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Dear Andrew

Targeted Charging Review response: Scottish Renewables and Renewable UK

Scottish Renewables is the voice of Scotland's renewable energy industry, working to grow the sector and sustain its position at the forefront of the global clean energy industry. We represent around 250 organisations working across the full range of renewable energy technologies in Scotland and around the world, from large suppliers, operators and manufacturers to small developers, installers and community groups, and companies right across the supply chain.

RenewableUK is the trade and professional body for the wind, wave and tidal energy industries. It promotes the deployment of clean energy in a smart energy system, increasing overall awareness of the UK's energy transition - from fossil fuels to renewable sources. Formed in 1978, and with more than 400 corporate member companies, our members employ a quarter of a million people and will invest more than £15.6bn in UK infrastructure between 2016 and 2021 – over 90% of which will flow to regions outside of London and the South East. In 2017, 28.8% of the UK's electricity was generated from renewable energy sources. 46% of this was generated by onshore and offshore wind, which provided 13.2% of the UK's electricity needs.

Scottish Renewables and RenewableUK recognise that the evolution underway in our energy system requires change across the way users interact with our electricity network, the way network operators manage the system, and the way in which costs for network usage are levied.

The Intergovernmental Panel on Climate Change¹ is clear that globally we must limit temperature rises to 1.5°C if we are to prevent the most catastrophic effects of climate change. This ambition is reflected in a series of UK Government policies,

¹ Intergovernmental Panel on Climate Change (IPCC), 'Global Warming of 1.5 °C', October 2018
https://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf

including the Clean Growth Strategy, the Smart Systems and Flexibility Plan and of course the UK Government's legally binding emissions reductions targets.

The further deployment of renewable energy is critical to delivering these agreements. We therefore have significant concerns that the proposals outlined in the Targeted Charging Review (TCR) are of particular detriment to the renewable energy industry, jeopardising further project development, damaging investor confidence in the sector, and threatening schemes already operational and/or with support contracts secured (as acknowledged by Ofgem in the consultation document). It is of particular concern that decarbonisation was excluded from the assessment criteria, when this is a central plank of the UK's energy policy and long-term consumer welfare.

We are deeply concerned that the impact of the proposals set out in the TCR are at odds with the wider direction of government policy, and through their damaging impact to the renewable energy industry will threaten the sector's progress and fail to fulfil the Authority's principal objective, which it itself states is:

“to protect the interests of existing and future consumers in relation to gas conveyed through pipes and electricity conveyed by distribution or transmission systems. The interests of such consumers are their interests taken as a whole, **including their interests in the reduction of greenhouse gases** in the security of the supply of gas and electricity to them”²

Furthermore, the narrow approach to consumer benefit taken in the TCR seems to focus purely on reducing network costs for consumers, and does not fully take into account the detrimental impacts the proposals will have elsewhere on the system. For example, it is now well established that onshore wind and solar PV are the cheapest forms of new-build electricity generation, so it is vital that consumers are afforded access to these low-cost technologies in order to keep bills down. The modelling approach excluded the response of renewable technologies from being quantitatively assessed, on the assumption that all new-build renewables will have a CfD out to 2040. Current government policy excludes pot 1 technologies from competing for CfDs, and the modelling does not consider what the response of merchant-build renewables would be to the TCR outputs.

Moreover, any increase in the cost base or regulatory uncertainty for offshore wind is likely to manifest itself in increased strike prices in CfD auctions with consumers

² Ofgem, 'Powers and duties of GEMA', 2013 (para. 1.4) www.ofgem.gov.uk/publications-and-updates/powers-and-duties-gema

eventually paying for the cost of grid charging reform through CfD top-up payments. With the proposals outlined in the TCR set to damage the renewables sector, we are concerned that consumers are effectively being denied volumes of low-cost, low-carbon, flexible renewable energy and that the cost of energy may ultimately be increased.

