Citizens Advice response to Ofgem's consultation on access to half-hourly electricity data for settlement purposes

September 2018

citizens advice

Summary

The use of half hourly (HH) data could make settlement more accurate, timely and cost-efficient. This has benefits to industry: reducing barriers to entry in the market, and reducing costs to consumers if efficiency savings are passed through. It will also enable new products and services for consumers. Ofgem's draft economic case values the benefits of HHS between £1.8 billion to £5.4 billion by 2045.[1]

As such, we support settlement reform and recognise that half hourly data access for a majority of consumers is necessary to maximise the benefit of these reforms. Ofgem has set out three options, which have varying degrees of difficulty in meeting this aim and which afford consumers different levels of control over their data.

The rollout of smart meters has already highlighted some privacy concerns[2] consumers have. Our own research[3] of over 800 consumers with smart meters and over 1000 consumers without smart meters, showed over a quarter had some concern about sharing their energy usage data with their supplier.

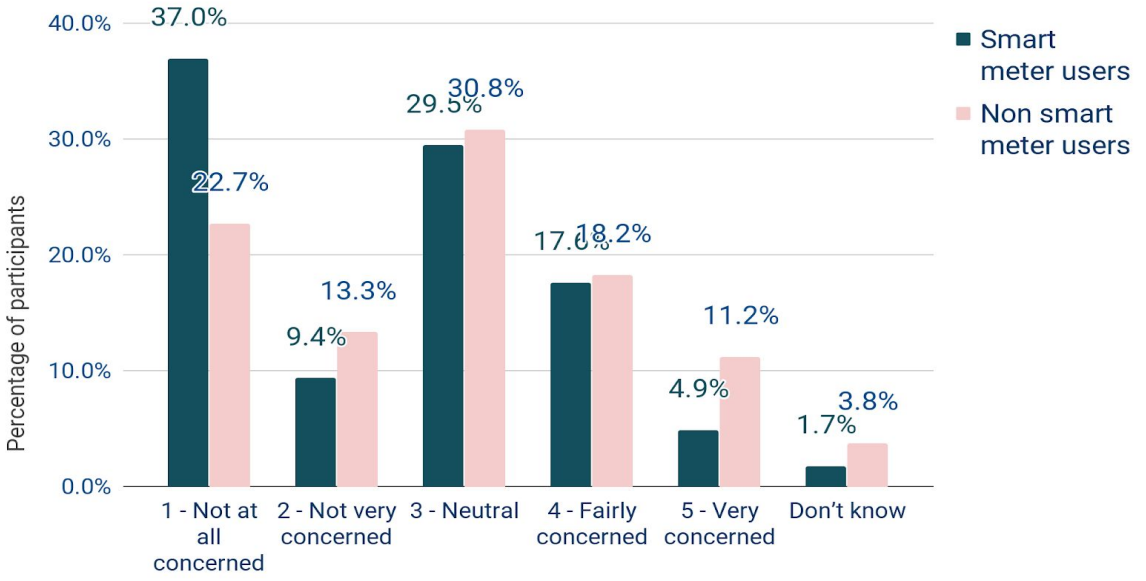

Fig. 1 shows the percentage of consumers who were concerned about sharing their energy usage data with their supplier

[1] Market-wide Settlement Reform: Outline Business Case, Ofgem, August 2018 https://www.ofgem.gov.uk/system/files/docs/2018/08/marketwide_settlement_reform_outline_business_case.pdf

[2] 24 June 2017, 'Is your smart meter spying on you?', The Guardian https://www.theguardian.com/money/2017/jun/24/smart-meters-spying-collecting-private-data-french-british

[3] Citizens Advice, July 2018, 'Early consumer experiences of smart meters 2018' https://www.theguardian.com/money/2017/jun/24/smart-meters-spying-collecting-private-data-french-british

The consumer controls and choices provided through the data and privacy framework were reached after significant work with both industry and consumer groups to ensure that consumers were afforded a reasonable amount of control over how much smart meter data they shared with their energy supplier. The ability for consumers to opt-out down to monthly reads and the requirement for suppliers to acquire consent for anything more detailed than a daily meter read were put in place to help provide consumers with some leverage in an area (consumer data) where consumer understanding and trust is partcularly low.

