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Call for Evidence: Potential impacts on consumers following market-wide settlement reform

EDF Energy is one of the UK's largest energy companies with activities throughout the energy chain. Our interests include nuclear, coal and gas-fired electricity generation, renewables, storage, and energy supply to end users. We have around five million electricity and gas customer accounts in the UK, including residential and business users.

Thank you for the opportunity to respond to the Call for Evidence. Attached to this letter is our more detailed answer to the questions.

Key points:

- The market is evolving and will continue to do so over time, with innovation and competition creating new propositions and lowering costs. Far more will be possible in future than is available today. This evolving market is driving the desire for Market-Wide Settlements to be delivered, but it also means any information on the future consumer impacts is currently limited.
- Ofgem are correct in their view that there will be winners and losers, but until more is learnt from commercial offerings it is difficult to provide robust evidence.
- In evolving the regulatory framework (in settlements, post supplier-hub, network charges and so on) we urge Ofgem to seek to avoid developing a market in extracting value solely from increase cost reflectivity (i.e. false arbitrages) that do not create new value, and merely place additional costs on customers who, for various reasons, are unable to respond.
- Participants should be free to innovate without unnecessary regulatory constraints, but should be subject to common regulatory obligations (i.e. not just those who are currently subject to an out-of-date licensing regime).
- Settlement reform by itself will not create time of use tariffs, automation or other ways of load shifting. These will only be enabled by further investment in processes, systems and equipment, none of which will be mandated for parties to deliver. When exploring the benefits new offerings can provide we also need to be cognisant that they will require investment from market participants to be realised.

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• Consumer engagement in energy remains difficult, , as has been proven with the engagement challenges in relation to the smart metering roll-out despite a £200m+ independent Smart Energy GB campaign.

Should you wish to discuss any of the issues raised in our response or have any queries, please contact Andy Jones on 07875 119072, or myself.

Yours sincerely,

Paul Delamare

Head of Customers Policy and Regulation

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Question 2.1: Individual domestic consumers will differ in their ability and/or willingness to engage with how they use electricity.

a) What are your views on the forms of communication most likely to facilitate/encourage consumers to engage with their energy use to help them make informed choices?

We have no directly related evidence we can provide on this question in relation to our existing product set. However, we are working on a range of innovative propositions for launch later in 2019 and beyond. Therefore, we hope to be in a position to better understand what is possible by the time the settlement programme is implemented.

In the meantime, we believe that the Smart Metering rollout can provide useful insights into this question and that Ofgem should explore what aspects did/did not work in in terms of consumer engagement. In this regard, we observe that:

- Energy suppliers will have collectively paid in excess of £200m to Smart Energy GB, an independent trusted communications company, to support the objectives of the smart meter rollout. After some early successes in increasing consumer understanding, SEGB has missed its key targets on providing consumers with the confidence to take action proactively or by accepting an offer.
- The smart meter rollout has demonstrated it is very difficult to convince disengaged customers to act.

We believe that suppliers are best positioned to engage with consumers, despite the engagement challenge discussed above. In that regard, we would support a limited set of common terms used for the engagement of consumers to be used across the industry, but beyond that we would not recommend prescriptive requirements for consumer communications, or a central body coordinating engagement. There should not be any impediment to suppliers innovating or focusing on particular benefits that the settlements or DUoS charging reforms create over others.

The introduction of the planned Target Operating Model (TOM) provides certain groups of consumers (i.e. those without smart meters and those with smart meters operating in 'dumb mode') with less ability to engage with how they use electricity than they do now. This is because under the new arrangements they will lose the ability to reflect their consumption time pattern in their tariff (which is currently achieved through the use of SSCs and TPRs). Therefore, suppliers will be unable to settle these consumers on any time-of-use tariffs as accurately/cost-reflectively as under the present settlements arrangements.



In summary, while we do not have any product related experience to share with Ofgem, the smart metering rollout strongly suggests that that a significant cohort of consumers are likely to remain hard to reach and that the proposed settlement reforms will actually reduce suppliers' ability to apply cost-reflective tariffs because of the loss of SSC/TPRs.

b) What specific information about their energy use could encourage consumers to engage? Please consider how this information is presented and how regularly it is communicated.

This has been a major focus of the smart metering programme, and a number of approaches have been implemented (for example to encourage consumers to engage with the energy efficiency advice provided).

When SSE, Scottish Power, E.on and EDF Energy started the Energy Demand Reduction Pilot (EDRP) with Ofgem, we were all asked to lead with a green message to engage with customers. All four suppliers independently adapted the message to focus on price/bill reduction as the green message was not incentivising action from customers. This price/bill reduction message has continued to be the primary message throughout the rollout, though we have seen recently consumers starting to become more receptive to a green message. With smart meters we also have customers who are early adopters of technology, those who like other benefits such as no estimated bills and those who need the reassurance of friends and family before accepting a meter.