Finally, our members understand that regulatory change is an inevitable and necessary part of any system, and accept the risk to projects and revenues that comes with it. However, the industry feels the scale and pace of change is making investment decisions increasingly difficult to make, and the impacts of future change would make these impossible. Costs of investment are going up as a direct consequence of regulatory change, and in extreme cases investors are actively choosing to leave the sector due to the level of uncertainty that the regulator is forcing them to bear.

We look forward to engaging with you further as this work progresses.

Yours sincerely



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Introduction

The impact assessment does not take account of the impact that the TCR will have on the deployment of renewables, on cost of energy, or on emissions. We consider this significant failing in Ofgem's approach to the analysis. The potential impact on renewable energy, worst affected by the proposed changes set out in the TCR, completely contradicts the wider government policy ambitions as set out in the Clean Growth Plan and the Industrial Strategy. Further, the potential impacts of the TCR undermine the energy market transition set out by Ofgem and BEIS through the Smart Systems and Flexibility Plan by removing value from existing and planned flexibility assets as well as low-carbon renewables.

The plethora of current and recent regulatory intervention in the electricity industry continues to undermine the investment case for new generation. The TCR comes alongside the ENAP and immediately after recent shocks including the ruling on CMP264/265 (triad charging), P350 (transmission losses) and CMP261 (EU cap). The impact assessment undertaken by Ofgem does not consider the cumulative impact of all of these changes together. The immediate outcome of this is an increased cost of energy through various factors:

- Increase in development risk and costs to track, understand, process and reshape development/ownership portfolios to reflect the changing regulatory landscape.
- Increased investment risk due to unforeseen and fundamental changes to the charging principles that have underpinned the charging arrangements since 2005. Perceived low regulatory risk has been a key factor in driving down to the cost of capital for new renewables projects in recent years. However, increased investment risk leads to higher cost of capital for all projects. This increase in cost will ultimately remove value from consumers and increase energy bills.
- Slower and less deployment of 'subsidy-free' renewable generators and flexibility projects through increased costs and risk.
- Lower overall inward investment in the UK as a key benefit of investments in the UK market is eroded. Regulatory stability and low overall risk are a key reasons that investment is attracted to the UK market, compared to other markets with higher potential returns.

It is of utmost importance that no decisions are taken before Ofgem has commissioned a high quality and broad-reaching impact assessment which assesses the compounded impacts of TCR and ENAP together.

Leading Options

1. Do you agree that residual charges should be levied on final demand only?

We agree that moving residual charging elements from generation and placing it on final demand only will help to reduce distortions throughout the industry. Removing residual charges from generation is going to better align the charging arrangements for generators located in GB with generators located in neighbouring jurisdictions.

However, in relation to the treatment of the Transmission Generation Residual (TGR), the preferred options regarding this specific charging element are not going to result in reduced costs for consumers. Arbitrary removal/fixing of this charging component will disproportionately impact on renewable energy investments as this type of generator tends to have lower annual load factor. Therefore any £/kW increase in tariffs applied to all large and transmission connected generation will result in higher levelised cost of exports (£ per MWh exported) for renewable energy build projects. In addition, Ofgem's proposals for the TGR and the principle of charging residual costs on final demand interacts with the legal requirement for GB to comply with EU regulations. We encourage Ofgem to be both practical and sensible in this regard.

We would like to note that the reason that the negative residual charge exists at transmission is to ensure compliance with EU regulation 838/2010 of €0 - €2.50/MWh (the 2.5 euro/MWh cap). The purpose of this cap is to ensure transmission connected generation from member states do not incur excessive TNUoS charges and can compete on a level playing field. Removing the negative transmission residual will result in GB generators being placed at a cost disadvantage compared with its European peers. This is an increasingly important area given the increase in interconnection and project TERRE.

2. Do you agree with how we have assessed the impacts of the changes we have considered against the principles? If you disagree with our assessment, please provide evidence for your reasoning.

