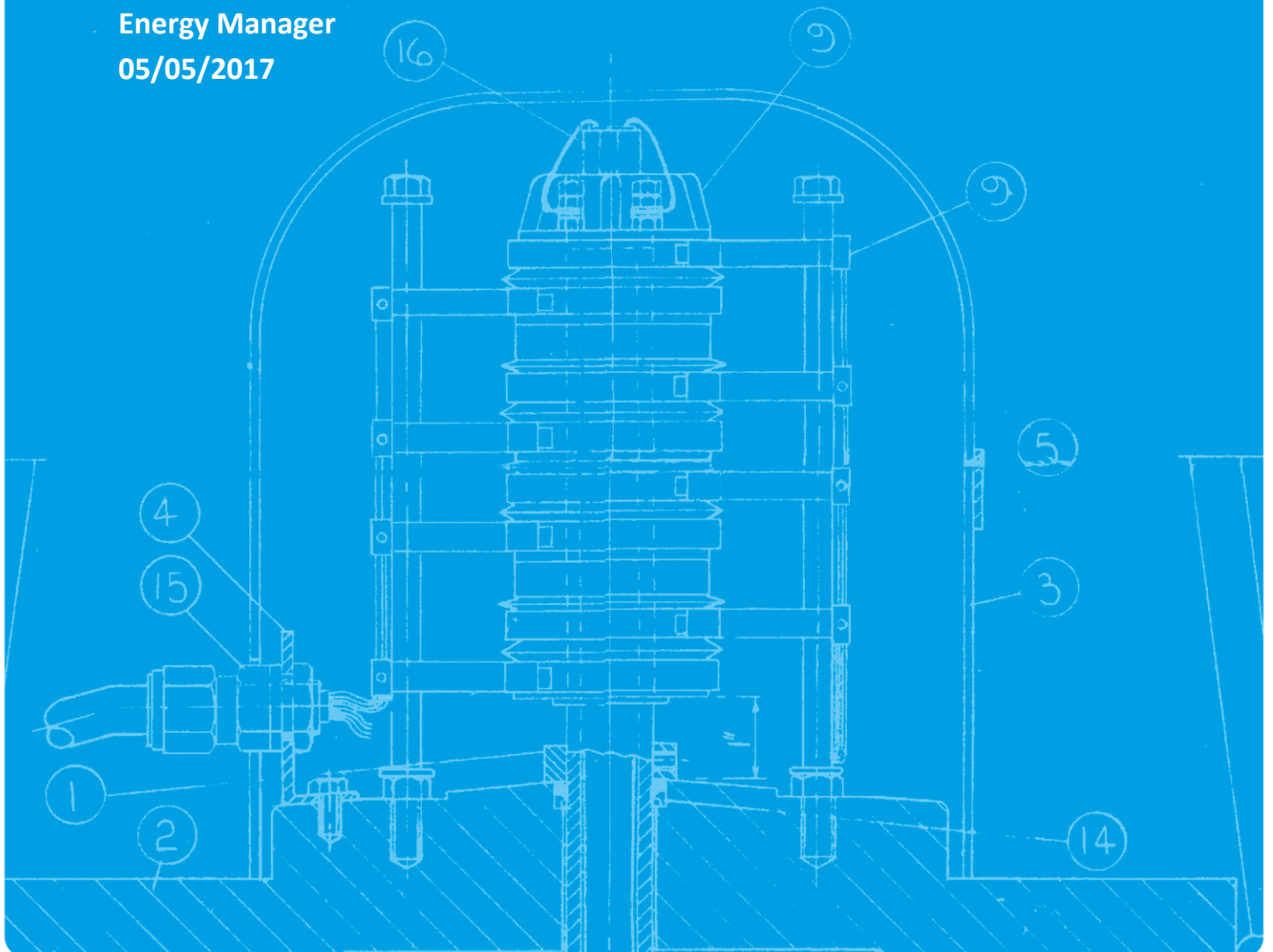


Ofgem's Targeted Charging Review

Severn Trent response

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Energy Manager
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Our Views

Thank you for the opportunity to respond to your consultation on the targeted charging review. As a major energy user, with a significant quantity of renewable energy generation we are likely to see significant impacts on our business as a result of the proposed changes to these charges which will negatively impact water customers' bills.

We agree with your objectives for fair and efficient pricing. However we are concerned that the proposals in their current form may not achieve these objectives and could undermine them by distorting the market and discouraging investment in demand management and renewable energy.