In conclusion there is not one single message that works, but the most universal is cost savings.

Question 2.2: Aside from communication, what other measures or initiatives would encourage consumers to become more confident about engaging with their energy use? This engagement may be direct, or through an intermediary/third party.

We would question whether this is in scope for the programme. We have tried to emphasise the relationship between billing and settlements with limited success. The consumer will only engage with the tariffs and automation that they feel comfortable accepting and understand. It will take time to build trust on both these elements. Even with tariffs and automation the relationship between billing and settlements need to be aligned.

The evolution of the market will naturally encourage consumers to be more confident about engaging with their energy use. Examples include the continued take up of electric cars, and energy storage beginning to enter the market.

We are concerned that consumers who cannot or will not engage will be penalised/subsidise others. We prefer an approach that rewards those who are engaged, rather than creating an environment that is set up to create winners and losers. For



example, one area that would result in winners and losers are non-half-hourly consumers picking up a larger proportion of industry costs. This means that the design of future industry frameworks (such as charging, post-supplier-hub, settlements and so on) should try to anticipate participants from profiting from false-arbitrages (i.e. cherry picking with no or little added value).

Any regulations imposed on energy suppliers and other parties should be the same across all market players operating in the commercial space. This includes large and small energy suppliers, as well as third party organisations. Regulated activities may include those beyond the meter, and it would create an unfair playing field should regulations only cover certain types of organisation.

The increase in auto-switching services as the point of consumer engagement with the industry creates a barrier to engagement on aspects of consumer energy use because of the emphasis on price (it also creates a barrier to the development of customer service as a product attribute). This restricts the supplier or other parties' opportunity to engage consumers on other topics such as energy behaviour change.

Question 2.3: Based on any relevant evidence you have collected,

- a) what proportion of consumers would be price responsive?
- b) what enablers would be important and what barriers might exist?
- c) what volume of load shifting from peak to off-peak periods (%) will a consumer be able to offer?

This is an area that EDF Energy is focussed on gathering evidence from our commercial offerings.

There is a risk that evidence is based on opinion formers rather than how an average consumer would act. This may bias results to look more positive than will be achieved through larger scale roll-outs.

We are taking actions to understand the proportion of consumers who want to act themselves to control their energy use, or alternatively are content to rely on automation. This evidence will evolve over time as the products in the market improve and customer acceptance and awareness of such offerings increase.

The Low Carbon London Trial was able to evidence that time-of-use tariffs can lower the majority of consumer bills, though there were some for whom this was financially detrimental. While the trial had many positive outcomes, the tariff used was not realistic/commercially viable at the time but a simulation of what a future tariff could be. Therefore, Ofgem should explore distributional impacts and the benefits of load shifting but for a realistic view of customer impacts the results from commercially viable products are required.



DNOs have stated at Smart Grid Forum meetings that in their Low Carbon Network Fund projects that consumer behaviour did not alter as much as at other times at the coldest time of year – i.e. when demand reduction was most important, as they would prioritise heating their homes over possible cost savings. This would result in the highest potential savings from load shifting of heating not being realised.

Question 2.4: A number of different approaches to load shifting exist.

- a) Which approaches to load shifting (direct, or indirect, with or without automation) would domestic consumers be more likely to prefer and respond to?
- b) What are the risks and benefits of these approaches?
- c) How could those risks be mitigated?
- d) Would certain types/groups of consumers favour certain approaches?
- e) Would certain types/groups of consumers be at greater risk of detriment from certain approaches?

These approaches could include but are not limited to:

- ToU tariffs
- Tariffs reflecting capacity-based charges, which may involve a defined access limit or different types of access option as described in paragraph 2.6 and Appendix 4

There is a concern that Ofgem will base the market-wide Half Hourly settlements business case on assumed actions by industry. These actions will need to be supported by investment in systems, processes and hardware which should also be taken into account.

Question 2.5: Which parties (eg suppliers, other third parties, network companies, community schemes etc) do you consider could be best placed and/or trusted to facilitate these above approaches?

Suppliers are best placed to facilitate the above approaches. Energy suppliers have existing relationship with consumers, settle the energy and create the tariffs and billing processes that link settlements and consumers.

Other parties will not be regulated (under the current licensing arrangements) and may well be focussed on extracting value from the transition to new arrangements (the false-arbitrage we described above). Facilitating entry/activity in these circumstances could create increased long term trust issues with the whole market and higher costs in other parts to the market such as DNOs, System Operator, generation and suppliers.