The principles that have been set out and used to assess the impact of the proposed changes are reasonable and we are generally supportive. The assessment has failed, though, to assess the broader and longer term impacts of all the proposed amendments set out in this minded-to position and to consider what this means for consumer bills in the medium-long term. The principles take no account of carbon emissions and the impact of generation technology on the UK Government's climate change and emissions reductions targets (see our response to Q10). We urge Ofgem

to take account of the potential impact of the proposed changes on the deployment of low carbon generation and emissions from the electricity sector in line with the Committee on Climate Changes recommendations and the UK's obligations under the UN Paris Climate Agreement.

We are disappointed that the proposals in the TCR are seemingly at odds with achieving a smart, flexible and low-carbon energy system at lowest overall cost to the consumer.

3. For each user, residual charges are currently based on the costs of the voltage level of the network to which a user is connected and the higher voltage levels of the network, but not from lower voltage levels below the user's connection. At this stage, we are not proposing changes to this aspect of the current arrangements. Are there other approaches that would better meet our TCR principles reducing harmful distortions, fairness and proportionality and practical considerations?

We do not believe that charging users for lower voltage networks would benefit consumers. This would be a significant change to the principles of network charging and would introduce further upheaval, uncertainty and investor risk – likely to increase the cost of capital for future energy developments.

Charging the residual component of lower voltage networks to customers may introduce a perverse signal to users to avoid connecting at the most economic and efficient point on the network. For example, users might be incentivised to connect at a lower voltage due to this change, even if it is more economic from a system perspective to connect at a higher voltage. This could result in suboptimal whole system outcomes.

Charging the residual component of lower voltage networks also introduces the question of whether all network users should pay for all other parts of the network, including neighbouring distribution networks. This is likely to be impractical to implement but rational considering the GB energy market as a whole.

4. As explained in paragraphs 4.41, 4.43, 4.46, 4.49, 4.80, we think we should prioritise equality within charging segments and equity across all segments. Do you agree that it is fair for all users in the same segment to pay the same charge, and the manner in which we have set the segments? If not, do you know of another approach with available data which would address this issue? Please provide evidence to support your answer.

No comment.

5. Do you agree that similar customers with and without on-site generation should pay the same residual charges? Should both types of users face the same residual charge for their Line Loss Factor Class (LLFC)?

We believe that the definition of 'similar customer' needs to be explored further. Fundamentally, we disagree that customers with on-site generation and customers without on-site generation are 'similar customers'.

The justification for using LLFCs has not been made clear as the impact of different segmentation methods has not been explored within the impact assessment. Further, the lack of transparency around the calculation of these factors increases uncertainty for network users.

It is not clear at all that the use of LLFC methodology is an appropriate way in which to segment customers as the definition of customer types within this methodology is too simplistic. It is unrealistic to assume that generators with a small import requirement will pay the same residual amount as a normal demand customer. The import for a generator tends to be very small compared to a normal demand customer so they should not contribute the same amount towards the residual charge. Generation should be separated out and exempted from the residual charge (as proposed under CMP280 and DCP 321 and 319 (before they were withdrawn)). We would like to note that the import from generation does not impact greatly on the local network which is sized to the export, which is much larger.

We believe that LLFCs do not provide sufficient granularity particularly at High Voltage, Extra High Voltage and transmission where each customer segment contains a wide range of customers. This results in all customers within each segment facing the same charge regardless of their size and impact on the network.

Utilising existing market mechanisms such as the LLFC improves the practicality of implementation, but it is not clear that this is necessarily appropriate or what the alternatives might be. We encourage Ofgem to do a full exploration of alternative approaches to segmentation and banding and how these compare to utilising the LLFC.

Should LLFCs be used for market segmentation, we believe there will need to be extensive review of this methodology to ensure that it is fit for purpose for determining the calculation of residual network charges. We are also cautious that the Electricity Network Access Project (ENAP) has scoped a wide-ranging review of

distribution access and charging methodology and it is not yet clear if LLFC would need to be changed after the ENAP review has reached its decision.

