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Dear Judith,

Targeted Charging Review: a consultation

Thank you for the invitation to respond to the above document. Good Energy is a fast-growing 100% renewable electricity supply company, offering value for money and award-winning customer service. An AIM-listed PLC, our mission is to support change in the energy market, address climate change and boost energy security.

Overview

- **Good Energy very much welcomes the proposal to conduct an in-depth study of network charging by means of a Significant Code Review (SCR).**
- **It is essential that not undermining investor confidence is a foundational principal of the SCR as this is central to supporting ongoing investment in the energy sector and delivering best value to consumers.**
- **Grandfathering existing arrangements for generators, as was done in Nevada and California, is an effective means of delivering investor confidence.**
- **A net kWh residual charge, best addresses the need to recover revenue, whilst remaining consistent with the need to support the transition to a flexible, future energy system.**
- **The SCR should have a wider scope and include locational and connection charges. The current scope focusing on residual charges is too narrow.**
- **Examination of BSUoS charges should not be carried out until after completion of the SCR due to the significant volume of change which is currently progressing through the industry, and the relatively smaller revenue associated with them compared to transmission and distribution network residual charges.**

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?

Competitive markets, by their nature, inevitably favour those who are best able to respond to market signals. Consumers will be best served by the creation of an innovative energy system which is fit for the future, where energy consumers are able to become energy citizens and are able to understand and respond to the changing nature of the energy market. Whilst we fully support steps to protect poor and vulnerable customers, it is essential that this protection does not take a form which will also undermine investor confidence, or stifle innovation in the energy sector.

We have serious misgivings regarding the current debate around the TNUoS residual – there is significant risk that a regime will be established which constrains the development of nascent technologies and business practices relating to storage and flexibility, which will be essential in the transition to a more affordable, secure, and sustainable energy system. To this end, we very much welcome Ofgem's

commitment to take due consideration in the consultation of the need to support a lower carbon, more decentralised, and more dynamic and responsive energy system.

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

We support a full evaluation of the way the residual charges are calculated and levied, but some of the wording in the consultation implies that Ofgem is starting from a position of attempting to create a system which levies system charges on all users, irrespective of their usage of the system. Any such charging regime would not only be a complete reversal of the current principles whereby those who make most use of the system contribute most to its costs, but also risks placing significant costs burden on low-demand consumers such as fuel poor households. This is clearly contrary to Ofgem's intended outcomes.

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.

It is a common misapprehension that the transmission and distribution residual charges are made up of various 'elements'. In reality the residual charges merely represent the difference between the locational (or forward looking) element of the tariff, and the network owners' allowed revenue under the RII framework. The 'elements' purport to exist within the locational element of the tariff, and we would welcome the examination all elements of the locational tariffs to ensure they appropriately reflect the full costs of connecting additional demand or generation. It is important to note that the locational element of transmission and distribution charging are based on entirely different methodologies, which will inevitably lead to inconsistencies between the two. This may be exacerbated by differences in calculation of connection charges for transmission and distribution connected sites, i.e. transmission-connected generators benefit from shallow connection charges whereas distribution connected sites often bear deep reinforcement costs. It is important to examine network charges holistically, because different parts of the methodology are inherently connected. Extending examination of the charging structure to include both locational and connection charging methodologies could reduce residual charges.

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

We commend Ofgem in its commissioning of an examination of alternative charging regimes in other countries. However, we have serious misgivings regarding the way that these case studies were selected. As was set out by CEPA as the Ofgem stakeholder engagement event, they were chosen largely on the basis of the language skills of the team in the CEPA offices. This is not a robust basis on which to base decisions which will inform decisions affecting significant revenues and investment.

In spite of the methodological shortcomings, the approaches in California and Nevada may hold some value. The use of grandfathering to protect investor confidence are particularly worthy of note. These support the need to account for the changing nature of the energy system, while allowing investors to maintain a low cost of capital through reduced perception of regulatory risk. Any failure to grandfather charges risks undermining both investor confidence and future security of supply.

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

The account of the impacts of policy changes in Nevada are particularly worthy of note. The attempt to make cuts to existing sites resulted in significant backlash from large numbers of politically engaged households with PV panels. Although grandfathering was eventually put in place, this has created significant investor uncertainty. It is essential that every opportunity is taken to learn lessons from Nevada.

