By email only to : half-hourlysettlement@ofgem.gov.uk

Ofgem Settlement Reform Team :
Anna Stacey, Head of Settlement Reform

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Please reply to :

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Dear Anna

Ofgem Consultation – Access to Half-Hourly Electricity Data for Settlement Purposes
Response from Sustainability First & the Centre for Sustainable Energy

This response reflects the views of Sustainability First and the Centre for Sustainable Energy (CSE). Sustainability First and CSE are two environment charities, each with a strong record in the field of energy demand-side policy and practice, and significant experience of consumer and public interest issues and approaches to regulation.

For this submission, we draw on lessons from our work with the Public Interest Advisory Group (PIAG) on access to smart meter energy data which we convene - and from PIAG workshops and discussion. The PIAG work programme is led for both organisations by Maxine Frerk and involves a group of key 'public interest' stakeholders. While at DECC, Maxine was lead-author of the government's Data Access and Privacy Framework 2013. Further background on the PIAG project can be found in the Annex to this submission.

Kindly note that this submission is not a formal response on behalf of PIAG or our members.

In summary, we question Ofgem's initial decision to favour Option 2 - a customer 'opt-out' for providing their half-hourly meter-data into the settlement system. The principle which under-pins the Data Access & Privacy Framework 2013 (and reinforced at EU level) is that consumers should have a choice over use of their data *except where this data is needed for a regulated purpose*.

If Ofgem is satisfied that settlement reform brings new and significant consumer and efficiency benefits to the electricity system as a whole (which we and Ofgem each expect), then customer half-hourly data should be made available to the settlement system as a regulated requirement, rather than a matter of customer choice. Of course, steps should be taken to minimise privacy impacts for customers – for example through 'hidden identity'. But, in our view, the proposed Option 2 for customer 'opt-out' puts at risk the longer-term potential benefits of settlement reform being fully realised for consumers at large. And, as recognised by the consultation, an 'opt-out' approach arguably could lead to potential 'gaming' with some retailers (or customers) potentially taking unfair advantage of an electricity system only partly-settled against 'actual' energy usage.

In coming to its decision in favour of Option 2, Ofgem draws on focus group findings from its Consumer First Panel (~60 customers in total) – plus a short Omnibus survey of ~1500 respondents. Absent other relevant evidence (on international experience, for example), such research can offer helpful insight into customer thinking, but customer data-privacy and electricity settlement reform are unquestionably complex topics for consumer research. In arriving at fundamental decisions about the future shape and desired outcomes for settlement reform, customer research should be treated as just one among a number of relevant inputs.

Separately, Ofgem is presently reviewing detailed privacy plans submitted by distribution network operators (DNOs). These plans are designed to allow DNO-access to customer smart-meter half-hourly consumption data for their own regulated purposes. This new data is expected to help DNO's improve on how they plan and operate their networks. Ofgem recently agreed the privacy plan submitted by Western Power Distribution (WPD).

In the main, consumers will not distinguish between a need by their DNO or by the settlement system, for their half-hourly data. From a consumer perspective each will look very similar. In both cases the reason for accessing 'actual' half-hourly consumption data is to help improve the efficiency of the energy system overall. Notably, the DNO privacy plan just agreed by Ofgem is based on an option of pseudonymisation as standard, without customer 'opt out'. It is unclear why different approaches to different regulated activities would be warranted for access to customer meter-data. Different approaches may also needlessly complicate communicating with consumers. From a regulatory standpoint, consistency of approach to access to customer meter-data for regulated purposes is surely important.

We are extremely mindful of the importance of privacy issues to consumers. But, we nonetheless believe that the likely long-run benefits from successful settlement reform, including for consumers overall, will warrant a mandated approach to collecting customer half-hourly consumption data for settlement (Option 3), with 'hidden identity' (Option 4b). Our logic is simply that system settlement is a regulated activity, and should be treated as such for access to customer meter data. This approach would also align with that recently agreed by Ofgem for WPD. Mandation would also address the potential for gaming noted above. A mandated approach to accessing customer data for settlement purposes may in the end prove fairer overall, subject to a good understanding of the likely distributional impacts for end-customers of greater cost-reflection in under-lying industry charges from settlement reform – especially for energy consumers in vulnerable circumstances. It will be important to explore this topic in the economic case in the half-hourly settlement Business case.