6. Do you know of any reasons why the expected consumer benefits from our leading options might not materialise?

The proposal for fixed capacity charges for transmission and distribution residual charges is likely to undermine the proposals under the Smart Systems and Flexibility Plan.

As set out in the Smart Systems and Flexibility Plan, the future expectation of a more complex energy network is clear, with greater decentralisation and flexibility. It is estimated that this transition could save consumers £8 billion a year³. The range and sophistication of market participants, particularly at distribution, is likely to grow. Therefore, the design of network charges needs to reflect how this reality can be realised at lowest cost to the consumer.

We are concerned that the proposed fixed capacity charge is not going to be able to efficiently capture the different types of network user behaviour and it will not be an effective incentive to influence the behaviour of network users for the benefit of the system, to lower costs. The fixed capacity charge will therefore not result in expected consumer benefits.

Removing the residual component from 'forward looking' charges and charging it on a 'fixed capacity' basis, will significantly erode the benefit/penalty associated with different types of network utilisation. This will reduce engagement in smart system and local system balancing – likely resulting in the need for increased investment in new network assets and increasing costs to the consumer. We believe that this reduced engagement and increase in system costs has not been effectively captured within the analysis performed as part of the impact assessment.

We are more supportive of the capacity charge options. These options will provide fair and equitable charging to all network users. These options will not undermine efforts under the ENAP to incentivise better use of the networks through forward looking charging signals. Further, recovering the residual on capacity would result in a more efficient allocation of capacity and reduce the likelihood of capacity hoarding.

Based on the analysis summary of the 'five variants' set out in Table 6 – there is no proportionality and practicality advantage identified of the fixed charge option

³ National Infrastructure Commission, 'Smart Power', 2016
<https://www.gov.uk/government/publications/smart-power-a-national-infrastructure-commission-report>

compared to the agreed capacity option and therefore we disagree with the statement in 4.13 which indicated that there is such an advantage.

Nevertheless, we consider that these options need to be considered alongside the potential impact of the ENAP Significant Code Review and cannot be treated in isolation. Indeed, while the proposed changes may save consumers costs with regards to the existing networks, this is a narrow view. The overall impact of the changes will be higher energy costs overall (as the cheapest forms of generation are made less cost effective), and the benefits of a smarter, more flexible system will not be realised.

We note that the impact of the proposed changes under the TCR will delay the energy market transition set out under the Smart Systems and Flexibility Plan.

7. Do you agree that our leading options will be more practical to implement than other options?

8. Do you agree with the approaches set out for banding (either LLFC or deeming for agreed capacity)? If not please provide evidence as why different approaches to banding would better facilitate the TCR principles.

See response to question 5 about using LLFC.

9. Do you agree that LLFCs are a sensible way to segment residual charges? If not, are there other existing classifications that should be considered in more detail?

See response to question 5 about using LLFC.

10. Do you agree with the conclusion we have drawn from our assessment of the following? A) distributional modelling b) the distributional impacts of the options c) our wider system modelling d) how we have interpreted the wider system modelling? Please be specific which assessment you agree/disagree with.

We do not agree with the assessment used. The modelling inputs are flawed, and therefore the conclusions drawn from the outputs are ill-informed.

The use of the 'Steady Progression' FES scenario is not a representative baseline against which to assess the impact of the proposed changes. This scenario only considered one potential future energy outcome, one which does not meet the Government's legally binding carbon emissions reductions target. Under both FES

scenarios the renewable generation assumed to be built out to 2040 is “locked down” and assumed not to respond to the changes. This assumption is particularly unrealistic given the current government policy outlook for renewable energy.