We believe a way forward would be to:

- Focus attention on reducing incentives for carbon-intensive fossil fuel generation and not renewable energy, to ensure consistency with Government policy.
- Maintain incentives for energy efficiency and more flexible users who can avoid peak times within these charges – this will reduce energy costs in the long run by keeping a lid on peak and total demand.
- Avoid charges based on gross energy or on installed capacity alone. We strongly disagree with these options as we believe they would introduce new market distortions and additional complexity.
- Reduce uncertainty for businesses as soon as possible, as this will deter investment in the things UK plc needs to deliver to meet its statutory carbon reduction commitments

A solution to this would be to pursue a hybrid option for charging which heavily penalises distributed fossil fuel generation, retains incentives to manage energy use overall and at peak times and encourages users to reduce connected supply capacity where possible.

Response to consultation

We disagree with the options as proposed as we believe they would harm both the development of renewable energy and reduce incentives for large users like us to become more flexible, efficient users of energy. We also believe that the options will lead to higher prices for our customers and unfairness to those who have invested in renewable energy to self-supply and in demand reduction.

Question 1: Do you agree that the potential for residual charges to fall increasingly on groups of consumers who are less able to take action than others who are connected to the system, is something we should address?

We agree that “all users who are connected to the licensed networks should make some contribution to common costs.” And that this should be fair. This needs to be balanced with the long-term aims for the network and the consequent incentives provided by all elements of electricity charges.

We do agree with the aim, previously stated as part of the embedded benefits consultation, to reduce the proliferation of distribution connected reciprocating plant powered by fossil fuels and to protect those vulnerable customers who are unable to mitigate these charges. We think this objective would be better met by specifically targeting those forms of generation rather than all connected users and by offering protection to specific groups of vulnerable customers.

There are many different ways available in the market for companies to reduce charges under the current system and contribute to carbon reduction and a more flexible grid at the same time. We do not see why users who have not sought to do this but who have access to the same opportunities should benefit from a change.

A core way for a business to manage these charges is time of day demand management. This usually does not normally require significant investment of capital, so is as open to small-scale users as it is to larger businesses. For business it can require significant resource, processes, performance tracking, training and communication at all levels of our business. Continually revising these operations as charging incentives change is similarly time-consuming and costly and provides an advantage to those who have the largest capability to keep up to date with the market. More certainty and fewer changes levels the playing field.

We can see a case that “users who are not able to invest in their own generation and storage” will receive higher charges than those who have made the effort and spent the necessary resources to invest in generation, storage and demand management. We would argue that some users may have chosen not to, but most are exposed to the same markets and opportunities, so have that option. We believe a principle of fairness means those who have made significant efforts should benefit more than those who have not.

We see there may be a case for small users to pay less, where there is evidence of lesser access to capital and resource. Or such users could opt into a simpler array of charges. We believe that those who have chosen to invest in processes and technologies to manage demand in ways which benefit the national grid should continue to benefit from their investments.

Question 2: If so, why do you think, or do not think, action is needed?

In the round, we would support Ofgem in a Significant Code Review to evaluate residual charges but this should be done in the context of the national aims for the energy sector and the economy towards a lower-carbon and more flexible grid. We believe such charges should be, at least in part, priced according to the carbon emissions relating to generation. Residual as well as forward-looking charging should encourage investment in low-carbon, sustainable generating technologies.

Question 3: We are proposing to look at residual charges in a Significant Code Review. Are there any elements of residual charges that you think should be addressed more urgently? Please say why.

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Question 4: Are there elements of the approaches in other countries that you think could be appropriate for GB residual charges?

We note that the international analysis is limited to a handful of countries and only recent years there is no conclusive evidence from those that any particular approach works best in line with the principles you have outlined.

[Borrowed] Germany has embraced smart flexibility, offering dispatchable power and power to gas to suit demand. This is an example of policy that could help the UK transition to a smart energy future, as was called for in BEIS and Ofgem’s recent call for evidence.

The Netherlands example, you conclude, shows that energy efficiency incentives would be unaffected by the option proposed. We do not think there is yet enough evidence to say that a

reduction in energy efficiency activity would not follow an increase in the number of fixed charges. Such an option would naturally reduce the benefits of managing energy demand. Our experience is that higher energy prices naturally push energy efficiency up the agenda and we are investing in energy efficiency with fairly long-term paybacks even at current volume-related charges. Reductions in the 'controllability' of our energy spend will not benefit energy efficiency or flexibility.

