Sustainability *first*

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2 October 2023

To: consumerflexibility@ofgem.gov.uk

Ofgem – Engaging Domestic Consumers in Energy Flexibility – Call for Input (CfI)

Sustainability First has a long-history of working on the GB electricity demand-side from a consumer standpoint going back to our original GB Electricity Demand Project. We also have been directly involved in ToU and flexibility innovation projects, plus membership of the BEIS / Ofgem Smart Systems Forum, the Ofgem Design Advisory Board for market-wide half-hourly settlement, and Ofgem's Challenge Group for ED2.

DESNZ has recently concluded a lengthy consultation on Retail Innovation. Many of the questions raised in this Ofgem CfI cross-over. We therefore draw your attention to the Sustainability First response to that consultation as a part of our response to this CfI.

The Ofgem CfI outlines multiple high-level factors likely to engage consumers in domestic flexibility. However, the CfI document lacks a clear focus on how domestic flexibility is most likely to evolve in practice and gain momentum over time – and importantly therefore lacks insight into the *priority steps* for greater consumer engagement for flexibility.

There are two specific medium-term drivers of household flexibility – of which the *consequences* for engaging customers in flexibility are largely overlooked in the CfI document:

(1) **the time-line for market-wide half-hourly settlement - and the new financial risk this will create for suppliers** - unless they achieve a closer match between what it costs them to supply a particular customer - and the way that customer is subsequently charged

(2**) For the next five-to-ten years the main addition to electricity load – and potentially to household flexibility - will be from EVs (both kW and kWh).** EV acquisition will increase through commercial fleets and the more able-to-pay households. In the same time-period, heat pump (HP) installation will probably continue at a slow pace – mostly in new-build developments, social landlord refurbishments and a few able-to-pay homes.

From a general equity standpoint, it seems important for a clear expectation that additional system costs (capacity-, network-related) caused by new EV and HP loads should be recovered from - in part at least - those customers who trigger them. Some will see this as a deterrent to electric car or heat-pump uptake and a risk to the pace of de-carbonisation of transport and heat. But the main argument for flexible operation of EVs (and HPs should HP flexibility in the end prove practicable at scale) – is that the customers who create added system costs should also be encouraged to help avoid these costs through their flexibility – *to benefit both for themselves plus all customers*. Failing that, increased costs that arise from EV and HP adoption will fall across every customer, irrespective of whether they have an EV or HP, and including those least able to pay and unable to be flexible.

In this context it is worth noting that in 2022 40% of the bottom quintile by income had no car – as against only 13% in the top three quintiles, and where, in contrast, over 40% have more than one car

(source ONS). These existing inequalities need to be considered in thinking about how the flexibility market is likely to evolve.

The Ofgem document comprehensively describes factors for engaging customers in flexibility but as a result also reflects something of a 'do everything everywhere all at once' approach.

While there are good arguments for trying to get people used to the idea that when they use energy matters as much as how much they use, the scope for significant savings without an EV, heat pump or battery / solar is limited.

A more realistic focus might be to take a 5-10 year time-frame on engaging customers who buy EVs (and HPs to some extent) and, in so doing, acknowledge the following practical realities of a smooth customer journey:

- **Make 'point-of-entry' the priority – especially for EVs** - for the next decade, 'point-of-entry' will be the best moment to trigger new customer-thinking on flexible charging and tariff choice – especially for EVs (but also HPs). **A concerted focus on EV flexibility at the point of purchase should be the top-priority for customer engagement** – including where EVs are employer / fleet owned.
- **Flexibility matters to customers as a way to reduce their electricity bills :** most household customers will take an interest in flexibility if they see this as a main way to reduce their EV or HP running costs. Most ToU and flexibility trials, including the most recent DSF evaluation by CSE, show that customers mainly participate in flexibility programmes because they expect to reduce their bills.
- **At the point of purchase of an EV or HP, vendors should be required to offer a referral for *free independent advice*** on available options to manage their **running costs (kWh)** : customers should be clearly and independently advised on likely costs associated with being free to charge their EV (or run their HP) whenever they choose – as against possible options for reducing running costs through their flexible operation (and benefit other consumers too, as a by-product). Approaches to funding this kind of independent advice would need thought, ranging from a vendor-levy to government- or Ofgem supported schemes.
- **Household capacity charges (kW) may eventually also be necessary to drive customer flexibility:** active thought needs to be given by government and Ofgem to the potential for introducing a future household capacity charge to more closely reflect the cost of the size of a customer connection in terms of their kW offtake (as per Norway for household EV connections). In past consultations on the allocation of network charges the choice has been presented as being between volumetric and standing charges when a capacity charge would offer a more cost reflective basis for charging that also includes an element of rough justice linked to affordability. The DESNZ Alternative Energy Markets trials could usefully explore options. Not least, consideration would be needed as to how to mitigate the capacity costs associated with existing electric-heat provision (which is typically in lower income households).
- **Learning-by-doing – enabling market-led future pathways to develop**: Ofgem and government should reconcile themselves, beyond current experience of trials and pilots, that for the next decade household flexibility markets will be shaped through learning-by-doing – whether that's for market actors and / or for consumers on a largely 'buyer beware' basis. Some market actors will get burnt - as will some households. It will not be possible to foresee or to protect every customer from the potential for unfair treatment. At the same time, Ofgem and the competition authorities must make very clear their aim of safeguarding customers as smart markets develop, including the reputation of those markets. Principles based regulation around treating customers