RenewableUK and Scottish Renewables members are of the express view that renewables build *will* be affected by the proposed changes. The assessment assumes that this will not be the case with the reasoning that Ofgem expects all new renewables build to 2040 to be built only if it secures a CfD. This is a major flaw, which results in modelling outputs that are unreliable and incorrect. Currently, government policy prevents pot 1 technologies from competing for CfDs. The response of renewables build should therefore be a crucial consideration for Ofgem, along with a broadening of the goals of the assessment – from considering network costs alone to considering the more appropriate overall cost of the system as a whole and customer bill impacts.

The proposed changes in relation to the treatment of residual charges and embedded benefits will have a significant impact on the future deployment of renewable energy projects. These changes will harm investment in these technologies and will therefore reduce the overall levels of deployment. This outcome is not captured within the impact assessment and needs to be considered, particularly in relation to the UK’s carbon emissions reduction targets.

In particular, we note that the Frontier Economics impact assessment paper concludes that “renewable build is locked down between scenarios as per the ‘background’ FES scenario”. We do not believe that this method represents a robust way to assess the impact of the changes as the cheapest renewable energy technologies still do not have a clear route to market and continued network charging regulatory uncertainty further undermines investor confidence and increases costs.

Therefore, the assumption of renewable build being unaffected by the changes is only valid if government policy significantly changes and fresh support for further renewable energy deployment becomes available, as the current market conditions are not suitable for investment. Scottish Renewables and RenewableUK are aware that investors with a long history and track record of activity within the renewables market are actively leaving, particularly in relation to smaller-scale, distribution connected renewable energy projects.

We also note the assumed increase in CfD strike prices in the impact assessment as a result of the changes in the treatment of residual charges and embedded benefits. It would seem, therefore, that the only potential to reduce costs for consumers is by

removing value from existing generation. However, this risks damaging investor confidence in the UK energy sector leading to a feedback loop as return expectations and risk allowances are affected with impacts on LCOE, undermining progress made in recent years that has contributed to a significant reduction in cost of energy.

The impact of future increased CfD prices will only affect technologies that are eligible for bidding for such CfD contracts. As the lowest cost renewables – onshore wind and solar – are currently excluded from bidding, these impacts will have a significant skewing effect on the renewable energy market and likely result in increased costs for consumers through fundamentally less efficient projects being taken forward. The Steady Progression scenario assumes a low level of policy support for low-carbon solutions. Despite this, an extra 15GW of solar and 5GW of onshore wind is forecast to be built by 2050. The Frontier assumption that renewables build remains constant is not consistent with the policy assumptions in the FES.

The impact assessment does not consider the impact on investment costs. The proposed changes will erode investor confidence and increase the cost of capital for new energy projects. This factor has apparently not been accounted for within the modelling and will result in reduced consumer benefit.

For these reasons, the impact assessment is focused on near-term cost savings for consumers on network costs, but does not properly capture the future costs/impacts of the changes more widely in the longer term, as outlined above.

The impact assessment does not take due consideration of the combined impact of the TCR and the ENAP SCRs on the potential outcomes for the industry and these issues cannot be separated, particularly when the reviews are happening in parallel.

Ofgem has made it clear that it does not see decarbonisation considerations as being within its remit. Our members disagree with this, and point to GEMA's statutory obligations, as we set out in our introduction to this response. The best interests of the future consumer lie not just with reducing existing network costs for consumers (which is what the TCR solely aims to do), but with considering how to make the cost of energy and the networks as optimal as possible. By proposing fundamental charging reforms which have such detrimental impacts upon low-carbon, clean, cheap forms of energy generation, Ofgem is failing to take into account what this will mean for the future consumer, and the expected consumer benefits will be undermined by the effects of this.

It is our view that Ofgem should be looking at residual charging, forward-looking charging, grid access rights, the Capacity Market, ancillary services and flexibility requirements in a joined-up fashion. The minded-to proposals under this TCR, the impact assessment and how it has been interpreted are inconsistent with the required joined-up approach and do not represent a way forward which will result in tangible benefits for future consumers.