We recognise there are particular questions regarding consent arrangements for access to data for settlement purposes for the ~6 million customers who already have an electricity smart meter (i.e. foundation or SMETS 1 meters). Even so, Ofgem's proposal for this customer group to retain the existing 'opt in' arrangements until they change either their tariff or their supplier seems out of step with achieving successful settlement reform and arguably disproportionate. Should consent arrangements for customers who already have a smart meter be judged a significant obstacle, then an 'opt out' for such customers may be an appropriate fall-back. Ofgem's main argument against an 'opt out' for these customers is that they may not read the information. This is not a strong argument in itself. In practice, customers who feel strongly about such issues are perhaps more likely to read revised terms from their supplier. A single cut-over point to allow access to half-hourly data for settlement i.e for a regulated purpose – would also allow for more co-ordinated communications by Ofgem and by consumer groups.

A further point we wish to make concerns the proposals around aggregated data for forecasting. This has direct links with the PIAG work. While Ofgem is considering the provision of aggregated data by supplier at Grid Supply Point Group level for forecasting it notes that there are concerns around small numbers of customers enabling re-identification (either for small suppliers or for more granular geographies). An obvious solution would be to provide market level aggregated data at, for example, LSOA or street level which could become available to all suppliers and also for other public interest purposes. While we recognise that Ofgem are looking to limit the scope of this consultation to settlement, Ofgem has a wider interest in making such data available to other market participants to encourage the provision of flexibility services by non-traditional players. As such we believe more open provision of aggregated data would be more consistent with Ofgem's duties than simply providing this data to existing players.

Last, Ofgem's decisions on customer privacy and access to data for settlement purposes will also create a GB precedent for future thinking around eventual wider access to customer meter data, including for third parties (subject of course, to suitable customer privacy safeguards). Not a topic for this consultation, but para 2.6 (page 16) of Ofgem's consultation acknowledges the work of the Public Interest Advisory Group convened by Sustainability First and CSE in exploring access to energy meter data for 'public interest' purposes – 'for research, to aid policy-making or support beneficial innovation'. The work under-taken in PIAG has already noted how GB is internationally unique, without some form of centralised repository for smart meter data - which might eventually take on the role of a secure gateway to access smart meter data for purposes of 'public policy'. Our final PIAG report due in spring 2019 will explore the potential for appropriate and secure routes / gateways to smart meter data for public policy purposes. A settlement system in which access to customer half-hourly data was mandated for a regulated purpose would perhaps avoid needlessly closing a door on one such eventual 'secure gateway'.

We provide answers to the individual questions in the attached annex.

Yours,

Maxine Frerk	***Judith Ward***	***Simon Roberts***
Associate	**Associate**	**Chief Executive**
Sustainability First	**Sustainability First**	**Centre for Sustainable Energy**

Ofgem Consultation - Access to Half-Hourly Electricity Data for Settlement Purposes

Response from Sustainability First & CSE

Annex I : Response to individual questions

Question 1: What are your views on Ofgem's assessment of the implications of the options we have set out for access to HH electricity consumption data for settlement?

The most striking thing about Ofgem's assessment is there that there is no reference to or read across from the decision on networks access to data and Ofgem's approval of WPD's privacy plan (following extensive dialogue and iteration). The majority of consumers do not understand the different roles within the energy system and would see these as similar issues ie industry players needing data for a 'regulated' purpose to ensure that we have an efficient energy system and ultimately to help keep the lights on as more renewables are connected to the system.

It is unclear why Ofgem considers a different approach is appropriate for different activity or sectors and what thought has been given to the interactions in terms of customer communication and, for example, the customer's decision to accept a smart meter.

Question 2: Do you agree with Ofgem's current view that the best balance could be achieved by a legal obligation to process HH electricity consumption data for settlement provided the consumer has not opted out, and if so, why? If you have a different view, please explain which option you would prefer and the reasons for this.

