



13 April 2017

Andrew Self
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Dear Andrew,

Consultation: Minded to decision and draft Impact Assessment of industry's proposals (CMP264 and CMP265) to change electricity transmission charging arrangements for Embedded Generators

As the UK leader in environmental solutions, Veolia provides a comprehensive range of energy, waste, water and wastewater management services designed to build the circular economy and preserve scarce raw materials.

Conscious of our social and environmental responsibilities, we are committed to focussing on carbon reduction by preventing pollution, preserving natural resources, protecting biodiversity, combating climate change and raising environmental awareness.

Veolia's strategy is focused on manufacturing green products and low-carbon energy, helping our customers and suppliers reduce their carbon impact. As part of our commitment to the green agenda, we have committed to invest £750 million in the next five years to build green infrastructure in the UK.

We employ around 14,000 people in the UK including 300+ apprentices and our turnover is in the region of £2bn.

Veolia welcomes the opportunity to input to Ofgem's consultation on changes to electricity transmission charging arrangements for Embedded Generators and we hope our views are of value to the consultation process.

If you would like to discuss any of these matters further, please do not hesitate to contact me.

Yours sincerely,

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Summary

We are concerned about the objectivity of the CUSC process in particular the lack of balance amongst the membership of the CUSC Panel, which is largely made up of members representing large transmission organisations; it appears to us that there are clear conflicts of interest here. We also believe that the proposed principles to be adopted here could also undermine the Government's recently published Industrial Strategy. It is for these and the reasons set out in our response below that we would urge Ofgem to consider a broader Significant Code Review and to consider all of the implications, rather than just the narrow set of issues around embedded benefits.

Question 1: Do you agree with our problem definition and that the Transmission Network Use of System (TNUoS) Demand Residual (TDR) payments to sub-100MW Embedded Generation ("smaller EG") are distorting dispatch, wholesale price, the capacity market (CM) and that they pose an increased cost to consumers?

No.

We share Ofgem's concern that transmission charging needs to both facilitate competition and be as cost-reflective as possible. With respect to Transmission Network Use of System (TNUoS) charging, this means that:

- locational signals should reflect the marginal cost of connections in different zones; and
- any *residual* charges should reward connections at, or as near as possible to, a level equal to the marginal system benefit that they provide.

Whilst a level of residual charging will be inevitable so long as the TSO cannot recoup its costs on £/MWh basis, the impacts of such cost recovery should be limited such that:

- residual cost recovery is kept to a minimum; and
- impacts on competition (CUSC objective (a)) and cost-reflectivity (CUSC objective (b)) are minimised.

The problem definition sets out the impacts on a range of actors, including transmission connected generators and consumers, of the large and growing TNUoS demand residual. In this respect, it is concerned with the second condition above. However, it does not address the *causes* of rising TNUoS demand residual payments. We feel that this needs to be addressed at the same time in order for the review to be holistic and comprehensive.

Question 2: Do you agree that rising TDR payments to smaller EG is a problem which needs to be addressed?

Yes but as we suggest above, both:

- the cause of the rising TDR payment needs to be addressed; and
- if residual charging is unavoidable it needs to be looked at every level. For example, the generation residual charge needs to be considered as part of a holistic review, as do credits paid to EHV generators at the distribution level under the EDCM and CCDM methodologies.

Question 3: Do you agree with our interpretation of the applicable CUSC objectives?

Yes.

Question 4: Do you agree with our assessment against the applicable CUSC objectives and statutory duties? Please provide evidence for any differing views.

No. See Question 5.

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Question 5: In our assessment against the objectives, do you believe there are any relevant assessments we have not taken into account?

We do not agree with Ofgem's assessment of CUSC Objective A.

The level of TDR Payments

We disagree with this assessment.

The assumption in Paragraph 4.6 is that the difference in TDR payments between small EG and transmission connected plant is anti-competitive. We do not agree with this assumption because it treats all small EG as one actor, freely able to connect at any level of the network. As discussed in our response to question 12, Veolia has little choice as to where it connects its plants as our installations respond to local needs, whether those of industrial customers or local authorities. As such the current level of TDR payment is rarely a *signal* we can actually respond to, therefore it cannot give us a competitive advantage.

Options including the TNUoS Generation Residual

We disagree with this assessment.

Veolia is concerned that the TNUoS Generation Residual is likely to be anti-competitive as soon as it turns negative. Therefore it seems perverse that this is not being considered at the same time as the Demand Residual. Whilst we appreciate Ofgem has limited resources, this is an argument for conducting an holistic review that looks at transmission charging in the round, and at the least giving additional merit to WACMs which pass on the TGR to EG.

Options to prevent disincentives for smaller generators to generate at peak periods

We disagree with this assessment.

It seems strange to state that lowest locational option *preserves locational signals with the smaller EG market more effectively* (4.16) but then say that the impact on competition between this approach and the *floor at zero* is *neutral*.

Objective B Cost reflectivity

We do not agree with Ofgem's assessment of CUSC Objective B.

Value of the payments to smaller EG and value of avoided GSP costs

As stated in our response to Question 1, locational signals should be as cost reflective as possible and residual charges should not cause distortions.

Veolia considers that:

1. There is no evidence that the demand locational charge is cost-reflective. The fact that the charge varies across the country does not mean it is set at the correct level. Also, the level of the charge in any given demand zone depends on the choice of the reference node, which is a purely arbitrary point on the system. We refer Ofgem to the work undertaken for the Association for Decentralized Energy by Imperial College/NERA in this matter.
2. Although the TDR is a cost reallocation mechanism this does *not* mean it is a sunk cost. More work must be undertaken to model a perfect network in order to quantify the true level of sunk costs. The difference between total fixed costs and sunk costs would then be a starting point for setting the value of x. Veolia considers the evidence for suggesting that the value of x is £1.62/kW is insufficient at the present time.

