

Demand response – consumer protections and benefits

CEER Hearing on the Draft Advice on the take-off of a demand response electricity market with smart meters

September 2011

zoe.mcleod@consumerfocus.org.uk

Demand response – our starting point

Smart deals to incentivise load shifting and overall energy reduction such as:

- Fixed price time of use tariffs – charged different amount depending on when during the day, week or year use energy (seasonal)
- Dynamic pricing - critical peak pricing, off peak rebates
- Automation – direct load control/remote control appliances within the home
- Energy deals which combine supply energy with displays/energy monitoring and advice

Potential customer benefits:

- Some households may benefit from relatively cheaper energy bills
- Security of supply – helping to keep the lights on as move to low carbon energy market

Recognise:

- Customers respond to pricing signals – can result in peak load shift and overall energy reduction

Demand response – we need to know

Before NRAs develop the regulatory and monitoring framework they need to know:

- How much load is 'shift-able'? Who and what load?
- To what extent does price influence behaviour in that market? e.g. in Ireland responded to existence of time of use, but weak relationship between price and usage.
- What do you want to achieve? What does success look like?
- What is a fair price to charge/acceptable price?
- What proportion of customers need to adopt time of use to deliver this benefit?
- How interested are consumers? What are the barriers to consumer engagement and how can they be overcome?
- Who will be the winners and losers and why?

Challenge – who will be the winners and losers?

- DECC's Impact Assessment states:
“Bill savings for some customers may be offset by bill increases for other customers”
- Not all households will be able use energy at low cost times
- Much debate on the impact of ToU on low income and vulnerable customers – but this is not a single group further segmentation needed
- Low income customers may not be able to afford smart appliances
- Cost reflectivity v equity and tackling fuel poverty? Is this an issue?



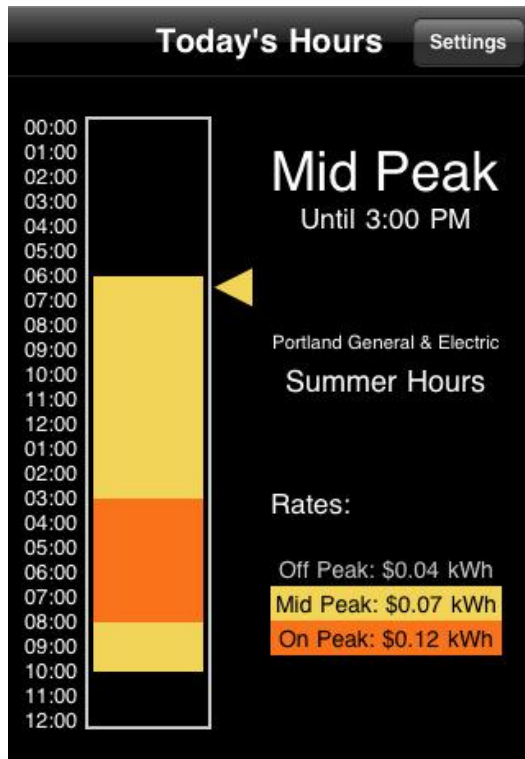
Recommendations

CEER advice should require NRAs to:

- Review existing demand response programmes to establish lessons learnt
- Carry out an impact assessment of demand response including analysis of the distributional impact – not just by income, but more granular segmentation by social group, heating type, dwelling, tenure, location etc.
- Trial demand response approaches including customer engagement strategies to maximise load reduction



Challenge: how ensure consumers make informed choices



- Welcome recognition that DR could lead to further tariff complexity
- In GB around third consumers when switch already do not get price reduction - this is 42-48% on doorstep
- How can customers compare these complex deals easily?
- How ensure properly understand advantages and disadvantages for their lifestyle?
- How ensure they understand what to do to benefit and are encouraged to change behaviour? Range of innovations e.g. stickers, fridge magnets, IHDs, orbs etc.

Recommendations

CEER advice should require that:

1. Customers are provided with **projected bills** based on **actual** past energy use over a number of seasons – this should outline different scenarios to make clear the risks if don't change behaviour.

2. NRAs monitor and where necessary regulate against some long-term contracts e.g. customer exposed to too much volatility with dynamic pricing to be locked in

3. Guidance on what information suppliers should provide to customers on advantages and disadvantages – how ensure vulnerable customers don't go onto inappropriate tariffs?

