

4 February 2019

Submission to Ofgem Targeted charging review: minded to decision and draft impact assessment

Prof Catherine Mitchell, Richard Hoggett, Dr Becky Willis, Jess Britton
Energy Policy Group, University of Exeter

Summary

This is a submission to the Targeted Charging Review: minded to decision and draft impact assessment ¹from Catherine Mitchell of the University of Exeter's Energy Policy Group and its Innovation and Governance (IGov) project².

Ofgem's Minded To document comes to two preferred options: one related to fixed charges (the preferred outcome), and the other related to some form of capacity charge.

Much has been written about delivering an energy system transformation in the most cost effective way, which is also equitable and secure. And it is very clear that what a regulatory system should not do if it cares about equity or sustainability is put a generalised fixed charge in place.

By putting in place a fixed charge, it would be dis-incentivising those which have endeavoured to have an energy efficient home, with energy efficient electricity appliances and decarbonised heat; it would be undermining the necessary investment for a flexible energy system (electric vehicles, storage, solar pv); it would be undermining of business models which can provide more flexibility (demand side response); it would be undermining those technologies which can bring down total peak capacity needs, and therefore bring down the overall average price of electricity, as well as peak price of electricity; and it would be undermining innovation, vital for energy system transformation.

All of this is against Government policy, and the Secretary of States latest big energy speech³, and yet it is the preferred option of this Minded To document.

¹<https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-minded-decision-and-draft-impact-assessment>

² <http://projects.exeter.ac.uk/igov/>

³ <https://www.gov.uk/government/speeches/after-the-trilemma-4-principles-for-the-power-sector>

We support neither option. We, IGov, would argue that a customer or person connected to a network should pay for the energy they use, but also the value that customer or person provides to the system should also be taken account of – both in a direct system sense but also in terms of its value for the transformation of the energy system to one that is sustainable, secure and equitable.

Overall, we view the Minded To document with disappointment.

Introduction

The Government's energy policy in support of a smart and flexible energy system is set out in the following documents: the Clean Growth Strategy⁴, the Industrial Strategy⁵; Ofgem's Smart Systems and Flexible Plan⁶; Ofgem's Strategy for Future Energy Systems⁷. At the same time as Ofgem's Smart Systems and Flexible Plan in 2017, Ofgem also released parallel documents which set out future regulatory options related to network charging (residual⁸ and future⁹), electricity settlement¹⁰ and RIIO-2¹¹ issues.

The outcomes of these consultations will lead to the basic regulatory structure for the energy system – and therefore it is vital that they are got right if the UK is to meet the greenhouse gas reduction targets on time, as set out by the Committee of Climate Change (CCC), and if we are to do so, in a cost effective, secure and just manner.

This submission relates to the network charging reviews, and in particular to the one dealing with 'residual' charging and some final aspects of embedded benefits. Much of our arguments against Ofgem's Minded to proposals are already set out in our response¹² to the 'future' network charging consultation.

This Minded To document seems to take the exact counter line to that stated in the Secretary of States speech 'We do not want these investment decisions to be driven by charging rules that reflect the old realities. We want a level playing field in which 'off grid' or 'low grid' solutions are rewarded if they actually contribute to reducing system costs'¹³ (page 11-12).

⁴https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/651916/BEIS_The_Clean_Growth_online_12.10.17.pdf

⁵https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/664572/industrial-strategy-white-paper-print-ready-version.pdf

⁶https://www.ofgem.gov.uk/system/files/docs/2017/07/upgrading_our_energy_system_-_smart_systems_and_flexibility_plan.pdf

⁷https://www.ofgem.gov.uk/system/files/docs/2017/08/our_strategy_for_regulating_the_future_energy_system.pdf

⁸https://www.ofgem.gov.uk/system/files/docs/2017/11/tcr_working_paper_nov17_final.pdf

⁹https://www.ofgem.gov.uk/system/files/docs/2017/11/reform_of_electricity_network_access_and_forward-looking_charges_-_a_working_paper.pdf

¹⁰https://www.ofgem.gov.uk/system/files/docs/2017/07/electricity_settlement_reform_significant_code_review_launch_statement.pdf

¹¹<http://projects.exeter.ac.uk/igov/comments-on-the-open-letter-on-the-riio-2-framework/>