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 support the three foundational principles of the Targeted Charging Review (TCR), on the assumption these are taken also to include the objectives of the CUSC, and Ofgem's five regulatory stances. In addition, we would argue that not undermining investor confidence should also be included as a principle for the TCR. A significant level of investment in the energy system is necessary in coming years in order to make an effective transition to a sustainable, secure and affordable energy system. The measures set out in this TCR could lead to a significant undermining of investor confidence in renewables and small-scale flexible generation. This will make the transition less certain, and increase its costs, both of which risk significant harm to consumers.

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?

We support the cost-reflective principle of those parties which make most use of the electricity transmission system facing the greatest costs of the electricity transmission system, and those which reduce pressure on a system receiving the appropriate benefit for this. The allocation of costs between users should be proportionate to the level and time of usage of the network with charges reflecting the extent to which usage is coincident with peak demands on the system which drives system costs. This means customers that consume units of electricity that flow over the transmission network should pay the transmission cost associated with those units, and generators who export units of electricity onto the transmission system should pay the transmission charges associated with those units. We believe that those who make most use of the network benefit most from the investments that have been made, and therefore should pay most towards it. This is a simple and transparent approach to attributing the costs of the network to its users. Just as generators and consumers who do not make use of the distribution system are not expected to pay for the distribution system, we see it right that consumers and generators who do not make use of the transmission system should not pay for the transmission system. If there is an expectation on distributed generators to pay for use of the transmission system, then it is reasonable to begin to charge DUoS on transmission-connected generators, who rely on distribution systems to deliver their output to end consumers.

It may be reasonable to begin applying transmission charges to embedded generators where Grid Supply Points become exporting. However it may be better to levy any such charges on distribution network operators, who already pay transmission exit charges by GSP, whereas TNUoS charges can only be levied on suppliers by GSP Group. This would provide Distribution Network Operators with appropriate signals for:

- managing their networks and potentially facilitating a transition to smart networks and becoming Distribution System Operators in Great Britain;
- making least cost choices between investment in distribution system reinforcement and additional charges for increased capacity at GSPs.

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?

As set out in question seven, it is reasonable for those consumers that make use of the distribution system, pay the costs associated with that system. Any generators which impose costs on that system should be expected to pay a fair share of them. In order to maintain a level playing field, if there is any eventuality where distributed generators should be expected to pay for (or lose the value of the savings they provide) the transmission system, it is reasonable that transmission-connected generators begin to pay the costs of the distribution system, as they benefit for its presence, in that they rely on it for delivery of output to the majority of end consumers.

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

Overall, of the five options being considered, a volume-based charge best reflects the principles of the TCR. However, depending on the details of the proposal, there may be some value in a capacity-based charge. Both a per-meter or gross-volume charge would be entirely inappropriate. A hybrid approach comprising a volume-based and capacity-based charge may offer some value. Our high-level views and concerns on each of the charging approaches are set out below:

- Option A: a charge linked to net (kWh) consumption** - We support the use of a net kWh charge. This could either be done on a flat basis for every kWh of consumption, or applied as a scaler to the locational charge. We understand Ofgem's expressed view that the residual is designed for revenue recovery, and therefore is not currently designed to send behavioural signals. However, we would argue that using the residual charges to amplify behavioural signals of the location charge is more supportive of a transition to a dynamic, flexible energy system. This could be done whilst still ensuring effective revenue recovery. Otherwise, owing to the relative scale differences between locational and residual charges, there is significant risk that a) the behavioural signal will be drowned out by the residual, meaning that there is no meaningful behavioural signal at all; b) the charging structure may have to be altered again in the near future to attempt to reintroduce behavioural responses – this would introduce yet more uncertainty into the charging regime. It is important that the network companies are able to recover their allowed revenue, however to suggest that this implies the residual charge cannot be used to send behavioural signals is a false dichotomy. If, however this is deemed inappropriate, a flat kWh charge on all consumed units represents an easy to implement, non-distorting method of cost recovery. This also represents a progressive method of revenue collection because fuel poor consumers typically have low levels of consumption, and more affluent consumers typically have higher demand levels.
- **Option B: a fixed price charge** – A fixed per-meter charge would be highly regressive because it would mean that a fuel poor family subsisting on 1000kWh of demand a year paying the same contribution as an affluent family in a 6 bedroom house consuming 9000kWh a year. It would also reduce the relief that solar panels fitted to social housing would provide. It is essential that the drive to prevent engaged consumers avoiding charges does not lead to a charging regime which penalises vulnerable consumers as this would run contrary to Ofgem's objectives. A fixed per-meter charge not only reduces the incentive for consumers' engagement with their energy use, but also brings the point where it is financially advantageous for consumers to 'island' themselves from the grid much closer. Given the rapidly decreasing cost of battery storage technology, this is already a pressing concern. Finally, a fixed per-meter charge reduces the value of investment in energy efficiency which should be considered a priority, particularly for fuel poor households.
 - **Option C: fixed charges set by measured capacity** – The pros and cons of this approach hinge largely on the way that capacity is defined. A measure based on actual used capacity – either on a maximum per-site basis, or utilised capacity at time of system peak (as is the case with the triad-based charging at present). It would however be very socially regressive to base capacity on size of connection (i.e. using fuse size) because this would leave those unengaged consumers who are unaware or unable to arrange for a fuse change, facing higher charges than their engaged counterparts – this is expressly the sort of impact that Ofgem has stated it is keen to avoid. The use of fuse size is also potentially impractical to implement, owing to lack of records of installed fuses,