Embedded Benefits

11. Do you agree with our proposed approach to the reform of the remaining non-locational Embedded Benefits?

Full BSUoS reform will increase costs to consumers as it will have a significant and severe impact on future investment in the lowest cost renewable energy projects.

Based on analysis that we have undertaken together with Xero Energy, RenewableUK and Scottish Renewables have assessed that full BSUoS reform would reduce revenues and increase operational costs for small embedded renewables by £96M per annum⁴.

This additional cost/reduced revenue outlook – with no clear markets to participate in which could ease the impact of this loss of revenue - will significantly damage pre-existing investments and reduce investment in future renewable energy build and low-carbon flexibility projects. The impact assessment does not consider the reduced renewable build as a result of these changes nor does it consider the potential increased cost of capital due to regulatory risk that would result from these changes. We note that 6.21 of the consultation states that both embedded benefit reforms are expected to result in “limited changes in the investment in generation capacity”. We disagree entirely with this assertion (which is flawed due to the flawed inputs, see our response to Q10) and consider that these changes will have very significant impacts on the investment in generation and flexibility providers. This will either mean projects not going ahead, or requiring higher returns. In either case, costs would increase for consumers, which should be captured in the analysis.

Reduced future renewable energy and flexibility deployment at distribution will reduce the UK’s ability to meet carbon reduction targets. It will also reduce engagement with local distribution flexibility markets, reducing the ability of local system operators to efficiently manage the network. Reduced deployment will also impact on the range of flexibility providers available at a national level, reducing the resilience of the total system.

We welcome the extension of the Small Generator Discount, but urge Ofgem to consider a longer-term solution to this issue rather than focusing on a solution that only extends the existing arrangement until March 2021. This extension pre-judges the outcome of the TCR and presumes that all significant distortions will be resolved

⁴ Xero Energy, ‘Balancing Services Use Of System Charges Renewables Impact Analysis’, November 2018 (attached)

by this point. However, we do not believe that this is necessarily the case and shouldn't be assumed for considering the treatment of the discount in future.

We believe that consumers would benefit from a longer-term resolution to this matter. A long-term solution would provide reduced uncertainty for investors and reduce the associated cost of capital against this risk for future build of renewable energy and flexibility projects.

We encourage Ofgem to await the outcomes of the BSUoS task force before taking further steps in relation to the treatment of BSUoS embedded benefit. The outcomes of the task force need to be considered within the impact analysis of the proposed embedded benefits reform.

Current BSUoS arrangements mean that each Supplier and the generators they account for are not only in receipt of BSUoS embedded benefits. Embedded generators also pay the BSUoS generation charge in any HH that the GSP Group is exporting. This is because Suppliers pass through the cost of the system operator is handling that export. Ofgem do not appear to have accounted for this in their impact assessment, and have therefore likely overstated the benefits of reform (see paragraph 6.11 of TCR minded-to position document).

Further, the consultation is not clear regarding the future treatment of BSUoS 'residual' charges. It is not clear if these charges are still going to be levied on a volumetric basis or other (e.g. fixed, capacity basis). This too must be understood and modelled within the impact analysis of the embedded benefits reform to ensure that the full potential impact of the proposed changes is captured. For example, removal of 'residual' balancing charges from transmission connected generation could reduce wholesale electricity prices and reduce revenues for embedded generation (compounding the effect of the removal of the benefit). This will also increase costs to demand consumers reducing the consumer savings identified as part of the reform.

The proposal to set the TGR arbitrarily to £0/kW could cost the average intermittent generator an increase of up to 540% in their Wider TNUoS costs⁵. All generators could see their costs go up by more than 100%. In Scotland this change would be felt most keenly.