¹²<http://projects.exeter.ac.uk/igov/submission-ofgem-electricity-network-access-and-charging/>

¹³<https://www.gov.uk/government/speeches/after-the-trilemma-4-principles-for-the-power-sector>

Summary of Our Views

Energy is a Whole System and Network Charging cannot be separated from the Regulatory Mechanism

As with the 'Future' Charging response, IGov simply does not believe that Ofgem can (1) separate out future network charges from residual network charges; and (2) cannot separate out network charging as a separate regulatory activity from the RIIO regulatory mechanism. As the energy system alters, becoming more decarbonised, more decentralised and more digitalised, the value of distributed energy resources to that system is altering and we do not think that a sensible regulatory settlement can be made without incorporating the differing uses of the network into that regulatory settlement (see Figure 1).

We think that the DNO area coordinator (whether a DSO or a DSP¹⁴) should be responsible for the framework of what network users pay or how they are paid – and that should be part of their RIIO settlement.

With respect to transmission, users should pay according to their net usage and the value of their resource to the system and this should be the responsibility of the integrated and independent system operator (IISO).

Disagree with the Network Charging Principles

We disagree with the three principles by which Ofgem has made its charging decision: reducing harmful distortions, fairness and proportionality and practical considerations (page 13, 3.1). This is (1) because we no longer believe that we live in a trade-off world between environment, equity and justice and security – as the Secretary of State also said in his Four Principles speech¹⁵. We now live in a world where each of the energy policy goals has to be met.

It is not just that the three principles of network charging miss out sustainability; but they also appear to take no account of the complexity of energy system transformation and its needs, including the move to a smart and flexible energy system, preferably as market based as possible.

Overall therefore the principles of the residual network charging seem entirely unrelated to Government energy policy, and indeed, reflect the 'old' realities which the Secretary of State warned against.

Disagree with Equity Elements

We also therefore disagree with the 5 elements of fairness: equity and equality; simplicity; transparency; justifiability and predictability (page 15, 3.9).

Delivering an equitable and just outcome from energy policy is essential. However, as said above, we have moved on from trade-offs between sustainability and equity or equity and security. What we cannot have is a move to be more equitable at the expense of sustainability – as this *Minded To* document seems to support, moreover in the most old-fashioned of ways.

¹⁴ <http://projects.exeter.ac.uk/igov/blog-1-of-name-form-and-function-of-distribution-entities/>

¹⁵ <http://projects.exeter.ac.uk/igov/blog-1-of-name-form-and-function-of-distribution-entities/>

The debate in the document reminds me of the debate between conservationists and wind farms in the early 1990s. This sowed the seeds of GB's current dysfunctional policy towards onshore wind because Government policy required trade-offs which inevitably upset one or the other groups.

We must not do the same for distributed energy resources and a smart and flexible energy system which Ofgem seems in danger of arguing is undermining equity. In so doing, it takes a one-sided and old fashioned view of value to the energy system (which also diverges from Government energy policy and the general momentum of energy economics). DER is a fundamental part of a smart and flexible energy system – as Government policy says. It is a vital step in our faltering transformation to a decarbonised energy system, capable of meeting the CCC targets. It has to be encouraged rather than undermined as this *Minded To* seems determined to do.

GB needs to have a clear process for energy equity. Such a policy would have additional policies, targeted to help those most vulnerable to ensure that no one suffers negative distributional impacts of policy. Ofgem's current policy in this regard is the price cap. However, equitable energy policies need to be thought of as much broader than this: the priority is energy efficient and net Zero homes, so that energy use and bills are reduced; a much greater inter-linkage between gas (heat) and electricity so that it is not just electricity which pays for the environmental and social costs of energy but also gas (including VAT); governance (institutions, rules and incentives) should be set up to minimise the non-energy aspects of the retail price, and makes sure that those who add value to the energy system are paid for that value; and departments other than BEIS should be involved. Other ideas such as 'free' kWhs for the fuel poor should also be thought about.

Too narrow approach

This *Minded To* document is extremely narrow. As said above, it does not appear to take notice of the wider energy policy goals into. When undertaking a Control F, we can see : 3 mentions of environment / environmental ; 0 for sustainability ; 1 for transformation; 1 for energy transition; 6 mentions for flexibility or flexibility plan; 0 for smart and flexible; 0 for digitalisation; 2 for secure – and this in a 96 page document.

