

REA response to Ofgem consultation on 'minded to' changes to the TDR Element of the Embedded Benefit

The Renewable Energy Association (REA) is pleased to submit this response to the above consultation. The REA represents a wide variety of organisations, including generators, project developers, fuel and power suppliers, investors, equipment producers and service providers. Members range in size from major multinationals to sole traders. There are around 700 corporate members of the REA, making it the largest renewable energy trade association in the UK, and this includes around 100 energy storage members.

Our members are fundamentally affected by this proposal. We have been closely involved in the work to consider the role of the Embedded Benefit (EB) in recent years, such as the exercise to review the charging arrangements for exporting Grid Supply Points (GSPs). We welcome the opportunity to respond to the current 'minded to' consultation, in advance of the final decision.

Summary

The majority of our members strongly oppose the proposed 95% cut in the value of the Embedded Benefit via replacing the Transmission Demand Residual (TDR) element of the Embedded Benefit, for the reasons set out below. Ofgem's decision on the triad embedded benefit and its Targeted Charging Review needs to examine how to better control future network costs for consumers, through smart, innovative, demand side, distributed and storage solutions. A holistic, wide-ranging review of grid charging is needed, wider than that proposed under the Targeted Charging Review, to encompass these elements. The review should work to align with the aims of the strategies above in a more coherent manner. The proposals are directly at odds with both the Government's Industrial Strategy, which highlighted the need to control energy costs and manage the electricity network's transition, and the Smart Energy Call for Evidence, which recognises the benefits of a more flexible, decentralised, lower cost energy system. Crucially, if applied to all existing generators as well as new connectees, the proposals represent a risk to energy security as contracted plant for the Capacity Market and EFR may not be delivered.

In addition, we recognise the challenges that have resulted from additional high carbon generation deploying through the Capacity Mechanism. Removing embedded benefits which impact on all forms of embedded generation regardless of their environmental credentials is not the solution to fix a problem caused by failures in the Capacity Mechanism policy.

Detailed Response

We oppose the proposals for the reasons outlined below:

Significant risks to electricity security not considered

The full impact of these proposals on security of energy supplies in the UK have not been considered. We have already seen significant capacity which was awarded Capacity Market contracts in 2016 put up for sale, and although this could be procured afresh in the T-1 auction, the type of larger scale, gas fired plants which would be net beneficiaries of the proposal would not be able to build out in such a

short timeframe, while Embedded Generators (EG) would not be able to make an economic case to build given the reduction in available income.

Distributed generation provides more than 7.5 GW of capacity during peak demand periods. Ofgem undertook no analysis of winter supply margin impacts. In addition, up to 2 GW of new build distributed generation may not deliver its capacity commitments following the embedded benefit's removal, increasing costs for consumers in future Capacity Market auctions.

Flawed CUSC Process & Consumer Advocate's Abstention

The proposal was rushed through the Connection and Use of System Code (CUSC) industry process (with less than four weeks consultation), and that process did not allow enough time to gather sufficient evidence - the decision panel responsible for the modification's approval did not include anyone with explicit remit to represent the interests of industrial manufacturing or distributed generation. Six of the panel's nine members are employed by larger generation companies, two of which made the original modification proposals.

Crucially, for a measure designed to save consumers money and benefit domestic customers, their own advocate on the panel, Citizen's Advice, abstained on all votes due to insufficient time to consider the proposals.

The CUSC Governance regime is lacking key stakeholders as we move to a more flexible decentralised energy system, and Ofgem should treat the CUSC process and its decisions with significant caution in determining the appropriate next steps. This again points to the need for a more holistic fundamental review of the issue.

The forecast cost savings are unlikely to be delivered

While recognising the importance of reducing consumers (and businesses) costs on energy bills, there are significant doubts over whether the projected savings will actually be seen. Embedded generation has been shown to have positive impacts on the transmission system and there has been no analysis of the potential negative impact of removing the EB therefore. With the costs of the transmission network forecast to rise to £3.7 billion by 2021 it is very possible that these could be reduced by greater EG and flexible capacity (which would not be incentivised to connect under the proposals). In fact, The National Infrastructure Commission's 'Smart Power' report indicated consumer savings of £8bn a year by 2030 from 4GW of new storage capacity, interconnection and demand flexibility, in a high renewable generation system¹.

In addition, the net impact of the proposals on the Capacity Market is to increase the clearing process for future auctions. The Capacity Market is paid for from energy bills and therefore consumers will end up paying more on this incentive, year on year. In addition, assumptions made for the cost of new build gas plants are very low, using the lowest possible capital costs, which may be unrealistic.

