Briefing: Impact of Ofgem network charging reforms on renewables, storage and smart energy

Ofgem are proposing major reforms to the way that our network is paid which work directly against key government policy objectives for a smart, flexible and decarbonised energy system. The renewable industry has been expressing deep concerns in the past few months and 2 recent independent reports have now highlighted these concerns.

- A review by Oxera found they will have a cost impact of £5/MWh on renewable generators – a material impact on new investment.
- A review by Aurora found the proposals will delay subsidy free renewables by 2-5 years. Ofgem’s own impact assessment shows the proposals will penalise households and business that have ‘done the right thing’ and invested in their own generation, storage and energy efficiency measures.

Background

- Network charges – levied on energy consumers and generators – are a significant cost; £9.7bn in 2017/18, about 25% of the overall electricity bill.
- The current method for charging is based on models which don’t account for the transformation the energy system has undergone and will continue to experience. Ofgem is therefore undertaking a necessary overhaul of these charging models.
- As well as covering important infrastructure costs, network charges are also a key method for incentivising the most efficient use of the network.
- Ofgem’s review has been split into two parts:
  - Residual network charges – sunk costs which pay for existing network infrastructure.
  - Forward-looking and access charges designed to pay for future infrastructure and capacity and costs to connect to the network.

What is the issue?

- Ofgem released their Targeted Charging Review ‘Minded-to’ decision on the review of residual charges in November 2018 which proposes to shift network charges from how much energy consumers use, to a flat rate.
- The review had a narrow focus and the principles behind the review are not aligned with the UK’s wider energy policy aims. In particular, by failing to make carbon reduction a key aim of the review, Ofgem are not meeting their statutory and moral obligation to protect consumers.
- Renewable generation is disproportionately affected. These reforms will result in higher costs, greater uncertainty and decreased deployment.
- Ofgem’s review of ‘residual’ network charges is out of step with the reform of ‘forward-looking’ charges. Residual and forward-looking charges are clearly linked and it is difficult to assess one without knowing the structure of the other. The uncertainty caused by this disconnect is preventing industry from accurately modelling future business cases and, in turn, deterring investment.
- The proposals come at a time when the hydropower sector is affected by multiple policy changes, including reduced government support and the burden of increases costs.
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What action is needed?
- Critical decisions for the future of our energy system are being made by a regulator with narrow objectives. Proper political and Parliamentary scrutiny is required to ensure Ofgem’s reforms are in line with government energy policy goals.
- Industry must express concern that Ofgem’s Targeted Charging Review:
  - Works against key government policy goals for a smart, flexible and decarbonised energy system;
  - Hits companies and consumers who have done the right thing by investing in energy efficiency and on-site generation;
  - Seriously damages the business case for renewables and storage.

Additional background
- Network charges pay for the infrastructure and operating expenditure of DNOs and National Grid, including transmission and distribution network infrastructure and balancing the system. The total revenue is around £9.7bn/year and is split by Ofgem into sunk infrastructure costs (residual charges), future infrastructure costs (forward-looking charges) and the cost to access the network.
- Ofgem has two separate reviews to reform these charges:
  - The Targeted Charging Review, looking at residual charges, is already well underway.
  - The Forward-looking and Access Review looks at forward-looking charges and access costs. This is still in early stages – we are not expecting decisions until early 2020.

The current charging model is certainly in need of reform for a smarter energy future. Charging signals need to better reflect when and where electricity is used or generated. The current charges are high during peak time and the savings to be made by avoiding them, provide significant revenue for behind-the-meter generation, demand-side response and storage.
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Ofgem insists their proposals will reduce overall costs for demand customers. However, the impacts are complex. Companies who have ‘done the right thing’ and reduced energy use and installed their own generation, will pay significantly more.

Decentralised generators and storage receive payments for generating during these times of peak demand, known as ‘embedded benefits’. These are also being reduced, shifting incentives towards centralised generation.

The Targeted Charging Review proposes to change the model for residual charges (around £4bn of the total pot) by creating a fixed charge for demand customers only. This will remove any incentive to shift demand away from peak periods and significantly reduces the revenue that behind-the-meter generation and storage receive.

This reduction could be as much as 96% for behind-the-meter renewable generator and 50% for a storage asset.

The Targeted Charging Review also proposes to remove a key embedded benefit for generators and storage and potentially turn it into a charge. This swing could cost renewable generators £4-5/MWh – a significant hit to business models now based on revenues in the region of £60-70 MWh.

The forward-looking charge, which represents about £5bn/year, is still under consideration. However, these two reviews are completely out of step with each other; incentives and revenues are being removed, but there is no clear idea of how they might be replaced. Many generators are unable to factor in these charges to their future business cases and this uncertainty is deterring investment.