⁵ Aurora Energy Research, 'TCR consultation note', December 2018
https://eos.auroraer.com/documents/TCR_consultation.pdf

Ofgem has discussed many reasons why residual charges should be levied upon final demand only, with much emphasis on how exactly these charges should be levied and the principles of assessment. However, Ofgem has not set out how it proposes that TGR can be set arbitrarily to £0/kW. Currently, the negative TGR acts as a correction factor so that average GB generator costs remain compliant within the range set out in EU regulation 838/2010 of €0 - €2.50/MWh. Therefore, the negative residual is not acting as cost recovery – instead its purpose is for compliance with legally binding legislation. Urgent clarity on how Ofgem’s proposal can be enacted is therefore required.

Overall, the change process is not robust. We do not believe that industry has been provided all the evidence required to provide comment on the application of the TCR principles to balancing costs. There is significant uncertainty about what the application of this principle might mean going forward given the work being undertaken by the BSUoS task force. This increases risk and uncertainty for operational and planned generators. Therefore, Ofgem should not make any decisions on the treatment of BSUoS until there is a clear set of options/outcomes from the BSUoS task force with the impact assessment clear for different user groups.

12. Do you agree with our proposal not to address any other remaining Embedded Benefits at this stage? Which of the embedded benefits do you think should be removed as outlined in xx? Please state your reasoning and provide evidence to support your answer.

AND

13. Are there any reasons we have not included that mean that the remaining Embedded Benefits should be maintained?

We believe that the impact on the deployment of renewable energy projects has not been included in the assessment of the proposed reform of embedded benefits.

Transitional arrangements and Ofgem 'minded-to' position

14. Do you agree with our proposed approach to transitional arrangements for reforms to: a) transmission and distribution residual charges b) non-locational Embedded Benefits? Please provide evidence to indicate why different arrangements would be more appropriate.

15. Do you agree with our minded to decision set out? If not please state your reasoning and provide evidence to support your answer.

We do not agree with the minded-to decision.

The proposed changes set out within this minded-to consultation amount to energy market policy, as opposed to regulation, given the scale of impact on market dynamics.

The case for the 'fixed' option has not been sufficiently made. The proposed solution undermines investment incentives in flexibility providers and erodes the strength of forward-looking signal to network users. This incentive is critical for continued investment in flexibility providers.

The capacity options set out in the consultation present much better opportunities to align with the goals of the Smart Systems and Flexibility Plan and the likely outcome of the Electricity Network Access Project.

Full BSUoS reform will increase costs to consumers as it will have a significant and severe impact on future investment in the lowest cost renewable energy projects. Partial reform removes the most significant element of distortion but mitigates the extent to which existing investments are penalised and investor confidence can be maintained for future projects. However, the process of deciding how BSUoS should be charged going forward must account for the outcomes of the BSUoS taskforce and should not pre-judge them. Therefore, we urge Ofgem to withhold from making a decision on charging arrangements for balancing costs until there is a clear set of options/outcomes from this process. Overall, the BSUoS reforms represent removal of revenue streams which currently are not available to renewable, embedded generators as they are to others. This does not represent the level playing field Ofgem are keen to create as a result of both their current SCRs. It is of utmost importance that no decisions are taken before Ofgem has commissioned a very high quality and broad-reaching impact assessment which assesses the compounded impacts of TCR and ENAP together. Such analysis could also incorporate elements of SNaPS and day-ahead procurement of system services, DSO, etc.

Industry should have the opportunity to comment on a coherent set of proposals across all areas of proposed reform before final decisions are taken on substance and implementation.

In relation to the treatment of the TGR, the preferred options regarding this specific charging element are not going to result in reduced costs for consumers. Arbitrary removal/fixing of this charging component will disproportionately impact on renewable energy investments as this type of generator tends to have lower annual load factor. Therefore, any £/kW increase in tariffs applied to all large and transmission connected generation will result in higher levelised cost of exports (£ per MWh exported) for renewable energy build projects.

16. For our preferred option do you think there are practical considerations or difficulties that we have not taken account of? Please provide evidence to support your answer.

No comment.