Question 5: Are there other approaches that you know about from other jurisdictions, that you think offer relevant lessons for GB?

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Question 6: Do you agree that our proposed principles for assessing options for residual charges are the right ones? Please suggest any specific changes, or new principles that you think should apply.

We believe another principle is required which is that incentives on users must align with strategic objectives for the UK national grid. The most important element are for improving energy efficiency, increasing our flexibility as users and reducing the carbon-intensity of energy generation.

Severn Trent generates a most renewable energy from anaerobic digestion (AD). Generation of renewable electricity from AD plants contributes significantly to several government objectives: providing energy security, reducing imports, curbing carbon emissions and helping the UK meet its renewable energy and recycling targets. Reducing or removing the embedded benefit would put the continuing delivery of these benefits at risk. We note the suggested savings to consumers take no account of the socialised cost of climate change adaption. This cost will rise the longer decarbonisation is postponed – the minded to decision will lead to a reduction of deployment and increased subsidy cost for renewable generation. Slow progress on ending carbon intensive generation has a high cost that will, ultimately, fall on consumers to pay.

The principle of fairness needs to include the impact on companies who have made investments in renewable self-supply and demand management activity, the return on investment of which is often marginal. For an energy user, it takes time and effort understanding charges and pass these messages through our large and complex organisation. Undoing changes and reorganising to deliver in line with new charging frameworks takes significant commitment of resources for a business. Setting plans to manage demand during the highest cost times also produce energy efficiency by reducing overall demand.

Question 7: In future, which of these parties should pay the transmission residual charges: generators (transmission- or distribution-connected), storage (transmission- or distribution-connected), and demand, and why? What proportion of these charges should be recovered from each type of user?

Any change should focus attention on reducing incentives for carbon-intensive fossil fuel generation and not renewable energy, to ensure consistency with Government policy.

Question 8: In future, which of these parties should pay the distribution residual charges: generators (transmission- or distribution-connected.), storage (transmission- or distribution-connected), and demand, and why? What proportion of these charges should be recovered from each type of user?

Any change should focus attention on reducing incentives for carbon-intensive fossil fuel generation and not renewable energy, to ensure consistency with Government policy.

Question 9: Do you support any of the five options we have set out for residual charges below, and why?

We do not support any of the five options set out. All options will require a substantial change program in our company and any monetary impact will be ultimately passed on to our customers. We do not believe that this is either fair or practical.

We believe there should continue to be incentives for energy efficiency and users who can avoid peak times – this will reduce energy costs in the long run by keeping a lid on peak and total demand.

Question 10: Are there other options for residual charges that you think we should consider, and why?

We believe a good option to consider is a hybrid option for charging which heavily penalises distributed fossil fuel generation, retains incentives to manage energy use overall and at peak times and encourages users to reduce connected supply capacity where possible.

At the consultation event it was confirmed in response to a query that a form of the status quo was still a feasible option. This must be considered fairly alongside the options included in the consultation paper.

The effect on investor uncertainty and current incentives on users to reduce carbon-intensity, manage energy usage efficiently, improve flexibility and increase renewable energy generation must be considered for all options. Basing the charge on periods of peak system demand over winter, as currently, provides benefits in the longer term in terms of reducing the need for future network expansion.

Question 11: Are there any options that you think we should rule out now? Please say why.

A gross charging option would be hugely complex to regulate. As an example we operate nearly 100 sites which include a form of self-supplied renewable energy generation on site. Each has a sequence of private and fiscal meters essential in order to accurately measure gross consumption. We use this information internally, but we estimate that meeting the same standards and regularly reporting these for the purposes of charging could carry costs in the 100s of thousands.

Fixed charging creates different market distortions and potentially more damaging and costly ones. Any fixed charge must be set on a basis and if this is capacity, then it incentivises users to reduce deemed capacity. Some users are more able to reduce these charges than others, depending on their role in society and their risk tolerance. For example, a large energy user like a water company or a hospital must take all reasonable steps to ensure services can be provided consistently and to a high public health standard at all times. This includes making sure that available capacity can be drawn from the grid if existing self-supply arrangements might fail. For this reason we must maintain higher connection capacity and are less able to reduce these than an energy user not subject to the same types of risk. Introducing charges on this basis will distort the market in favour of consumers able to carry more risk.

