

Future Charging and Access programme – Consultation on refined residual charging banding in the Targeted Charging Review, and Supplementary renewables modelling

Response on behalf of the Solar Trade Association

About us

Since 1978, the Solar Trade Association (STA) has worked to promote the benefits of solar energy and to make its adoption easy and profitable for domestic and commercial users.

A not-for-profit association, we are funded entirely by our membership, which includes installers, manufacturers, distributors, large scale developers, investors and law firms.

Our mission is to empower the UK solar and storage transformation. We are paving the way for solar to deliver the maximum possible share of UK energy by enabling a bigger and better solar industry.

Respondent details

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Would you like this response to remain confidential?	No

Response:

The STA welcomes this opportunity to provide feedback on refined residual charging banding in the Targeted Charging Review, and on the supplementary renewables modelling provided. However, our central position remains unchanged: These proposed reforms to network charging are fundamentally contrary to the UK's legally-binding GHG emissions reduction target, which have become considerably more stringent since the TCR was first introduced in November of last year, as a result of the Net Zero legislation.

The development of subsidy-free renewable energy requires a stable and supportive regulatory framework. There can therefore be little doubt that these reforms would have the effect of delaying electricity sector decarbonisation, as is acknowledged in the supplementary renewables modelling provided by Frontier Economics. This troubling prospect underscores the need for Government to provide a long-overdue update to the Statement of Policy and Strategy for Ofgem, in line with the 2050 Net Zero objective.

Refined residual charging banding

We concur with the view presented here that LLFCs would be an inappropriate basis for consumer banding. The somewhat more refined approach presented here should better reflect the diversity seen across businesses more so than the arbitrary LLFC segmentation. The use of a net volumetric approach to apportioning segment boundaries for non-domestic LV consumers could be preferable to the LLFC basis in that it might better reflect consumer characteristics and thus be more equitable. However, it would be impossible to directly compare the distributional impact of this segmentation without knowing exactly how many and what type of users within each LLFC would be re-apportioned into the proposed bands.

It would be inappropriate to set and allocate users to bands based on historic basis and update them periodically “in line with price controls” – Consumer behaviour and consumption patterns could vary considerably over an eight-year price control period, particularly given the current pace of technological change within the industry. Revisiting banding any less frequently than every four years would give rise to potentially significant distortions and inequities.

Most of all, it is critical that a transparent, pre-determined criteria linked to principles should be used to inform segment definition and how it should be updated over time. As it stands, it is unclear how Ofgem determined the refined bandings and what impact this proposed revision would have on consumers and the energy system as a whole. Whilst the move away from LLFC-based segmentation is promising, this consultation document does not contain sufficient detail to properly comment on the revised proposal.

We have separately submitted a meeting request with the TCR leadership to discuss these proposals in greater detail.

Supplementary renewables modelling

These proposals for non-locational embedded benefit reform set out in the Targeted Charging Review would severely disrupt and harm the UK solar industry, and subsidy-free renewables more broadly.

It is deeply regrettable both that this analysis was not made available to stakeholders and policymakers at the outset of this consultation process, and that it was left to third parties (notably Aurora Energy Research and Oxera Consulting) to compel Ofgem to respond at this late stage with such a substantially revised impact assessment.

First and foremost, it must be pointed out that the National Grid “FES: Steady Progression” modelled scenario was incompatible with the prevailing GHG emissions reductions targets at the time of the TCR launch.¹ Since November 2018, the UK has adopted a significantly more ambitious legally binding target of reducing emissions to Net Zero by 2050 (*The Climate Change Act 2008 (2050 Target Amendment) Order 2019*). The Steady Progression scenario is therefore even more incompatible with Government policy and the UK’s global obligations to mitigate climate change. Going forward, we feel that any energy system modelling or planning by Ofgem for scenarios that would be in violation of risks setting a troubling precedent.

Meanwhile, whilst it had been compliant with the previous 2050 Climate Change Act target, the Community Renewables scenario would have resulted in emissions of over 165 Mt CO₂e by 2050, and would thus be in violation of the revised Net Zero target. Moreover, the revised modelling suggests that the proposed TCR reforms would not only fail to deliver a net benefit but would in fact **increase overall net costs by £2.14b** (NPV to 2040) (See Fig. 1), as a result of the cost of compensating for the foregone deployment of subsidy-free onshore renewables with a further “13.5GW of offshore window” [sic].