and the practice of using standard fuse sizes that for many users provide more capacity than required. It is also not clear that any records that do exist would be accessible to either National Grid (for the purpose of calculating supplier charges) or suppliers (for the purpose of calculating individual customers' charges). Putting in place a charging regime based, for example, on an average of actual net capacity during daytime hours would be likely to offer the most equitable outcome, however will in practice be difficult to implement until the smart meter rollout is complete, therefore a transitional arrangement based on overall volume would be appropriate.

- **Option D: gross kWh consumption** - As set out above, it is not cost reflective to charge units which do not flow onto the distribution or transmission system as if they have flowed across them. Any such policy would also risk significant unintended consequences – housing associations and local authorities have installed solar panels on thousands of social houses in order to support fuel poor households, any such change would significantly undermine the benefit that these panels provide. There are also practical challenges regarding the current metering regime metering that would be required to deliver such a change – there is no metering in place that would allow the amount of on-site consumption to be measured for domestic and small business premises with PV installed. To put this sort of metering in place could have significant cost implications. As under option B, this charging structure not only reduces the incentive for consumers to engage with how they consume energy, but improves the case for users to 'island' themselves from the grid.
- **Option E: a hybrid approach** – This may be appropriate, depending on the design, however it is also important that complexity is reduced, and that charges are predictable and stable, to allow accurate charging of customers by suppliers, and to keep risk to a minimum. A hybrid approach could either be based on a part-capacity and part-volume based charging regime, or based on an actual volume moving to an average capacity regime. These combinations would help to avoid step changes between different customer sizes. Alternatively, offering a different basis for charging between different customer types, as is the case currently between half hourly (HH) and non-half hourly (NHH) customers, may be appropriate.

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

We have no additional suggestions at this time.

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

We believe Options B and D are not worth pursuing due to their transparently regressive and non-cost-reflective nature. Both options could have significant negative implications for poorer and vulnerable households, particularly those in social housing where solar PV has been installed to help relieve fuel poverty. Both options also reduce the incentives for consumers to engage with their energy use, and increases risk of 'islanding'. Although we understand Ofgem's concerns that the current arrangements may place pressure on those who are unable to engage, that is not to say that engagement should not be encouraged. Ultimately if one group of users can limit their energy consumption at times of peak demand on the network, network assets will be used more efficiently. This results in a lower capacity network and less network reinforcement, thereby delivering lower costs for all consumers. This is particularly important in the context of the potential shift to electrification of heat and transport.

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 – We believe it is particularly important that Ofgem carry out extensive evaluation of the wider impact on embedded generators of potential changes. The changes proposed in this TCR have the potential to make or break the business cases for new renewable projects, embedded flexible generators, and battery projects. As has been well-documented, the future of the energy system is likely to be dominated by small-scale distributed generation and storage, and it is essential that changes to the network charging structure do not undermine the potential for this transition to be delivered at least cost. The way that the TCR is conducted is as important as the outcome – if robust analysis is carried out on the potential impact of decisions, then investor confidence is more likely to be supported, than if decisions are seen to be made with minimal scrutiny regarding the probable outcomes.

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

The answer to this question is heavily influenced by the outcome of the minded-to decision on CMP264/265. If approved, this would mean there was a fundamental departure from the most basic grounding of the charging regime whereby a unit of embedded generation faces the opposite charge to a unit of demand. However the TNUoS charging regime is reformed going forward, it is wholly inappropriate for price signals for an additional unit of embedded generation to be anything other than equal to a reduced unit of consumption. These both have an identical impact on the transmission system and therefore should be charged as such.