The key principle was that suppliers would be incentivised to offer something in return for more valuable detailed data rather than relying on a default setting that resulted in them receiving it in the majority of cases anyway.

As such any policy changes that may affect the provisions of the framework should be examined very closely and with careful consideration of their impact on consumers and suppliers incentives to pass benefits of consumer data on to those consumers.

There is also a broader reputational risk with any move that could significantly reduce consumer choice, or give the appearance of reducing consumer choice. The privacy framework has been particularly useful in reassuring consumers that they will retain control. Removing this control risks a backlash and wider suspicion that consumer choices and rights are being eroded.

In order to make an informed decision on the extent to which reduced data privacy rights for individuals might be outweighed by benefits to all consumers and society, **Citizens Advice would welcome more information about the correlation between the amount of half hourly data available and the benefits achieved.**Unfortunately neither the consultation documents, nor the draft economic case give a clear view of the minimum amount of half hourly data required to deliver an overall benefit from half hourly settlement and forecasting, nor the resulting relative costs and benefits of the different data access options.

Consultation questions

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?

For each option, we have set out our thoughts on the assessment laid out by Ofgem. For all options we are of the view that any changes to access to consumption data should only be for half-hourly settlement and not any other purposes.

Option 1: Opt-in HHS

The consultation assumes, based on current consent rates, there will be a significant minority who choose not to share their HH data. Accordingly, one potential implication is that fewer system benefits will be realised from these consumers, who do not shift their demand to off peak periods.

Firstly, we would caution using current consent rates as an indicator for future consent rates. We are not yet in a position to know whether these consent rates are truly reflective of future ones. Many suppliers are still developing their offers, services and products for consumers. As these are developed, the value in sharing half hourly data is likely to increase. If suppliers communicate this value clearly then more consumers are likely to opt-in.

We appreciate that both supplier and network infrastructure costs may increase if HHS does not take place. Citizens Advice would welcome more information about the correlation between the amount of half hourly data available and the benefits achieved through half hourly settlement. This would then inform whether the risk of a 'significant minority' withholding HH data would result in increased costs for all consumers and the extent of those potential costs.

Whilst it may be true that some consumers exhibit a 'status quo bias'[4] - meaning that opt-out HHS could increase consent rates, we must acknowledge that some consumers are concerned about their privacy and who accesses their data. Indeed the research undertaken by Ofgem to inform this consultation reached this conclusion. Unless presented with a compelling value exchange, consumers in most cases will find themselves in whatever the 'default' setting is for any opt ins or outs and this is why an opt-in for the most detailed data sharing was settled upon in the Data and Privacy Framework to ensure that this consumer leverage remained. Consumers should be able to make informed choices and it is far easier to do this when opting in.

[4] Kahneman, 2003, 'A perspective of judgement and choice: mapping bounded rationality'

Option 2: Opt-out HHS

We accept there are some benefits to opt-out HHS. This option would be likely to achieve greater access to half hourly data, more quickly. It would also retain some element of control for consumers in regards to their granular consumption data. However, it would diminish the incentive on suppliers to deliver attractive propositions in return for half hourly data access.

The consultation suggests one benefit of opt-out HHS is that consumers will not have to 'actively engage' should there be a change in occupancy or for every change of supplier event. In our view suppliers should be having a conversation with consumers about their current data sharing choices and options to change them at these points anyway - we would not want to dis-incentivise suppliers from having these conversations.

In the past, we know consumers have felt disempowered when sharing data and can be quite time poor to research their rights. In an opt-out consent scheme it must be clear that they have an opt out available, and this should be easy to exercise, if they wish. While suppliers are required by licence condition to regularly inform consumers of their current data choices, recent research has indicated that only 29% of consumers who had their smart meter for more than a year have any recollection of being provided this information.