¹ National Grid: “Future Energy Scenarios” – July 2018 – Available from:
<http://fes.nationalgrid.com/media/1363/fes-interactive-version-final.pdf>

Results & comparison to prior TCR analysis: Quantitative analysis of reform scenarios



	Baseline (Steady progression) vs. TGR & Full BSUoS Reform	Baseline (Community renewables) vs. TGR & Full BSUoS Reform	Baseline (Steady progression) vs. TGR & Full BSUoS Reform - REVISED	Baseline (Community renewables) vs. TGR & Full BSUoS Reform - REVISED
■ System Cost Impact (£bn) NPV to 2040	-0.02	0.33	1.04	4.06
■ Consumer Cost Impact (£bn) NPV to 2040	-4.52	-5.99	-3.52	-1.92
■ Total net cost (£bn) NPV to 2040	-4.54	-5.66	-2.48	2.14

Questions remain regarding results of impact modelling

We concur with the stated position of Frontier Economics that “The actual drop-out rate for renewables is a key input for the analysis and cannot be predicted with any certainty.”

Whilst assuming a 50% drop-out rate in terms of new investment in unsupported onshore wind and solar PV as a result of the reforms is a notable improvement over the prior assumption of a 0% drop-out rate, our fundamental concern remains that it is inappropriate and methodologically unsound to treat generation capacity build-out as exogenous in this context.

It is clearly impossible to determine the extent to which future investment in subsidy-free onshore renewables would be adversely affected by the TCR reforms. However, to predicate the modelling assumptions on scenarios that would be in violation of the legally binding emissions reduction targets is from the outset a critical error that severely undermines the credibility of any results or conclusions.

At minimum, it would be incumbent on Ofgem to require Frontier Economics to conduct a modelled assessment of the impact of these extraordinarily significant reforms that would be aligned with the Net Zero requirements. This would obviously require further research and analysis to determine how much additional offshore wind would need to be procured to ensure compliance.

It is stated in the introduction to the original analysis by Frontier Economics that:

“In relation to the analysis in this report, we reiterate our previously expressed view that quantitative modelling should not be the sole (or in many cases even principal) basis for determining whether particular modifications to a charging regime are appropriate, and that a qualitative assessment against clear criteria is of critical importance.”

We concur with this view, however we also challenge the notion that “levelling the playing field” and reducing supposed distortions with regard to transmission and distribution-connected generation is justified even from a principles standpoint, particularly if it would end up increasing overall costs. There is in our view absolutely no legitimate qualitative or principles-based justification for reducing the flexibility of the energy system by seeking to deliberately disadvantage DER assets, which are already profoundly disadvantaged in terms of access rights and ability to participate in the BM and ancillary services markets. Moreover, seeking to further harm the economic case for these assets would demonstrably increase system costs and jeopardise emissions reduction.

Thus whilst this supplementary analysis is an improvement, it leaves many extremely significant questions unanswered, specifically with regard to:

- **Compliance with the Net Zero legislation**
- **Additional risks of delayed emissions reductions and other potential environmental risks, including harm to local air quality, fuel price exposure risk, and broader economic impacts**
- **The results of the most recent CfD auction round, particularly with regard to offshore wind strike prices and implied top-up costs**
- **The capture price impacts of replacing merchant renewables with subsidised offshore wind, including in terms of diminished overall investor confidence in the UK energy sector**
- **Any interaction between the proposed embedded benefit reforms and potential outcomes of the ongoing Network Access and Forward-Looking Charges consultation**
- **Any interaction between the proposed embedded benefit reforms and currently ongoing code modification processes, specifically CMP281**
- **The potential impact of the Capacity Market remaining suspended, as could well be the outcome of the upcoming ECJ decision**

Given the remarkable extent to which the assumptions underlying the Frontier Economics analysis have shifted since the launch of the TCR process, and indeed since this revised analysis was submitted, the uncertainties in this analysis would preclude any quantitative justification for reform.

- **We would therefore strongly recommend that this consultation process be paused at least until the currently ongoing Network Access and Forward-Looking Charges consultation process has concluded, and that further modelling and industry consultation on embedded benefit reform be undertaken once the outcomes of that process are known**
- **Furthermore, we would recommend that all modelled scenarios put forward by Ofgem for industry consultation should be compliant with relevant legislation, and that potential outcomes that would jeopardise achievement of Net Zero should be removed from further consideration.**