

CEER Hearing

Draft advice on the take-off of a demand response
electricity market with smart meters

Market role for DSOs, metering operators & suppliers

Gert De Block
CEDEC

2 September 2011 | Brussels

CEDEC Missions

- **Represent** the interests of 1500 local energy companies in the European Union,
with companies' turnover of 100 billion €
& 75 million customers (connection points)
- **Exchange** know how and experience on the processes of electricity and gas markets
- www.cedec.com

Scope and definition

- Q1 : SCOPE

« focus on the role of DSOs versus commercial players »

↔ text excludes the role of DSOs in relation with the final customer

↔ current market design in MS

↔ future role of DSOs in smart grid environment

↔ energy efficiency directive proposal

- Q2 : DEFINITION of demand response

“ customers response ... to incentive payments designed to adjust electricity usage ... when system reliability is jeopardized.”

↔ no role for DSO in relation with customer / interface (figures 3 & 4)

↔ no interaction between DSO and suppliers / metering operators
(figure 4)

Offers reflecting actual consumption patterns

- **Q4 : market role of customers**
 - information on consumption and cost data :
« at least monthly » goes beyond the right for consumers to get regular information on consumption data that is foreseen in the 3rd package
 - information free of charge :
if additional information obligations cause additional costs
→ customer pays through higher meter rent / network tariffs / bills
- **Q5 : market role of micro generators :**
 - information on consumption and cost data : cf Q4
 - information free of charge : cf Q4
 - additional costs of additional channels to be covered by micro generator

Offers reflecting actual consumption patterns

- **Q7 : market role of DSO:**

- increasing fluctuation in demand and (decentralized) generation
 - network stability requires more active grid management
 - regulation must take into account investments in new network components and costs of additional (energy demand) services
- DSO can offer services to final customers :
 - ° energy efficiency services – cf. energy efficiency directive proposal
 - ° services in the framework of operational (regulated) network tasks

- **Q6 : market role of metering operators**

- if smart meters are installed (depending on national cost benefit assessment) : importance of remote functions & communication standards
- in most member states : DSO = metering operator
- rising importance of consumption/production data (detailed & quickly available) in smart grid environment → logic that DSO continues as metering operator (depending on national market model)

Offers reflecting actual consumption patterns

- **Q8 : market role of supplier**

- interface : standards for communication and access time
- « interface = prerequisite for developing demand response »
↔ page 7 par 2 : development of demand response is succesfull in markets without smart metering
- if regulation is needed, then not beyond a framework guideline in support of a more competitive market

- **5.1.1 Conclusions**

The interactions between the stakeholders as shown in Figure 3 (page 22) exclude interaction between DSO and customer :

- not in line with market design in majority of member states
- realistic in a future smart grid environment ?

Interface with the home

- « This approach would not give the DSO a privileged position »
+ This approach should not discriminate DSOs either
- **Q14 : market role of DSO**
DSO has to manage the whole consumption and injection flows on the local grid area → DSO plays a central role in the data communication that is necessary to develop demand response market
- **5.2.1 Conclusions**
 - DSO is excluded – as a principle – from the possibility to offer services, but :
 - services are necessary to guarantee grid stability in smartgrid environment
 - quid if insufficient commercial offers from suppliers and ESCOs ?
 - DSO is not allowed – as a principle – to use the open gateway, but :
 - how can DSO communicate and act in view of guaranteeing grid stability ?
 - in view of giving priority to or adjust injection of (micro)cogenerators ?
 - No communication is foreseen / allowed between supplier/ESCO and DSO in Figure 4 (page 25) : how can DSO guarantee grid stability ?

Conclusions

In smart grid environment

- DSO will need and provide the required data (on consumption, generation, storage) within the distribution grid;
- DSO will gradually interact more (enabled by data communication) with TSO, consumers and (local) generators.

- Commercial “demand services” market versus (smart) grid services environment ?
- Not exclude communication links that will prove to be necessary in the future
- Need for coherence with other EU initiatives – cf. energy efficiency directive proposal