One risk of a switch to opt-out half-hourly data collection for settlement is that it undermines part of the original purpose of the consumer choice and control enshrined in the data and privacy framework. This was designed to incentivise suppliers to make a compelling proposition to consumers in return for access to their data. If suppliers stand to save money from accessing more detailed data access then they should be able to pass these savings to consumers in exchange for the access. Consumers are then able to make a choice as to whether this is worthwhile to them.

Allowing default supplier access - even if only for settlement purposes - risks undermining this incentive on suppliers. It will also reduce the relative benefit to suppliers of sharing granular data for wider purposes, and therefore diminish the value of any propositions suppliers can offer consumers in return for this data.

Option 3: Mandatory HHS

Consumers should have transparency and control over their data whenever possible. We think that mandatory collection of half hourly data for settlement risks undermining this, and is therefore an unacceptable approach for collecting this data. We note that the research that accompanied this consultation document concluded that consumers find mandatory data access to be too invasive.

We also think that this approach is not compatible with a voluntary smart meter rollout, where consumers will retain the ultimate opt-out of refusing a smart meter altogether. Changing data privacy protections could risk damaging the rollout of smart meters, if this prompts some consumers to refuse a smart meter, or request the removal of an existing smart meter. Many consumers and privacy advocates have been reassured by the existing choices. Any move that could undermine these (or give the perception of doing so) risks significant reputational impacts on the smart meter programme.

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.

As outlined above, our view is that the status quo is the optimal solution for consumers as it retains consumer control, doesn't change the existing terms and incentivises suppliers to make the case to consumers to access their more detailed data. In most cases we regard an opt-out as inferior to opt-in from a consumer perspective with regard to their personal data for the reasons outlined above. We do acknowledge though that an opt out does allow consumers to retain ultimate control over the sharing of their data and as such it is an acceptable solution if not an optimal one.

We appreciate the benefits of half-hourly settlement to the wider energy system and the potential for those benefits to be passed onto consumers. Unfortunately we do not have a clear view of the minimum amount of half hourly data required to deliver an overall benefit from half hourly settlement, nor the resulting relative costs and benefits of the different options. This makes it difficult to judge the extent to which reduced data privacy rights for individuals might be outweighed by benefits to all consumers and society resulting from this change.

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 welcome that, with this question and with the forthcoming consultation on the impact of HHS, Ofgem is anticipating issues that might occur in a half-hourly settled world. The issue of consumers with particularly high usage at peak time opting out of/ not opting in to HHS, is an important one.

At this moment in time, we believe it is a difficult question to address. Firstly, there is no agreed definition of what "particularly high [usage] volumes" are. Ofgem's Targeted Charging Review touches on this question by introducing the concept of "core" use.[5] Defining what this means could have great repercussions for how network charges are set for different people. We are in the process of commissioning research and forming our own view of what "core" or "acceptable" usage means. Secondly, it is difficult to address because we cannot foresee or even forecast how many high volume peak time users will indeed opt out of HHS solely to avoid being exposed to higher cost-reflective charges.

Although we do agree it would be an issue which would need to be addressed, we are anxious that, if not well designed and implemented, interventions could punish low income or otherwise vulnerable consumers.

If an intervention, say, put proxies in place such as a certain property type with certain occupancy levels should not exceed a particular usage volume at peak time, it could end up punishing groups of consumers who genuinely are not able to lower or control their usage. High energy usage can be due to factors outside of people's control, for example energy inefficient housing with private landlords not taking action, large family sizes, or having old appliances in the home which they cannot afford to replace. Someone's ability to alter energy usage behaviour should also be taken into account, for example a dialysis patient needs a higher temperature in their home and should not be asked to compromise on that.

That said, we do contend that in some circumstances where a household (or indeed a micro business) causes particularly high system costs, for example if they charge their electric vehicle (EV) with anything but a three-pin socket, or export solar power, they may need to accept certain requirements, such as a smart charger for their EV or a smart meter for metered export, to enable energy networks to monitor and manage their network impact better.