Question 2.6: Certain consumers may face barriers that prevent them from load shifting.

- a) What barriers exist that may prevent consumers from load shifting?
- b) Which particular groups of domestic consumers may face greater or more significant barriers than others?
- c) For particular consumers are there certain types or levels of consumption that there will be less scope to flex (ie are there any forms of consumption that consumers would consider as "essential" and be unable to shift, such that suppliers, network companies or third parties should not be able to offer to reduce consumers' usage below this limit)?

There are a number of consumer groups that could face barriers to engaging in load shifting. These include;

- Renters who may not be fully in control of their energy engagement. In particular, investment in smart home technology are not likely to be attractive as such customers may only expect to reside in the premises for a (relatively) short period of time
- Consumers who cannot afford to pay for load shifting hardware such as electricity storage.
- Vulnerable consumers including the elderly.
 - o In the smart meter rollout in Victoria (Australia) the rollout had to be stopped due to the mandating of ToU tariffs negatively impacted the elderly more than other consumers (as they were less able to change their demand).
- Consumers who are time poor.
- Consumers who have an inability to secure necessary short-term financing to realise the long-term benefits of innovative technology.

These consumers should not be penalised for their inability to shift energy; at the same time those consumers who can shift energy should be rewarded for reducing industry costs. Any regulations that protect any consumer group should not be prescriptive as they may restrict innovation and inadvertently impact some consumers.

Question 2.7: Do you have any views about the scale of any distributional impacts? How may these be mitigated?



The methodology for how the costs of the programme are apportioned to consumers should be considered carefully. Consumers should be rewarded for changing their behaviour rather than penalising those who do not.

Question 2.8: How could innovative technologies or solutions enable more consumers to provide flexibility, either individually or collectively (eg through a community approach)?

There are many innovations that could provide flexibility to consumers. For these to be introduced they need to have positive business cases and technically mature products. Between now and the delivery of market-wide Half Hourly Settlements many of these solutions will improve in terms of both cost and the technology, making it more likely that new offerings will be developed by the market which are accepted by customers.

For innovations such as electric vehicles and storage to continue to develop, industry processes and regulations will have to adapt/provide flexibility to support innovation. The Elexon settlements sandpit demonstrates what could possible.

Question 2.9: We want to understand what specific concerns or risks of detriment may exist with the use of technology and innovation to enable flexibility.

- a) What barriers exist for consumers to access these enabling technologies/innovative products?
- b) How could these barriers be overcome?
- c) Are there any particular concerns which may apply for certain consumer groups, eg vulnerable consumers (affordability and practicality)?
- d) What further protection measures should be considered alongside these technologies?

We have described the barriers we see in our responses above. These are principally consumer engagement, affordability (of smart energy solutions), and ability to load shift.

Question 2.10: Do you have any views about whether consumers may prefer particular tariff types over others (for reference, some examples of ToU tariffs are listed in Appendix 2, and potential access options are described in Appendix 4)?

We are currently exploring more innovative tariffs, but do not have any evidence to provide at this time.

Question 2.11: Which types of flexible tariffs and offers are likely to be available following settlement reform, considering the potential network charging and access options described? Please identify specifically the types of tariff options which

- a) suppliers are already offering or are developing
- b) you expect may emerge following settlement reform



c) you expect suppliers may develop in response to more granular, locationally differing network charging signals and the availability of different access options for their consumers. Would you expect to see such tariffs, automation deals or offers targeted to consumers by location if underlying network charges varied locationally?

It is expected that locational network charges would be a large part of any tariff. The benefits of this must be considered against the complexity they create for the consumer.

Question 2.12: Considering any tariff options or packages you have developed or may develop, please provide any evidence of consumers' attitudes or response to them.

We are currently exploring more innovative tariffs, but do not have any evidence to provide at this time.

Question 2.13: How far could principles-based obligations help ensure tariffs/choices are appropriate, including in relation to potential new access options?

The primary approach should be to enable and support innovation and evolution rather than pre-empt a need for new obligations. Any obligations that Ofgem can evidence are required should be principles based to provide suppliers with the flexibility to maximise consumer benefits while still providing adequate protections.

Any obligations need to cover all the market participants equally to ensure all consumers are protected as is intended, and not create an uncompetitive playing field which disadvantages current regulated parties compared to new entrants (or vice versa).

Non-domestic

The non-domestic questions are repeats of the domestic questions and many of the same themes apply to the answers. One area that is different is that non-domestic consumers are better able to access capital where there is a positive business case for investment within a reasonable timeframe. This could result in certain technologies being take up faster in this market segment. Business cases will also be easier to make where energy consumption is higher.

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