No. Allowing for opt-out risks gaming by suppliers who would (1) want to avoid customers with high peak usage being half-hourly settled or (2) cherry-picking customers with low peak-usage. Similarly, individual customers with high peak usage risk being more likely to opt out (even if there was not an immediate price impact it is clear from Ofgem's consumer research that fear of price increases is a reason for customers having concerns about sharing their data). This will undermine the system benefits from HHS to the detriment of consumers at large. Allowing for optout is a disproportionate response to consumer concerns about the sharing of data.

In our view there is a clear case for mandating use of data for settlement but with the use of "hidden identity" (for all consumers) as a way of minimising the privacy impact.

While we recognise that Ofgem's consumer panel supported "opt out" as a sensible middle path it is beholden on Ofgem to do a fuller analysis of the impacts on the system of allowing opt out given the risk identified in question 3. While it is clear that some customers are concerned about sharing their data it is clear (eg from Ofgem's omnibus survey) that for almost all customers this data is seen as much less sensitive than other data such as health or financial data. As such Ofgem should not put at risk the wider consumer and system efficiency benefits of settlement reform by shaping the future data access arrangements around an anticipated small number of customers who may retain significant concerns. Instead, Ofgem's focus should be on how best to design the settlement system reform to minimise the privacy impacts within the chosen approach.

Question 3: There is a risk that consumers who use particularly high volumes of electricity at peak could choose not to be HH settled and therefore disproportionately increase energy system costs, which would then be shared by all consumers. Do you have any views on whether or how we should address this issue?

We agree this is a real concern and is the reason why we are advocating a mandated approach - for reasons of fairness overall.

However if Ofgem remains committed to Option 2 for customer 'opt-out', then additional actions should also be considered. For example, sampling half-hourly data from 'opt out' customers. Absent a full daily customer data-set being available to the settlement system, this would at least allow some evidence of the usage profiles of opted-out customers, including those who may have a heavy peak use.

Question 4: What are your views on the potential enhanced privacy options?

Identifying ways to enhance privacy where this can be done without materially impacting the benefits of the data is clearly the right thing to do. This was explored during the development of the Data Access and Privacy Framework in 2012, and at that point a range of technical options were advocated by academics, Microsoft and others. It is therefore disappointing that bolder options for anonymisation at the meter have been dismissed in the Ofgem consultation. We believe that greater exploration of these options between Ofgem, Baringa and the DCC (Smart Data Communications Company) is important.

As Ofgem acknowledges, Option 4a - the proposed 'anonymisation' option – is not in practice true anonymisation. Establishing a separate private sector body to collect and aggregate the data (but keeping the disaggregated data for some time to allow for validation) clearly would do little to allay the concerns of those customers who have particular concerns on data privacy. While there is mistrust of suppliers, Ofgem's research shows that mistrust of a new third party would actually be higher.

We accept that settlement reform requires many different interests to be reconciled, including those of incumbents. However, we would like to see considerably more stress given to innovative and creative ways to achieve satisfactory technical anonymisation (including different approaches to data validation, which seems to be a particular sticking point). Ofgem should reach out to innovators, universities and others with expertise in privacy-enhancing technologies (such as the Office for National Statistics) and to a wider set of industry players to fully test the anonymisation option initially explored in Option 4a.

If in the end full anonymisation is not practicable, then the hidden identity option (Option 4b) provides an alternative which merits serious consideration. Albeit somewhat less protective of privacy, Option 4b would at least offer a standard approach for dealing with such issues.

Question 5: If we decided to further consider the hidden identity option, do you think data from all consumers should be pseudonymised or only data from consumers who have not chosen to share their HH data for settlement?

If Option 4b (Hidden Identity) is to be pursued, then we are clear that this should provide added security and privacy to all consumers' data. The fact that such an approach was not mandated in the DAPF is not a reason to suggest such data does not need to be protected. General data protection legislation requires data to be kept secure and Ofgem should be making clear that this level of protection is appropriate for all consumers – once a system has been developed to do this then it is arguably easier to have a single system covering all consumers than for this just to be applied to those who have "chosen not share their data".