4. Don't introduce smart tariffs at the same time as smart meters – e.g. California contributed towards 'bill shock and backlash'

Proposals on switching sites welcome but need to be developed:

- need an accreditation scheme to ensure show all tariffs available in the market;
- advice must be independent, reliable, up to date e.g. GB switching sites do not include three rate ToU tariffs.
- Need a phone and hard copy service.

Challenge: customer protection

Advice should also require:

- **Single point of contact** for customer and clear timely complaint handling processes not just supply of energy, but also energy related products, services and advice.
- Role for Member States to ensure that the **regulatory framework** reflects likely convergence of markets and bundling of services (water, telecoms, products, supply) resulting from demand response.
- **Interoperability standards** not just for smart meters, but any connected appliance e.g. IHDs, smart fridge or smart air con, so that if a customer has to move home or switch supply they do not incur the cost, waste or inconvenience of having to change appliances. Where there are problems, customer should be given clear information in advance of compatibility issues e.g. as proposed by GB government/proposed Article 8 amendment of Energy Efficiency Directive.
- Prevent appliances being designed to be obsolete e.g. many IHDs don't have interchangeable chargers

Challenge: customer protection

New challenges:

- Require **co-existence checks** during smart appliance installation – issues of interference with touch dimmer lamps, baby monitors, home security etc.
- Need a strategy to deal with customer concerns about **health risks** associated with new technologies – customers with wireless sensitivity
- What are fair terms and conditions e.g. will there be penalties if the customer overrides direct load control? Do they have control to over-ride? How do they get signal that peak time? What happens if the signal fails – whose fault is it?
- How do you give customers assurances that prices are fair – cost reflective especially when price regulation is removed?

Data access and use

Welcome the proposals in the consultation including:

- transparency on existing customer data as the general principle; emphasis on customer choice and control except for regulated duties; clearly defined rules & monitoring.

But advice should press for:

- Accreditation and monitoring of third parties who use data
- No central data bases – GB model is ‘data tunnel’ not data storage
- More work defining ‘regulated duties’ – case for network access to detailed personal data not yet made and may not benefit customer in practice
- Charging for data access is problematic – needs careful consideration