fairly offers the prospect of at least basic protection without unduly constraining how the market might develop.

- **Ofgem needs better data if it is to avoid flying blind into the energy transition:** Ofgem must remain extremely alert to the potential for harm by vendors, suppliers and aggregators. From early-on Ofgem must develop suitable market metrics, including through close monitoring of customer complaints, so that patterns of customer abuse and exploitation come to light rapidly to be addressed. Crucially our PIAG project[1] highlighted the need for Ofgem to have access to granular smart meter data to enable it to understand market developments and identify potential abuse.
- **The needs of disadvantaged and vulnerable energy customers remain key – and they must not shoulder a disproportionate share of the costs associated with the adoption of EVs and HPs by early-adopters and the able-to-pay.** It seems unlikely that this customer segment will be wide-scale owners of EVs and HPs in the next five-to-ten years without dramatic interventions, especially on upfront capital grants. They are therefore unlikely to be major contributors to customer flexibility in those time-scales. Government and Ofgem must therefore act to ensure these customer groups are not indefinitely excluded from access to low carbon technologies, and that a growing segment of disadvantaged and vulnerable customers become supported in gaining access to them in the next five-to-ten years. It will then be vital that these customers should fully benefit from reduced running costs associated with their flexible operation wherever that does not disadvantage their personal needs. Above all, Ofgem must ensure that disadvantaged customer groups do not shoulder a disproportionate share of the costs of electrification of transport and heat of the able-to-pay.
- **Today's customers without EVs and HPs - but who have high loads at winter evening peak - need special consideration.** A proportion of these customers may be unable to flex and therefore obtain a benefit from peak-related prices - especially if they heat with direct-acting electric heat or if they have particular health-related needs. Such customers should not should be unduly penalised by moves either to peak-related or dynamic pricing - until such time as they also have loads which can respond. For Ofgem to understand the magnitude and nature of these challenges it needs much better data linking time of use consumption with customer demographics.

Learning from Economy 7: In developing approaches for future household flexibility, Ofgem must first analyse and understand the full lessons – positive and negative - that are available to them from the experiences of the 1.5 million Economy 7 storage-heater customers today. This is a point we have repeatedly made to both government and to Ofgem – including via the following:

- Report by Grid Edge Policy - The role of storage heating in heat decarbonisation https://ssen-innovation.co.uk/wp-content/uploads/2022/08/NIA_SSEN_0039-Electric-Heat-Pathways-Final-Report.pdf
- Treatment by Ofgem of Economy 7 under the price cap – including that Ofgem lacks the granular consumption data to effectively oversee even this basic part of the ToU market. https://www.sustainabilityfirst.org.uk/images/2023/02/06/glen_dimplex_report_economy_7_Jan23.pdf
- Follow-up from a Sustainability First roundtable for consumer groups to discuss how more focus must be given to Economy 7 customers - both to tackle the immediate issues (with many of these customers being low income or vulnerable) – and also to provide a more robust foundation for development of time of use tariffs going forwards - here

[1] www.smartenergydatapiag.org.uk – see in particular the report on Ofgem's use of data

Finally, the Ofgem call for input must recognise far more clearly that the customer journey for flexibility will be an extended one. Ofgem needs to be more explicit about the likely chronology and their practical expectations and priorities across time-periods for household flexibility. This must reflect a clearer understanding that for the next five-to-ten years the main drivers of household flexibility will be (1) the onset of half-hourly settlement and (2) a steadily growing EV market (focused on those who are better off financially). Importantly, although the household flexibility market remains very nascent Ofgem must also set out very clearly how, as these different flexibility markets evolve, the approach they expect to take on treating customers fairly via their market monitoring, market metrics and reputational regulation. As a priority, this must include the kind of interventions and safeguards they expect to adopt to protect vulnerable and disadvantaged customers.

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