

A Response To:

Ofgem (2019) Access and Forward-Looking Charges Significant Code Review – Winter 2019 working paper

(<https://www.ofgem.gov.uk/publications-and-updates/access-and-forward-looking-charges-significant-code-review-winter-2019-working-paper>)

Comments made on:

1. [How options could be applied to small users](#)
2. [Behavioural Insight Report on small users](#)

(taking into account but not commenting directly on [Consumer Panel Report](#))

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Paper: How options could be applied to small users

Ref: https://www.ofgem.gov.uk/system/files/docs/2019/12/winter_2019_working_paper_small_users_note_publish.pdf

General comments

1. Overall this document places substantial weight on, and therefore largely trusts to, the effectiveness of the rational actor model of consumer price response. Unfortunately the evidence provided both by the accompanying “Behavioural Insight Report on small users”, the “Consumer Panel Report” and the wider energy demand literature suggests that this model **does not work** in the household context. Households are rarely cost optimisers in the sense that small (and large) businesses might be. The consequence of this is that the *information deficit model*, where we expect consumers to make the ‘right’ ‘rational’ choice if they have complete information **also does not work**. I highlight in the specific comments below where this is particularly problematic.
2. I recommend perusal of the New Zealand Government’s recent pricing review (New Zealand Government 2019). This contains much highly relevant discussion because New Zealand’s market is similarly structured to the UK but the penetration of smart meters is substantially higher (~ 85% of ‘small’ users, ~ 100% of others). Time of use tariffs have therefore already entered the market while area-specific DNO charging is generally visible to consumers who care to inspect their bills. In this respect it should also be noted that distribution charges for residential consumers rose 548%, while those for commercial and some industrial businesses fell 58% in New Zealand between 1990 and 2018 (New Zealand Government 2018, 9), an issue which the review recommended should be addressed.

Specific comments

1.22 “to ensure consumers can easily compare tariffs and make informed choices”; 1.27 (2) “Users... need to be able to understand arrangements and have sufficient information to be able to reasonably predict their future access and charges”; 1.31 “important they can understand the requirements and potential implications of a tariff” & 1.92 “There could otherwise be a risk that *some consumers* may sign up for choices or tariffs which they do not sufficiently understand”

As noted in the behavioural insight report, recent research showed that even with ‘complete’ information, over 50% of a representative sample of GB bill payers did not or could not make a ‘correct’ choice (see (Moira Nicolson 2018 Table 14) and also further discussion below).

Further, the same study reported that 35% of ‘higher’ social grade respondents selected the ‘wrong’ ToU tariff for a presented consumption pattern while 18% did not know. Crucially, ‘lower’ social grades did slightly worse (37% incorrect selection, 25% did not know). These results imply that **some consumers** may be a substantial and concerning proportion.

1.30 ref 'essential demand': "it may not be meaningful to try and do so for these purposes, particularly given consumers' varying and evolving needs" (also 1.140)

Research on energy sufficiency comes to exactly the same conclusion. If it is not *required* for the efficient functioning of the system then it should not be pursued - it is likely to become an aggressively contested distraction since, as (Tina Fawcett and Sarah Darby 2019) note, "a sufficiency framing will involve challenging social and political debates, and technological advances will not allow us to side-step these."

1.48 "The consumer could choose to profile their level of access over time to better reflect when they want access to the network"

The behavioural insights report suggests that consumers do not make such judgements so it is relatively unclear why this is a better option than simply applying time-of-use tariffs so that a consumer who uses more at off-peak benefits from cheaper energy?

1.48 "A small user could agree to the DNO being able to curtail their usage at certain times"

There is evidence that this could be effective if a (cost-inducing?) over-ride function is provided (Fell et al. 2015).

1.53. "Options requiring users to define and pay for their access requirements could incentivise them to take action"

This may be true but the evidence noted above suggests that it will be impractical to assume that a useful proportion of consumers can or will do this (this is noted in 1.57)

1.62. Time varying charges

Given the evidence above this would appear to be the 'easiest' option to implement as it avoids the debate over what is 'essential' or 'sufficient' (Tina Fawcett and Sarah Darby 2019) and does not require consumers (or energy service intermediaries) to make decisions about pre-specified levels of access. Time-varying charges could also be used to amplify the carbon intensity of the electricity consumed perhaps providing a further lever to deliver the ICC's targets.