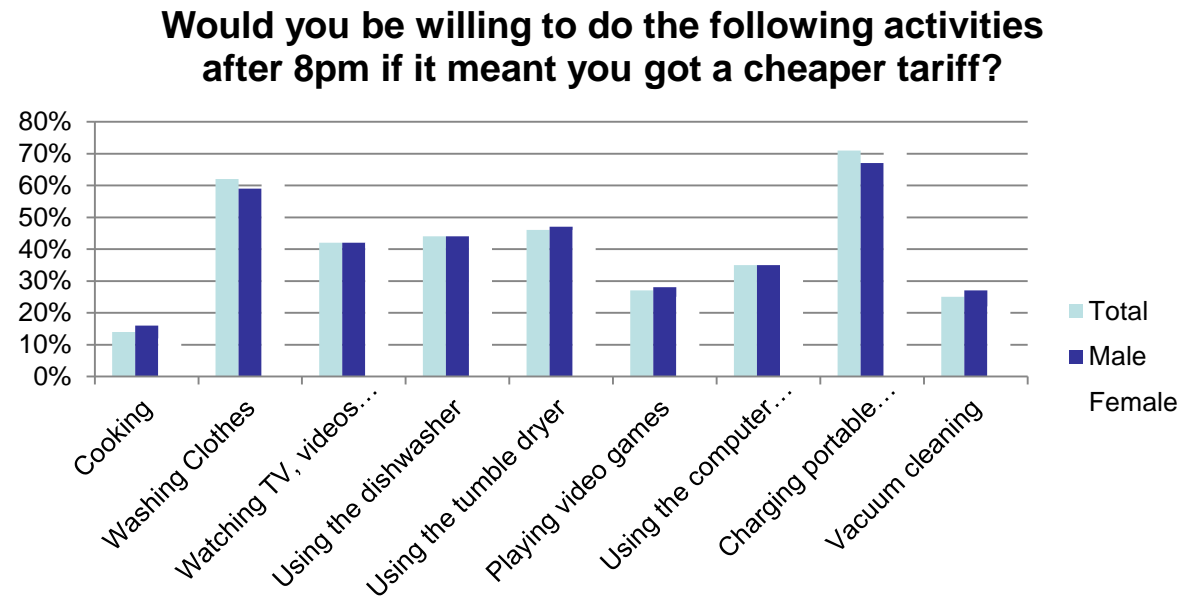


Customer engagement

- Welcome recognition importance of customer trust, understanding and easy ways to engage – consumer protections key to this
- Customers are used to dynamic pricing in other sectors e.g. transport, mobile phones, hotels, so relatively easy concept to understand but their understanding patterns of energy use and need less than other sectors.
- Need to understand what is acceptable to customers? Irish ToU trial tariffs that were more expensive in winter rejected Irish trials as unacceptable to customers. Customers not interested in automation where are penalised if override remote control.
- Ireland trial 82% participants said changed how use energy but 18% didn't – need work to understand why – is it because they can't or won't?
- Not just about pricing signals – highest engagement can be delivered by with additional support and appliances e.g. pricing with IHDs, information, stickers, remote controls

Challenge: customer engagement

- Are people unwilling to change behaviour?
- Appetite for automation not yet properly tested
- Charging devices and washing only two where 50% + willing to shift



Online survey
Base 2048
March 2010

Reasons:

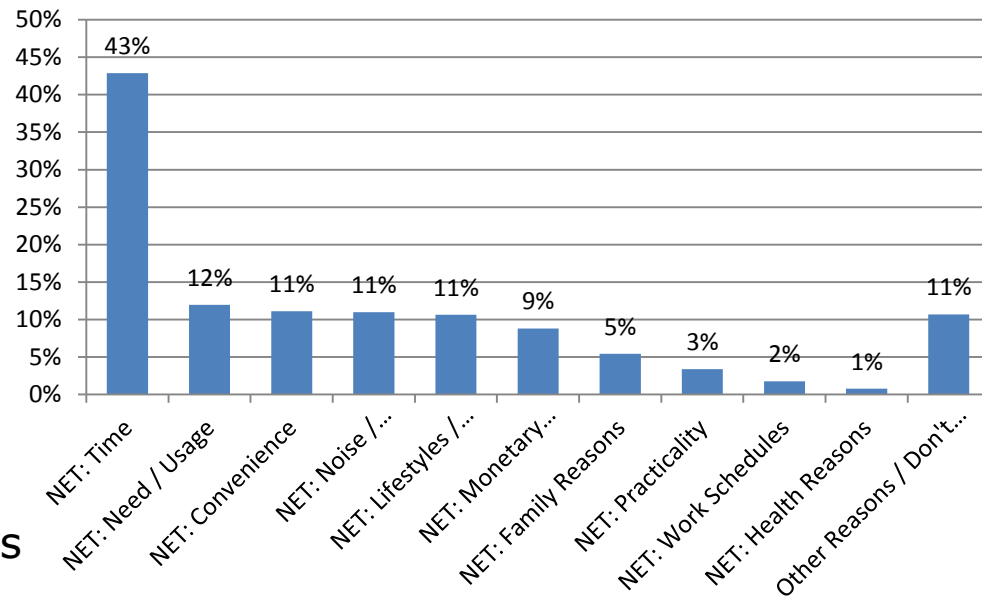
Households with children less willing to shift

Key reason against not taking action link with inconvenience/lifestyle

Recommendation

NRAs should encourage pilots of different offerings and consumer engagement strategies to encourage innovation and best practice

...what are your reasons for this?



Online survey
Base 2048
March 2010

Finally...

Next steps – the context

- Consumer Focus is working with networks, suppliers and local government on the Low Carbon Network Fund Trials – piloting different offers and approaches to demand response
- Participating in Eurelectric's Conference 20/21 October
- The Joint BEUC membership commentary at the Citizens' Energy Forum October 26/27 London
- Need to ensure the Energy Efficiency Directive is fit for purpose in a smart world and picks up demand response
- Collaborative approach needed to get this right

Consumer Focus
Artillery House
11-19 Artillery Row
London SW1P 1RT

t 020 7799 7900
f 020 7799 7901
e contact@consumerfocus.org.uk
www.consumerfocus.org.uk