We would also like to see a tight governance framework for whoever would be asked to "police" people's energy usage, and sufficient checks and balances in place which govern what actions they are allowed to take.

In summary, we are supportive of Ofgem's thinking in this area and are happy to contribute further in this debate but would caution on acting too soon. We would encourage Ofgem to monitor how many higher volume peak time users do exist and how many of them opt in/ out of HHS, and adjust their approach over time.

[5] Getting more out of our electricity networks by reforming access and forward-looking charging arrangements, Ofgem, July 2018 https://www.ofgem.gov.uk/system/files/docs/2018/07/network_access_consultation_july_2018_-_final.pdf

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

The full anonymisation of data is a sensible approach to evaluate as, when consumer data is fully anonymised it is no longer personal data and therefore concerns regarding the potential impacts on the data and privacy framework are eliminated.

In the consultation document Ofgem concludes that anonymisation “at source” is not technically feasible and therefore the GDPR/legal definition of anonymisation cannot be met. However some level of anonymisation by an appointed data agent is an option worth examining. The consultation proposes anonymising data in this way based on consumer choice.

To avoid potentially confusing conversations with consumers - particularly as this ‘anonymisation’ would not meet the legal definition of the term - it would seem more sensible to apply this process to all consumer data by default rather than adding another consumer choice into the system. Otherwise there would be a significant risk of consumers taking “anonymisation” to mean it in the legal sense, if an alternative word were used to describe the process it would only add to consumer confusion as to what they were or were not agreeing to.

We agree with the conclusion that pseudonymisation is a complex process to explain to consumers and risks obfuscating rather than clarifying the process when attempting to communicate it.

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?

As above, where there isn’t a significant impact in data quality - which the consultation document concludes there would not be - it would make most sense to apply whatever forms of anonymisation or pseudonymisation are possible - while they will not meet the legal definitions of anonymisation they should go some way to limit potential accidental or deliberate misuse of the data.

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

No response provided.

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

In our experience interacting with energy consumers, there is not always a clear distinction between domestic and micro business energy use. We would therefore caution against defining next steps purely in terms of whether or not a consumer has a domestic or a non domestic energy supply contract. Ultimately, we would not like to see a widening of the current protection gap between domestic and micro business consumer by enabling and embedding different regulations with regards to HH data use.

There is little transparent data on how home-based businesses decide whether to sign a domestic or non domestic energy contract. Many concerning cases that reach the Extra Help Unit (EHU)[6] of consumers on micro business contracts are regarding incomplete or inaccurate data regarding the use of a premise. This could be due to the management of their property by a landlord or housing associations, that they shared a building with a business premise or a simple mistake.

Differentiating between the protection of domestic and micro business consumers is of particular concern due to the fact that energy suppliers do not universally correctly identify domestic and non domestic properties in their processes. Even if initial building use is captured correctly, the use of buildings may not be consistent. It is not clear to us that the pace of change at premise level is yet captured by energy suppliers or the brokers that negotiate the majority of micro business energy contracts.

With regards to advanced meter reading (AMR), it is regrettable that the rollout choices of the Smart Metering Programme have caused confusion to consumers. This should not be compounded by the introduction of one measure of data protection for one group (with SMETS meters) from another (those with AMR installed).

While we acknowledge that the industry may face additional administrative challenges due to the complexity managing differences between metering types, this should not preclude protecting any occupants of premises on micro business contracts.

[6] The Extra Help Unit is a specialist team of caseworkers investigating energy complaints on behalf of vulnerable consumers. The service is telephone based and covers the whole of Great Britain helping domestic and micro-business consumers. A consumer may be vulnerable if they are unable to pursue a complaint on their own behalf due to personal circumstances, the complexity of their complaint or where they are at risk of having their energy supply disconnected. https://www.cas.org.uk/about-us/consumer-advice/extra-help-unit

In a letter to the Secretary of State for Business, Energy and Industrial Strategy in 2017, Dermot Nolan set out that Ofgem would consult on measures to help micro-businesses including the option of extending domestic protections to some micro-business consumers. There has been little progress in this area so far.