However as noted above, 36% of consumers may choose the 'wrong' time of use tariff and thus potentially face higher bills – see discussion of 1.92 "*There could otherwise be a risk that some consumers may sign up for choices or tariffs which they do not sufficiently understand*" above and "*4. Energy literacy amongst consumers is relatively poor*" below.

1.67 "Retail principle-based rules require suppliers to ensure tariffs are appropriate, vulnerable consumers are protected, and they can make *informed choices*"

As above, there is some doubt as to whether **informed choices** are actually made (correctly) even with full information and support. Effective policy and regulation cannot end with this assumption – if the assumption is wrong, which appears to be the case, then a different approach is required.

1.68 "Granular DUoS charging could involve potentially substantial differences in charges for users in adjacent areas"

This is a corollary of the NHS 'postcode lottery' and may imply that these costs should be socialised across a wider area. Experience in New Zealand where DNO/lines charges are already location specific suggests this may cause substantial actual and perceived

energy inequity although the New Zealand Government's recent pricing review did not recommend change (New Zealand Government 2019).

1.90 "If we introduce a greater range of consumer choice of access options and tariffs, we would expect consumers to benefit overall"

As noted above, the evidence suggests that this expectation is unlikely to be fulfilled for large proportions of consumers. There may instead be greater confusion and little overall benefit. The assumption that 'choice' works as an efficiency-driving mechanism in this context is therefore problematic.

1.139 "We will ensure our assessment is based on realistic assumptions about consumer behaviour" (also 1.161)

This is entirely to be welcomed and implies that the next iteration of the Working Paper must take *full account* of the evidence presented in the Behavioural Insight Report on small users and the Consumer Panel Report as well as additional material referenced in this submission.

1.143 "smart technology and automation may well mean ... the consumers need not engage directly with the signal" (also 1.151)

As an example, SolarCity installs PV & battery systems in homes in New Zealand at SolarCity's own cost (long term finance) and uses them to buffer consumer demand¹. The consumer buys electricity generated by this 'behind the meter' power plant from SolarCity and any 'top up' power required from the grid. SolarCity report considerable success in decoupling grid load from end-user consumption thus shifting load invisibly to the consumer whilst reducing grid peak demand **and** overall power bills. Anecdotally SolarCity have seen substantial uptake by low income households due to zero up-front capital cost and lack of exposure to price 'shocks' of the kind that impacted Flick energy's wholesale ToU price-following tariff² (ref 1.152 and other discussions of vulnerable or marginalised consumer groups).

Paper: Behavioural Insight Report on small users

Ref:

https://www.ofgem.gov.uk/system/files/docs/2019/12/behavioural_insights_and_forward_looking_charging_report.pdf

General comments

1. This is an excellent piece of work for which the team should be commended. It illustrates exactly why some of the conceptual foundations (consumers as rational actors, consumers as price responsive flexers) in the 'small users options' paper need to be reconsidered.
2. Whilst the evidence is still limited the (Frontier Economics and Sustainability First 2012) paper is relatively old. More recent reviews which update this (with much the same conclusions) include (Frederiks, Stenner, and Hobman 2015;

¹ <https://www.solarcity.co.nz/solarzero>

² <https://www.stuff.co.nz/business/108499388/2500-flick-customers-jump-as-wholesale-power-price-pressure-continues>

Srivastava, Van Passel, and Laes 2018). Attention should also be paid to (Andor and Fels 2018) which discusses non-price effects.

3. It should be noted (the authors are well aware) that many of the studies quoted in these papers are not representative (random) samples of customers. They are generally self-selecting (opt-in) samples who are therefore likely to be positively biased towards the study's aims. The consequence is that larger responses may be found than would be the case for the wider customer base. This is also likely to be the case with Octopus Agile's early adopters who appear to show a reasonably large time-of-use response (28% peak demand reduction & 47% for EV owners – see (Octopus Energy 2018)).

Specific comments

“4. Energy literacy amongst consumers is relatively poor”

Nicolson rightly draws attention to her own work (Moira Nicolson 2018) on slide 26 but underplays the significance of her findings. Her research suggested that even when provided with full information in a task that required no greater than primary school level maths, only 44% of a representative sample of GB bill payers selected the 'best' ToU tariff for a presented consumption pattern (Moira Nicolson 2018 Table 14). Crucially, 'lower' social grades did even worse (39%). This raises serious questions about the default 'energy justice' consequences of relying on 'informed choice' of ToU tariffs and thus price incentives to flex demand.

Collated references

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