

Ensuring Market and Regulatory Arrangements help deliver Demand-Side Flexibility

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EU Sustainable Energy Week

Brussels, 26 June 2014

Fostering energy markets, empowering **consumers**.



Introduction to CEER's work on **Demand-Side Flexibility**

• Who are we?

- ▶ The Council of European Energy Regulators acts as the voice of Europe's national regulators of electricity and gas at EU and international level
- We cooperate and exchange best practice to meet the objective of a competitive, efficient and sustainable European internal energy market that works in the best interests of consumers
- We work closely with (and support) the Agency for the Cooperation of Energy Regulators (ACER). CEER's members (from the EU) are also very active within ACER
- Our work is complementary and focuses on different policy areas



Introduction to CEER's work on Demand-Side Flexibility

- Why Demand-Side Flexibility?
 - ➤ The Energy Efficiency Directive (2012) places certain requirements on regulators to promote the demand side
 - There are huge potential benefits if we can harness DSF and make it work in the best interests of European consumers
 - ► This paper ("Advice" in CEER terminology) explores at a high level the emergence of Demand-Side Flexibility. It's published today on our website.
 - Process included an internal survey of regulators, a public consultation and workshop to which there was a big response. Thank you.
 - Today, we have representatives from the Commission, GEODE, the German regulator (BNetzA)





Ensuring Market and Regulatory Arrangements help deliver Demand-Side Flexibility

Joseph Gildea (Ofgem)

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- Energy markets are evolving...the challenge
- But also opportunities
- How to deliver Demand-Side Flexibility
- Who benefits?



Some seemingly random questions

- Are you a light sleeper?
 - Would you mind if your washing machine was programmed to come on during the night?
- How cold do you like your orange juice in the morning?
 - What if your energy supplier was able to remotely adjust the temperature of your fridge?
- How good is your eyesight?
 - How about if your local distribution network dimmed the lights in your house?





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Energy markets are evolving...challenges

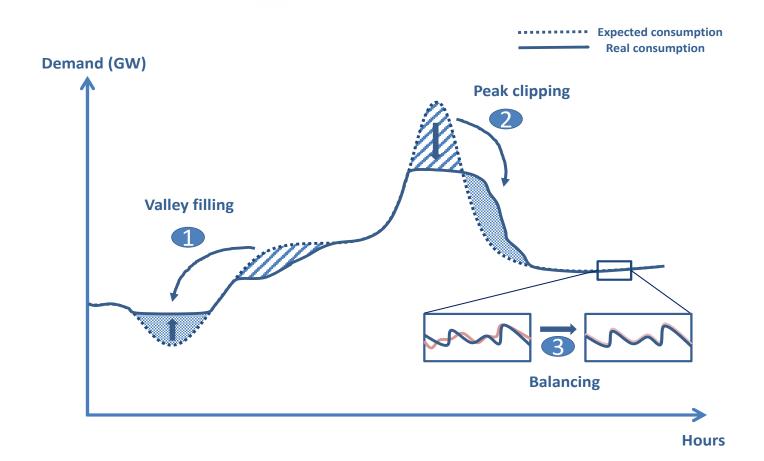
- Massive changes in energy system due to environmental policy and technological advance
 - Increased amount of intermittent Renewable Energy Sources (RES)
 - Distributed generation; new market players
 - ▶ Technology: smart meters, smart grids; increased electrification of heat and power
 - Security of supply concerns
 - Consumers: increasingly aware and concerned (prices, trust, privacy, the environment)

Demand-Side Flexibility is part of the response





Explanation of Demand-Side Flexibility





• Energy markets are evolving...the challenge

But also opportunities

How to deliver Demand-Side Flexibility

Who benefits?



Where's the value?

DSF value throughout the energy system

Balancing

A flexible tool for balancing

Capacity

A flexible form of providing adequacy

Generation

Reduction in average generation costs

Networks

A substitute for network assets;



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Where we are currently?

- Stakeholders view DSF as so far mainly offered by large industrial consumers and mainly in balancing markets
- For smaller consumers, DSF is so far not a real option although some countries enable them to participate either independently or through an aggregation service provider
- Energy markets are today managed from the supply side in future need to manage them also from the demand side



Anything in our way?

- Some difficulties* to be overcome
 - Clearly established roles and responsibilities among market players
 - ► DSF needs access to all markets (balancing, wholesale, retail, capacity)
 - ► The changing role of the DSO
 - Competition between the market players (new and incumbents)
 - Existing price regulation hinders DSF
 - ► Technological compatibility, measurement & verification, smart meters
 - Consumer awareness, engagement & understanding





High level Principles governing Demand-Side Flexibility

- As a high-level outcome CEER wants to unlock the value of demand-side flexibility for the provider/customer. This requires:
 - That consumers and market participants have the necessary information and tools to adequately and effectively engage in the market
 - A market free from barriers that promotes equal access for all parties and new entrants, through interoperable standards and arrangements
 - A regulatory framework that is flexible enough to adapt in an evolving market



High level Principles governing Demand-Side Flexibility

More specifically:

- An independent party should facilitate the administration of the different exchanges (energy, information, financial) between commercial parties
- ► There should be processes to ensure that all parties have visibility of the DSF actions taken by any one party which impacts their business
- Distortions to market signals that would unfairly advantage or disadvantage DSF should be avoided – need a level playing field
- DSF should be considered alongside traditional network reinforcement options by TSOs and DSOs



Recommendations

- 6 short term recommendations
 - Roles and responsibilities clarified
 - ► The role of DSOs (and network tariffs)
 - Standards and methodologies
 - ► European network codes maintain a focus on demand side
 - Continue to quantitatively assess/compare DSF across the EU
 - Market and regulatory arrangements allow system-wide benefits to be passed on to end-use consumers



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Back to those random questions

To the light sleepers

► What if you were to save 100 euros a year on your electricity bill, and you had new appliances that didn't wake you up at night?

To the OJ lovers:

➤ Can you really tell the difference? Wouldn't you allow that if you thought it contributed to saving the environment, and you saved some money?

To the night readers:

➤ What if this only happened when you weren't reading — if you had an opt out or override option? And again, you paid less for energy

CEER wants to unlock the value of DSF for all parties

Thank you for your attention



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