic advantages for the customer, so that we think of controlling customers appliances in the background without any discomfort for the customer.

In general the role of the DSO should be more emphasized. It seems that so far the CEER does not acknowledge the central role the DSO plays in order to make demand response work and the consequences of uncoordinated DR.

We could add something out of our position paper:

DR is an important tool for DSOs to cope with future challenges like the integration of huge numbers of decentralized generators. Especially direct load control measures (demand storage), e.g. to control charging processes of Electric Vehicles, are an essential tool to operate the electricity distribution grid in a secure, reliable and cost effective manner. In the liberalized electricity market DSOs are responsible for ensuring a secure, reliable and efficient electricity distribution system. To fulfill this task an alignment in advance (pre-check) of market driven DR activities by the DSOs should be obligatory (the compatibility with local grid constraints can only be assessed/judged by the DSO). This is in line with the recommendation of Expert Group 3 of Task Force Smart Grids of the EC. In that context DSOs should play a central role as a kind of coordinator/facilitator (information hub, etc.) to ensure the reliability and stability of the system while safeguarding commercial interests of other market actors and customers.

Thank you for considering our comments on draft advice on the take-off of a demand response electricity market with smart meters.

Kind regards,

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Deputy Secretary General

DI Ursula Tauschek
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