We also note that the primary research that Ofgem conducted to inform this consultation did not take the opportunity to speak to micro businesses about their views on data for settlement and forecasting.

8. Are there any issues relating to access to data from microbusinesses that you think Ofgem should be aware of?

As highlighted in our research "Smart choices - Investigating microbusinesses' interest in, and understanding of, smart meters"[7], micro business consumers do not always have free access to their smart metering data. This continues to be a concern, particularly in the context of the reliance on micro business consumers to deliver a proportionally high level of savings in the current cost-benefit analysis of the Smart Metering Programme.

Paying to access data could undermine a micro businesses' ability and motivation to engage with energy use reductions. As part of ensuring micro businesses benefit from half hourly data, we recommend that Ofgem review current practices in the sector and assess whether they allow for micro businesses to make informed choices about their usage and/or switching decisions.

9. We propose that domestic and microbusiness 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?

Clearly the choices made when a consumer agreed to have a smart meter installed (or later if this was amended) should be respected. It is our position that their level of control over these choices should not be altered at all. This would be in-keeping with options 1 (no change) and option 2 (a change from opt-in to opt-out for half-hourly data but with consumer control retained albeit with a need for active decision making to withdraw consent). We have detailed in previous answers our significant concerns with a switch to mandatory collection of half-hourly data.

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7 https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Smart%20microbusiness%20report%20(1).pdf

With regard to changing the 'default' setting from opt-in to opt-out, this would need to be communicated very clearly at the point of change of contract/tariff. Our previous research has already shown that many consumers do not recall being told about their data choices or being updated about them at regular intervals. As such suppliers will need to improve their communications to ensure that consumers do not switch to sharing a level of data they are not comfortable with without knowing that this has happened.

This conversation would have to happen where a consumer is switching supplier. Where a consumer is simply changing tariff with their existing supplier that supplier should be obliged to retain whatever preference the consumer had previously expressed or use the change in tariff process to have a specific conversation with the consumer about whether they would like to change those settings.

Consumers who already have a smart meter agreed to have one while the existing framework and choices were in place. Any changes to to those choices or defaults must be made very clear to them and they should always be able to retain the choices that were available to them at the time of accepting a smart meter, i.e. their supplier should explain the situation to them clearly and ensure that they are now opted-out if they were previously not opted-in and wish to retain their current data-sharing arrangements.

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 understand that, with market-wide HHS, suppliers will be required to forecast demand of their customer base for every half an hour, instead of, as currently, forecast the total volume of consumption in a day. To do so, suppliers will likely need to invest in their expertise in demand forecasting, building new models and demand profiles. This will come at a cost that will be passed on to consumers but as yet, that cost has not been quantified.[8]

Similarly, we are aware of the argument that, by giving suppliers greater access to HH data for forecasting, suppliers could reduce system costs which can be passed on to consumers in form of lower tariffs. Again, these potential benefits are as of yet not quantified.[9]

[8] Market-wide Settlement Reform: Outline Business Case, Ofgem, August 2018 https://www.ofgem.gov.uk/system/files/docs/2018/08/marketwide_settlement_reform_outline_business_case.pdf
[9] ibid.

This lack of quantified costs and benefits makes it even more difficult to make the tough trade-of between consumers' concerns around data sharing and the savings consumers could see in return. We therefore ask suppliers and Ofgem to continue their work in this area - as they do to quantify costs and benefits of HH data for settlement - before giving suppliers access to HH data for forecasting.

In order to have a more nuanced debate, it would also be useful to understand just how much data suppliers require to achieve how much savings. This should inform the decision around what granularity of data suppliers should get access to, or whether an opt-in regime for data for forecasting would already yield enough data for suppliers to accurately forecast HH demand.

In addition, we would ask Ofgem to consider the following points and concerns.

The need for HH consumption data for forecasting

At a basic level, we question the need for suppliers to receive HH consumption data for forecasting. Electricity demand is relatively predictable. It may be more complex for certain customers, for example those with electric vehicles of electric heating. But over time, we would expect suppliers to become more sophisticated in developing HH demand profiles, and for this to be one way in which suppliers can compete.