Charging for DER

It seems to me that Ofgem has published this *Minded To* document, and its decisions with it, because of the current political issues about the price of electricity rather than because of a sensible evidenced based evaluation of the situation. The document is, in my view, more supportive of equity concerns than other Government energy policy goals. However, the way Ofgem views those equity concerns is very narrow (short term cost).

Much has been written about delivering an energy system transformation in the most cost effective way, which is also equitable and secure. And it is very clear that what the regulatory system should not do if it cares about equity or sustainability is put a fixed charge in place¹⁶.

By putting in place a fixed charge, it would be dis-incentivising those which have endeavoured to have an energy efficient home, with energy efficient electricity appliances and decarbonised heat; it would be undermining the necessary investment for a flexible energy system (electric vehicles, storage, solar pv); it would be undermining of business models which can provide more flexibility (demand side response); it would be undermining those technologies which can bring down total peak capacity needs, and therefore bring down the overall average price of electricity, as well as peak price of electricity; and it would be undermining innovation, vital for energy system transformation.

All of this is against Government policy, and the Secretary of States latest big energy speech, and yet it is the preferred option of this *Minded To* document.

¹⁶ US SEIA keeps track of US solar policies, as does LBNL energy and market programme. In addition, NREL, RAP, NARUC and RMI are good sources of the how to pay for networks / future of the utility debate. <http://eta-publications.lbl.gov/sites/default/files/68469.pdf>; <https://www.nrel.gov/docs/fy18osti/68469.pdf>; <http://www.synapse-energy.com/project/show-me-numbers-framework-balanced-distributed-solar-policies>; <http://www.synapse-energy.com/sites/default/files/Synapse-Show-me-the-numbers-2-16-058.pdf>; http://www.synapse-energy.com/sites/default/files/Show-Me-the-Numbers-16-058_0.pdf; Synapse / Melissa Whited, Caught in a Fix - the problem of <http://consumersunion.org/research/caught-in-a-fix-the-problem-with-fixed-charges-for-electricity/>; See for example "Good Process" letter to Travis Kavulla, signed by 32 consumer, low-income, environmental and technology specific advocates, June 23, 2016, available at <http://blogs.edf.org/energyexchange/files/2016/06/Good-Rate-Design-Process-Letter-to-NARUC.pdf>; Cost Does Not Cut It; <https://www.rmi.org/when-cheap-doesnt-cut-it-why-energy-buyers-should-look-at-value-not-just-cost/>; NARUC Nov 2016 <https://pubs.naruc.org/pub/19FDF48B-AA57-5160-DBA1-BE2E9C2F7EA0>; Utility Drive 2018 <https://www.utilitydive.com/news/business-models-what-utilities-can-learn-from-amazon-and-netflix-about-the/530415/>; <https://www.raponline.org/blog/calming-chicken-little-an-ev-grid-tale-without-the-scaryending/?sf=s=Jim+Lazar&sft=category=blog&sfm=author=7232&sort=order=date+desc> <https://www.rmi.org/insight/non-wires-solutions-playbook/>; https://www.rmi.org/wp-content/uploads/2018/02/Insight_Brief_Demand_Flexibility_2018.pdf; <https://electricitypolicy.com/images/2016/August/10Aug2016/Chernick/Chernick2016Aug10final.pdf>; <http://www.raponline.org/wp-content/uploads/2016/05/rap-lazar-gonzalez-smart-rate-design-july2015.pdf>; <https://rmi.org/insights/reports/review-alternative-rate-designs/?preview=true>; <https://www.rmi.org/wp-content/uploads/2017/04/A-Review-of-Alternative-Rate-Designs-2016.pdf>

Embedded Benefits

IGov has written a great deal about the Ofgem decisions and embedded benefits (EB)¹⁷ and this Minded To document continues Ofgem's wider and longer held views which seem to be - which IGov totally disagrees with –that DER is a problem rather than one of the solutions for a cost effective transformation of the energy system.