Given that in the mandated model (Option 3) – which is where this issue arises – consumers would always be sharing their data, the question that suppliers would need to ask is not "are you willing to share your data for settlement" but "would you like us to take extra steps to protect your privacy when we share your data for settlement"; it is hard to envisage any consumer who would say no.

The main counter argument appears to be suppliers raising concerns that this would result in duplication if they were able to hold the data for other purposes without utilising hidden identity themselves. The answer may therefore be that suppliers need to demonstrate that the security they apply to data which they have the consent to collect provides equivalent protection.

Question 6: Please provide any information you can about the likely costs and benefits of these options.

Linking to the comments made above, we assume that Ofgem had some evidence on the costs of a "hidden identity" option when assessing the WPD proposal. If it is considered a proportionate approach for DNOs to take, even in relation to monthly consumption data, then it ought also to be a proportionate solution with respect to settlement system access to customer half-hourly data.

Question 7: Do you think that there should be a legal obligation to process HH data from all smart and advance metered micro-business customers for settlement purposes only? If you disagree, please explain why.

This makes sense given that as Ofgem note the privacy concerns will be less and the system benefits greater than for domestic customers.

Question 8: Are there any issues relating to access to data from micro-businesses that you think Ofgem should be aware of?

In general it is worth remembering that the concerns for businesses can be as much about commercial confidentiality as privacy per se.

Question 9: We propose that domestic and micro-business consumers retain the level of control over sharing their HH electricity consumption data that was communicated to them at the point at which they accepted a smart or advanced meter, until the point at which the consumer decides to change electricity contract. Do you agree this is the best approach?

No. There does not seem to be any necessity to go down this path. It is perfectly common for changes to terms and conditions to be made during the life of an energy contract, in particular where the regulatory framework changes. This is not a "retrospective" change as it would only apply to data collected (or relating to) a future date.

Moreover we know that many customers rarely engage in the energy market and hence could remain on their current 'opt-in' terms with their supplier for many, many years. Moreover these disengaged customers are the least likely to opt-in which means the benefits of HHS will be severely undermined.

We recognise that there is an issue that some customers may have only accepted a smart meter on the basis that they were able to limit the amount of data that was collected. For such customers allowing an opt-out until such time as they change tariff or supplier could be a way forward. The argument that they might not read a notice informing them of the change of terms is a very weak one as the basis for policy making. Having a single cut-over point would allow for more effective communication by Ofgem and consumer groups if there were a concern that it might be overlooked.

Moreover again there is a lack of any read across into the DNO data privacy regime where no such provisions have been made and the WPD privacy plan would apply to both new and existing customers.

Question 10: What are your views on Ofgem's proposal to make aggregated HH electricity consumption data broken down by supplier, GSP group, and metering system categorisation available for forecasting?

We recognise that suppliers have a need for data for forecasting and that more granular data is likely to support better forecasting which will be of increased importance in a HHS world – and that some suppliers are arguing for smaller geographic areas. We note the point raised by Ofgem about small suppliers where GSP level data by meter system could lead to small customer numbers potentially allowing customer re-identification.

As an alternative (or in addition) we would strongly urge Ofgem to look at making market-level aggregated data publicly available at a suitable level of geographic disaggregation (such as a street or Lower Super Output Area – LSOA). This could allow more granular data than GSP to be provided and could address the small supplier issue. Moreover, it would help open the market to a wider range of players and potential entrants who may be looking to assess the market opportunities.

There is an argument that such data should be the most that suppliers can expect to get on a mandated basis – and that if they also wish for supplier-specific data (to help better manage their costs), then they should find a way to share the benefits with their customers and obtain consent. While we recognise that Ofgem's focus here is on settlement, we also note that such an approach - of providing market-level data - could also deliver wider public policy benefits of the kind PIAG is exploring.

Question 11: Is there any additional data beyond this aggregated data that you consider suppliers will need for forecasting?

See q10 above.