More sophisticated profiles, combined with HH consumption data for forecasting from those consumers who have opted in might be enough to make accurate forecasts.

Besides their own forecasts, suppliers also have the option of purchasing access to reports from the System Operator, which produces a demand forecast (BM reports [10]) including Demand Day Ahead (forecast), Initial Demand Out-turn (actual) and Peak Demand data.

Privacy concerns

In the consultation document, Ofgem admits in point 7.6 that there is a "possibility that some individual consumers may be identifiable" if HH data at GSP group level is shared with suppliers. This is a concern from a GDPR perspective. However, Ofgem also mentioned in the consultation document that suppliers have said "that it would be relatively straightforward to put in place information barriers to ensure that only employees with a need to access HH electricity consumption data for specific functions would be able to do so." We would be keen for suppliers to outline in detail what such provisions could look like and for those to be assessed by Ofgem and privacy experts.

[10] https://bmreports.com/bmrs/?q=help/about-us

If suppliers are given access to HH for forecasting, ensuring that HH data is only used for that purpose and nothing else, and assuring consumers that this is policed, is essential given Ofgem's consumer research findings. Energy consumers are slightly less willing to share data for forecasting in comparison to settlement. Some consumers are highly sceptical that suppliers will only use their HH data for settlement and forecasting, fearing that it will be used for marketing or to put them on a worse tariff.

Data has value

We have argued for many years that data has value and that that value should be shared with consumers if companies are using their data. By suppliers getting access to HH consumption data for forecasting, suppliers will be able to reduce their imbalance position. We would expect suppliers to share the value of those savings with consumer, e.g. through reduced tariffs. Some may argue that in a competitive market, consumers will move towards those suppliers who do pass on savings to consumers. But given the rather low switching rates in the GB market, this competitive pressure is limited[11]. We believe suppliers will have a greater incentive to share value with their customers if they have to actively ask them for their data and offer something in return.

Other open questions

We are mindful that, although currently the debate focuses on the extent to which suppliers can have access to HH data for forecasting, once GB moved beyond the Supplier Hub model, further actors may wish to access HH data. We would welcome any thoughts from Ofgem on how the review of the Supplier Hub model may impact the decisions before us now.

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

No response provided.

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?

In practice personal data exists on a spectrum with some personal data generally regarded as "more" personal than other personal data. For example when compared to medical data energy consumption data is not usually ranked as highly by consumers as personal. It's also notable that consumer views on what they

[11] Quarterly domestic energy switching statistics, BEIS, June 2018 https://www.gov.uk/government/statistical-data-sets/quarterly-domestic-energy-switching-statistics

regard as personal vary quite significantly. Like Ofgem, we take the view that export data is personal data. We have not undertaken any consumer research examining this particular issue so are unable to definitively answer whether consumers regard it as "less" personal but this seems a logical supposition. On the basis of a lack of detailed information and the variable views of consumers we would advocate for export data to be treated the same way as usage data, this will also prevent potential confusion over a sliding-scale approach to personal data.

Whilst preparing this consultation response, National Grid gained access to HH settlement data from most export sites connected to the distribution system.[12] We would welcome Ofgem's comments on how this development sits with its current considerations around HH export data in this consultation.

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?

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

15. Do you have any additional thoughts or questions about the content of the DPIA?

As noted elsewhere in our response we have seen consistent issues for consumers where suppliers have failed to update consumers on their data choices or explain the choices they have. It may be that the communications are made but that consumers simply do not retain or understand them in their current form. Given that the intention of such rules is to ensure consumer understanding and ability to make informed decisions, work should be undertaken in this area, especially when proposals are being made to effectively reduce opportunities for consumer to leverage the value of their consumption data for their own benefit.

[12] "National Grid agrees access to half hourly distribution network generation data" Current, 24 August 2018 https://www.current-news.co.uk/news/national-grid-agrees-access-to-half-hourly-distribution-network-generation-data