Question 12: Do you think we should do further work to analyse the potential effects of the charging arrangements for smaller EG (called ‘embedded benefits’)?

Yes. Potential effects of such charging arrangements are crucial and cannot be looked at in isolation (As with the current 'minded to' CMP 264/265 review), instead they must be looked at in relation to the bigger picture and full potential impacts as part of a significant code review (SCR).

We believe that any change should focus attention on reducing incentives for carbon-intensive fossil fuel generation and not renewable energy, to ensure consistency with Government policy.

Question 13: Do you think changes are needed to the current charging arrangements for smaller EG, and when should any such changes be implemented?

Smaller energy generators provide an inherent benefit to the system in most locations and this must be recognised. Any changes to the current regime should only be implemented as part of an overall review of all charges.

The Severn Trent portfolio is predominantly Sewage, Food Waste and Crop Anaerobic Digestion. These plants have a stable generation profile but can also increase generation in the peaks which means the grid has benefited greatly from our portfolio. Not only have we reduced demand on the grid by self-supply but we have also replaced the need to import fossil fuel powered generation. We believe that the existing structure of embedded benefits should be retained for renewable generators. This we believe will encourage greater investment into renewable generation and help further decarbonise the electricity grid, whilst helping national grid manage the grid more efficiently.

Question 14: Of the embedded benefits listed in our table, do you think that any should be a higher or lower priority?

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Question 15: Do you think there are other aspects of transmission or distribution network charging which put smaller EG, or any other forms of generation or demand, at a material disadvantage?

Yes. At the distribution level, generators connected to the distribution network do not have rights to an unconstrained connection (and are not compensated in the same way as generators connected to the transmission network are). Going forward the amount and frequency of constraints increasingly represents significant risks to the generators on the distribution network more, when compared to generators on the transmission network.

This we feel if not addressed, in a wider look at different charging arrangements between distribution and transmission, will create an unfair playing field and distort the market towards larger generators on the transmission network. Not only this, there is a bigger impact on those generators that self supply as they will be forced to pay for reinforcement work on system that they do not use.

The cost of connecting to a distribution network for smaller generators should not be overlooked. Often small generators pay substantial sums to enhance the distribution network in the area they connect to.

Question 16: Do you agree with our view that storage should not pay the current demand residual charge, at either transmission or distribution level?

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Question 17: Do you agree with our view that storage should not pay BSUoS on both demand and generation?

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Question 18: Which of the BSUoS approaches describe is more likely to achieve a level playing field for storage?

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Question 19: Do you think the changes in this chapter should be made ahead of any wider changes to residual charging that may happen in future? Do you agree with our view that these changes should be implemented by industry through the standard code change process?

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Question 20: We would welcome your thoughts on the potential make-up of a CCG. Please refer to the potential role, structure, prioritisation criteria and assessment criteria.

We support the need for a new structure to govern charging reviews.

Large energy users must be more adequately represented in this process, as that is the group often bearing the burden and impact of charging reviews. Industrial manufacturers and distributed generators, the majority of who are not members of the CUSC process, are not adequately represented.

We would comment that fully understanding and quantifying the impacts of proposed changes in charges is a difficult, costly and time-consuming exercise for businesses like us. Sufficient resource should be available for credible, robust analysis which quantifies the impacts of changes on stakeholders. We would support this process.

Question 21: Do you agree with our proposed delivery model, including its scope?

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Question 22: Do you agree that our proposed SCR process is most appropriate for taking forward the residual charging and other arrangements for smaller EG discussed in this document?

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Background on Severn Trent

Severn Trent provides water and wastewater services to 4.3 million customers across England and Wales. In order to provide these services we require significant amounts of electricity (c900 GWh), which is our second highest single operating cost after manpower.

As the majority of our business activities are a regulated monopoly, we are subject to price regulation which means cost increases ultimately directly affect customers' bills. As part of our strategy to keep bills low for our customers we focus on energy management, particularly by reducing demand for energy during peak cost times, and renewable energy generation, particularly by using biofuel from our sewage treatment processes. As a result, we currently generate approximately 290 GWh of renewable electricity as well as injecting renewable biogas into the national grid. 75% of this electricity is self-supplied and directly reduces our electricity cost for customers. Where this is not possible or efficient, electricity is exported. Reducing the value of exported electricity from our regulated business will ultimately lead to higher water customer bills than they otherwise would be.