Ultimately, we disagree with Ofgem's EB decisions because Ofgem has made no attempt to actually work out what the value is of DER to the energy system, and therefore what EB across an area are. They continue to have static, non-dynamic, economics-only generalised assessments rather than develop a methodology for a time / site specific value within an area. They seemingly take no notice of the increasing amount of work undertaken on distributed energy resource assessments around the world, particularly in the US, and the value that DER can have¹⁸.

Viewing DER as the problem rather than part of the Solution

Ultimately, Ofgem seems trapped in viewing DER as a problem rather than part of the solution. Because of their view, they continue to try and regulate the energy system in the old, top-down, centralised, one way, supply orientated. The one exception to this is that Ofgem has recognised that the Supplier Hub model is now no longer fit for purpose. However, they have not followed through from that to other regulatory activities¹⁹.

What Should Ofgem Be Doing

The IGov project has argued that GB energy governance is not fit for purpose, and we have proposed a straw fit for purpose framework²⁰. In the IGov framework, DNOs are transformed into market facilitators; the system operator, is turned in to an integrated and independent system operator which is responsible for the GB energy system transforming sufficiently to meet the CCC targets; market design complements a high proportion of variable power and the need for flexibility via national and local markets; and Ofgem is returned to being an economic regulator.

¹⁷ <http://projects.exeter.ac.uk/igov/primer-fit-for-purpose-gb-energy-governance-framework/> ;
<http://projects.exeter.ac.uk/igov/new-thinking-the-embedded-benefit-saga/>;
<http://projects.exeter.ac.uk/igov/new-thinking-the-embedded-generator-saga-and-codes-governance/>;
<http://projects.exeter.ac.uk/igov/new-thinking-ofgem-has-to-be-reformed-if-gb-is-to-meet-its-energy-policy-goals/>

¹⁸ <http://projects.exeter.ac.uk/igov/new-thikning-reset-the-reset-1-we-need-institutional-governance-reform-and-we-need-it-now/> ; <http://projects.exeter.ac.uk/igov/new-thinking-reset-the-reset-3-der-walking-the-walk/>

¹⁹ <https://www.ofgem.gov.uk/publications-and-updates/future-supply-market-arrangements-response-our-call-evidence>

²⁰ <http://projects.exeter.ac.uk/igov/wp-content/uploads/2014/03/WP-7-Change-and-Inertia-in-the-UK-Energy-System.pdf> ; <http://projects.exeter.ac.uk/igov/paper-gb-energy-governance-for-innovation-sustainability-and-affordability-2/>; <http://projects.exeter.ac.uk/igov/wp-content/uploads/2018/04/CMitchell-presentation-WEET-Forum-26-April-2018.pdf>; <http://projects.exeter.ac.uk/igov/presentation-consumer-participation-market-design-issues/>

In that world, the IISO and DSO/ DSP are facilitating markets for flexibility; and the regulatory mechanism incorporates residual and future network costs. That means that DER has value – positive and negative – and that is recognised as a result of the DSO / DSP understanding the value of DER in their areas via a distributed energy resource assesment²¹.

The users of the network end up paying for what they use from the network but also taking account of the value of their DER or flexibility resource – whether DSR, EV storage, ancilliary services and so on.

What Ofgem Should Not Be Doing

Undermining investment in DER which is beneficial to system transformation; and valuing it in such a way that its benefits to the system are undervalued, to the detriment of all customers, including those which are vulnerable.

Because Ofgem has an old fashioned view of DER – that it negative demand and somehow a problem – they have then put forward an old fashioned minded to proposition for charging (which continues the old way of doing things) and this will undermine exactly what the Government says it wants the energy system to be doing.

Conclusion

IGov takes the view that the separate regulatory activity of network charging is no longer relevant. It should be incorporated within the regulatory mechanism.

As such, this submission, disagrees with the basic premise of the consultation and sees it as part of the general problem of GB energy governance not being fit for purpose and Ofgem trying to regulate an energy industry with the same regulatory tools and concepts as it always has done even though the energy industry is rapidly changing and has completely different public policy goals.

²¹ <http://projects.exeter.ac.uk/igov/new-thikning-reset-the-reset-1-we-need-institutional-governance-reform-and-we-need-it-now/> ; <http://projects.exeter.ac.uk/igov/new-thinking-reset-the-reset-3-der-walking-the-walk/>

Figure 1: The Inter-locking Dimensions of Network Costs