Question 12: Our analysis suggests that HH export data reveals less about a consumer and is therefore likely to be of less concern to consumers than HH electricity consumption data. Do you agree?

Yes – and we welcome the inclusion of export data in this debate as it is clearly critical to having an effective HHS system. For electricity system efficiency and for reasons of fairness in allocating industry charges in the future, it will be important for the system to be settled as a whole on the basis of actual customer export as well as actual import.

Question 13: Do you consider that any additional regulatory clarity may be needed with respect to the legal basis for processing HH export data from smart and advanced meters for settlement?

It is not clear that any additional regulatory clarity is needed. It is clear that export data does not fall within the scope of the DAPF but is likely (on ICO advice) to count as personal data. We understand that BEIS are anyway looking to provide additional guidance around the interplay of the DAPF and GDPR. If any additional clarity is needed it may best be done through that route.

Question 14: Do you have any thoughts on the monitoring/auditing environment for the use of HH data for settlement purposes?

No

Question 15: Do you have any additional thoughts or questions about the content of the DPIA? Access to half-hourly electricity consultation

No

Annex II

Smart Meter Energy Data Public Interest Advisory Group (PIAG) Sustainability First & the Centre for Sustainable Energy (CSE).

Exploring how smart energy data could better serve the public interest

Sustainability First and the Centre for Sustainable Energy (CSE) is convening a work programme to investigate how smart meter energy data could be put to work in the public interest and how that can be balanced against the need for individual's privacy and data security. The 18 month project (to Spring 2019) brings together a range of relevant stakeholders to hold an informed and structured policy dialogue on these issues.

The data being captured by the smart electricity and gas meters being installed in every home and business across Great Britain has the potential to transform our understanding of how and when energy is used. In so doing, it could significantly enhance the future design of public policy and market regulation and smarten up the planning and operation of the energy system at national and local scale.

But there are significant and legitimate privacy concerns about whether such data, if accessed without a householder's consent, could reveal too much about individual lifestyles or make people vulnerable to unsolicited marketing by energy suppliers and others. As a result, the government has put in place robust controls on access to the high resolution half-hourly consumption data recorded by the meters.

The Smart Meter Energy Data Public Interest Advisory Group (PIAG) is addressing the central question of how to obtain this better evidence-base of energy end-use data to better serve public policy-making and policy delivery (be that national, regional, local) while at the same time ensuring that customer rights to privacy and data security are observed. These fundamental public interest questions sits at the heart of the PIAG work.

PIAG is exploring how we could best realise the potentially significant 'public interest' benefits of installing smart meters in every home.

With research, analysis, stakeholder engagement and a series of exploratory workshops with the PIAG membership, the Sustainability First and CSE project team are developing an understanding of:

- Public interest principles and data ethics that could apply to smart energy data.
- Potential uses for smart energy meter data which would meet a public interest test.
- How the smart energy data would need to be accessed and analysed to serve these uses.
- Current and potential future arrangements for smart meter data access and privacy protection.
- International experience with smart meter data.

For more detail about the project including the stakeholders involved and the stimulus papers, research notes and other outputs to date from the project, please visit the project website at www.smartenergydatapiag.org.uk.

Members of the smart meter data Public Interest Advisory Group include representatives of :

BEIS, UCL Smart Meter Research Portal*, Ofgem*, the Energy Systems Catapult*, the Data Communications Company*, National Grid*, Elexon*, Northern Power Grid*, Citizens Advice, the Committee on Climate Change, CSE (Centre for Sustainable Energy), Energy Networks Association, Energy Saving Trust, Energy-UK, Greater London Authority, MHCLG (Ministry for Housing, Communities & Local Government), the National Infrastructure Commission, Office for National Statistics, Scottish Government, Smart Energy GB, Sustainability First, techUK, UKERC, TEDDINET / Edinburgh University, Universities of Exeter & Reading, CAR (Cambridge Architecture Research Ltd), Welsh Government, and Which?

* denotes funding partner

PIAG project micro-site - www.smartenergydatapiag.org.uk

www.cse.org.uk

www.sustainabilityfirst.org.uk

centre for sustainable energy

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