Increased business energy costs at odds with Industrial Strategy

We understand from our industrial partners that there will be increased energy costs of up to 20% for 375 industrial sites which generate their own power on-site using highly efficient combined heat and power (CHP), including energy intensive manufacturers in the steel, paper, chemical, and food and drink sectors. Ofgem's proposed changes could mean up to £170m in increased business energy costs by

¹ National Infrastructure Commission, 2016, 'Smart Power'

2021. We understand that these losses present risk of closures and job losses at manufacturing sites. This wider aspect of 'sustainability' (economic sustainability) is tangential to Ofgem but still covered under the duty to consider sustainability in its full sense of the word.

Government's energy storage and flexibility agenda at risk

The Government has set the goal of a smart, flexible energy system, as consulted on through the recent 'Call for Evidence' and we welcome Ofgem's positive role in this agenda. The Call for Evidence identified grid charging as one of the main opportunities and potential barriers for storage in the UK.

As well as putting battery projects that secured 2016 Enhanced Frequency Response contracts and new combined heat and power (CHP) projects at additional risk, the proposals remove one of the most significant drivers towards and incentives for, new flexible and energy storage capacity on the system. There is no direct support available for energy storage and so the grid charging regime and avoided TRIAD payments represent one of the most significant incentives to deliver such projects, which currently have very marginal business cases.

In addition, there is a need to significantly increase renewable heat deployment in the UK to meet our 2020 renewable energy targets and in line with the expected outcome from the Government's Emissions Reduction Plan – these proposals put at risk renewable CHP schemes which could feed into heat networks and localised heat provision.

Investor confidence further undermined

Without the embedded benefit, existing renewable generators will lose a small but significant part of income. Investor confidence in new distributed renewable energy will be undermined and, in so doing, undermine the industry's ability to deploy at increasingly low cost. This is increasingly important in the Brexit atmosphere and in the context of recent changes such as the removal of LECs at less than one month's notice. Reduced investor confidence usually translates to a higher cost of capital for new build projects.

We are aware that Cornwall have assessed the impact of a higher cost of capital and that the modelling shows this would result in an increased cost of £85m based on a 10- basis point increase, with additional costs of over a billion pounds over the next 15 years. This cost is considerably in excess of some of the grandfathering options considered.

If the proposed cut proceeds, grandfathering of existing EG should be introduced as a minimum to prevent this loss of investor confidence.

Past reviews have illustrated the wider value of Embedded Benefits and a way forward

The issue of Embedded Benefits has been examined on numerous occasions in the past few years and left unchanged on each occasion.

National Grid examined the issue of Embedded Benefits in 2016 – resolving that the application of a charge on exporting GSPs only was the most viable solution, rather than ending the EB altogether. National Grid's previous proposals to remove the Embedded Benefit by charging the demand half hourly residual on a gross basis were not adopted as they were seen as not truly cost reflective. By implementing a

charging arrangement for exporting GSPs, National Grid would effectively address the cost impact of distributed generation onto the transmission network, and therefore negate any current perceived need to remove the Embedded Benefit. The international analysis that Ofgem has published shows the difficulty of addressing distortions in fixed/sunk cost recovery in a fair and proportionate way, and demonstrates the need for a managed transition over several years.

We also note that this decision could be superseded by changes at the European level, which was in fact given as the reason by Ofgem not to progress a similar change, CMP 227 last year – the situation here is no different and should be progressed through one of the overarching reviews taking place (eg the TCR).

We note the calls among many generators to adopt Scenario 2 WACM 7 of the CMP change options, instead, as this would act as a holding position (still reducing the value of the EB, but not to such a drastic extent as proposed) while not giving investors cause for alarm.

Conclusion

Our objections to this proposal are summarised as follows:

- The significant risks to electricity security have not been considered
- The decision was taken in the flawed CUSC Process & the main supposed beneficiary's advocate abstained from voting (Consumer Advice)
- The forecast cost savings are unlikely to be delivered
- This will increase business energy costs for many and risk jobs, a result at direct odds with the Industrial Strategy
- Government's energy storage and flexibility agenda is put at risk by removing one of the few direct incentives to such capacity
- Investor confidence will be further undermined in the context of a challenging economic climate
- Past reviews have illustrated the wider value of Embedded Benefits and a way forward

Industry asks

There must be a wide-ranging Significant Code Review of all elements of grid charging, not just those proposed in the Targeted Charging Review, otherwise Ofgem will be considering only part of the picture.

If this measure is introduced, grandfathering for existing sites must be introduced, in order to protect energy security, low carbon generation and guard against unintended consequences for the system. Equally important is preserving investor confidence in the UK energy sector as a place to invest.

While not wishing to add complexity to the policy, there could be potential for a graded level of EB payment for different generators, based on system benefits (eg baseload profile) and carbon intensity (eg diesel gensets would be paid less than renewables). This would need to be developed further but would help to overcome problems with the Capacity Mechanism.

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