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

This question relates closely to the eventual decision on CMP264/265 – as set out in our consultation response to the minded-to position, there are significant issues with both the decision itself, and the way that the decision was reached. These are not only likely to undermine the energy transition, but could invite judicial review, which would lead to further uncertainty for investors in the sector. We would argue that the future of triad benefit should be considered alongside the future of transmission network charging, as the impact that an embedded generator has on the transmission network is identical to a reduced level of demand – it is therefore inappropriate for embedded generators to be considered as anything other than negative demand. Any future changed to demand charges must take this into consideration.

Conversely, we do not see BSUoS as having a significant distortionary impact – particularly in relation to the level of uncertainty and burden on the industry that reviewing another set of charges would impose. Small suppliers are already challenged by the level of change that is progressing through the industry; to add further to this would leave many small firms unable to participate adequately in the change process. The revenue associated with BSUoS charges is relatively small compared to that from transmission and distribution network residual charges.

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?

If the transmission generation residual were to become negative, this would create an 'embedded disbenefit'. This negative residual would be the product of the €2.50/MWh cap on transmission-connected generator charges. This demonstrates why the scope of this charging review is too narrow – attempting to purely examine the residual charges without also looking at the role and design of locational charges creates an incomplete analysis. The future departure from the EU provides an opportunity to remove the €2.50/MWh cap, and revert to a more equitable split of TNUoS charges between demand and generation such as the 73%/27% split in place previously – this would eliminate the need for a negative generation residual charge. It is evident, that owing to the relative scales of the locational and residual tariffs, that the locational element has a minimal impact for locating demand in one area of the country or another, and the €2.50 cap has the effect of flattening the locational signal for generators. It is clear therefore that this must be examined in detail.

We consider that differences in the determination of connection charges for transmission and distribution connected sites can put smaller embedded generators at a material disadvantage. This is because transmission-connected sites only pay shallow network charges, whereas distribution-connected sites often bear deep reinforcement costs.

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

Yes

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

Yes

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

Storage should incur BSUoS charges on its gross import, at the prices relevant to the periods of import, but benefit from BSUoS credits (ie be paid BSUoS charges) for its gross export, at the prices relevant to the periods of export. This correctly charges storage for BSUoS because the export from the storage will incur BSUoS charges when it is consumed by end customers – levied on the supplier of those end customers.

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?

If exempting storage from demand residual charges, there is no reason not to implement these changes ahead of the overall residual review. However, it should be delivered through the significant code review, and not left to industry to deliver.

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.

It is essential that there is a broad representation of representatives from across the industry in the CCG. It is important that individuals' tendency to present views which favour their organisation should be considered. In spite of the stipulation that those on code panels should act independently from their organisations' interests, it is not clear that this is always the case. We therefore propose that any governance arrangements that are put in place are mindful of this fact. If any parts of the governance structure of the CCG, even those areas without final decision-making powers, are dominated by one group of interests, this will inherently distort the outcomes of the process.

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

We believe that the SCR process is an appropriate tool for delivery of major change in the energy system. However we feel that the current scope is too narrow to deliver a charging regime that is fit for the future. We would argue that consideration should be taken of the locational element of TNUoS and DUoS, as well as connection charging, as singling out an examination of the charging regime for small embedded generators risks creating other distortions. As was set out in the international case studies work, The Netherlands does not break down network charges into a locational + residual charge, instead having a unified basis for

charging. Failing to examine locational, residual and connection charges together precludes any such approach being investigated in Great Britain.

We would argue that BSUoS charges for generators and consumers should not be considered in the scope of this review, and should be left for a later time – this is due both to the relatively smaller revenue associated with BSUoS charges compared to transmission and distribution network residual charges, and due to resourcing constraints on smaller market participants to engage with and respond to such a significant level of change.

Of the three proposed routes for the SCR to progress, we would support option three – where Ofgem leads a full end-to-end process to develop code modifications. This will support a quick and efficient move to a new network charging regime, helping to minimise uncertainty and best protect investor confidence. This will help to deliver the best outcomes for consumers more quickly than the other proposed options for delivering the SCR.

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?

As set out above, we believe the SCR is the most appropriate model for delivery of these changes, but they are currently too narrow in scope to deliver a charging regime fit for the future, which will provide the necessary level of investor confidence.

I hope you find this response useful. If you have any questions, please do not hesitate to contact me.

Kind regards,

Tom Steward
Wholesale Regulatory Officer