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Preventing disincentives to generate at peak periods

As noted under Objective A, flooring at zero removes the marginal difference between locations for distributed generation. The locational signal is not a cost-recovery signal.

Objective D – Taking into account European legislation

No comment.

Promotion of efficiency in implementation and administration of charging methodology

We agree with Ofgem's assessment that treating new and existing generators differently will create additional administrative costs for suppliers. However, Veolia is concerned that the cost impact on suppliers of different starting dates for implementation of gross charging has not been quantified in the draft IA.

Networks, social considerations and the environment

No comment.

Consumer costs

Veolia is concerned that Ofgem's assessment of consumer costs are unlikely to materialise (see Question 14). Furthermore, significant increases in actual costs for certain users of the network, including local authorities and industrial customers, have not been taken into account in the analysis of distributional impacts.

Question 6: Do you agree with our assessment that, in this instance, grandfathering as set out in the WACMs would be unlikely to best facilitate the CUSC objectives when compared to the other options available to us?

No comment.

Question 7: Do you agree with our assessment that the value of the avoided GSP investment cost best facilitates the applicable CUSC objectives?

No. See Question 4.

Question 8: Do you agree with our assessment of the impacts of security of supply? Please provide evidence for provided views.

No.

There has been insufficient work undertaken on how much EG would turn off as a result of implementation of WACM4. Veolia is concerned that National Grid has not been adequately consulted on the consequences of this change for system balancing and that system balancing costs have not been considered in the modelling work (see Question 14).

New build EG which received Capacity Market contracts in the 2014 and 2015 T-4 auctions may not be able to survive if Ofgem's proposed reduction in the TDR payment goes ahead. Veolia makes no comment on the economics of individual projects but we do note that if Ofgem confirms its *minded to* decision then the T-1 auctions in 2017 and 2018 will necessarily price in the possibility that these new build CMUs will default on their Capacity Market obligations. Paragraph 4.84 could be construed to mean that Ofgem believes the T-1 auction is a sufficient instrument to provide for this eventuality but if it came to pass it would be proof that the T-4 auctions in 2014 and 2015 had underprocured capacity because of a retrospective regulatory change.

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Paragraph 4.86 states that increasing levels of EG operating during winter peaks makes Triad forecasting more and more difficult.

Question 9: Please provide evidence to show if there are other cost savings which small EG drive in comparison to larger (over 100 MW) EG on the distribution system.

See Question 5.

Question 10: Is there any other evidence that payment above avoided GSP/generation residual would better facilitate the applicable objectives.

See Question 5.

Question 11: Do you believe you have a legitimate expectation or contractual right of the continuation of TDR payments? If so, please provide evidence.

The discussion of grandfathering in Chapter 4 is premised on the assumption that investors realise that both the levels of network charges and the rules around who access them can change as a result of the CUSC modification process and therefore rapid changes are possible without any need for grandfathering. Logically, this implies that investors place zero value on the charging regime because it could be modified as a result of rapid regulatory change. However, not only do we know that investments have been made at the EG level partly because of the existing charging regime – indeed, the LCP modelling work is premised on the assumption that developers at EG level can theoretically bid in to the Capacity Market £0/kW because of the TDR payment – we also know that one of the putative benefits of implementing this minded-to decision is the increase in Capacity Market clearing prices for future auction rounds, in other words future investment decisions at transmission level will be made as a result of Ofgem's final decision.

Veolia does not comment on the question of whether or not there is a contractual right to continue to receive TDR payments : we consider that Ofgem has actually already made this assumption in its modelling work.

Question 12: Do you agree with our assessment of the distributional issues?

No.

Thermal generation, CHP and EfW impacts

Ofgem's statements on the distributional impacts on these types of plant are not based on evidence.

Paragraph 5.3 states that *it is unlikely that embedded benefits revenues were a primary business driver* for CHP and EfW plants. As we have suggested in Question 11 this is technically irrelevant – if the TDR payment was a primary business driver, it would only be necessary to retain the current TDR arrangements if these plant had a contractual right to continue to receive payments.

Paragraph 5.3 goes on to state that *we do not expect the revenue impact on (CHP and EfW) to be as significant, with these payments forming a much lower proportion of income*. The CHP and EfW plant that Veolia operates are not sized in order to connect to the distribution network so as to gain embedded benefits, they are *load following*, sized to meet either the waste load in the surrounding area (EfW) or the heat load of an industrial customer or district heating network (CHP or EfW with CHP). Frequently, the case for CHP, in particular district heating, is financially difficult : the certainty that the TDR payment has hitherto provided is an important part of the business case.

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With this in mind the comment at 5.4 that *larger EG and transmission-connected CHP and EfW plants will find a more level playing field if there is a reduction in payments to smaller EG* is absurd. EfW plants are built where there is need for incineration capacity. The high cost of transporting municipal solid waste across the country means that these plant are invariably small and hence distribution connected: TDR payments are not causing a distortion between different sizes of EfW plant.

We note Ofgem's comments with respect to a loss of revenue for local authorities from reduced TDR payments. As we discuss in our response to Question 14 the assumptions required to claim that implementation of WACM4 will lead to consumer savings of £7.2bn from 2016-2034 are at best unsafe and at worst flawed. However, the phased loss of TDR revenue is guaranteed if Ofgem implements WACM4. Although Ofgem recognise the loss of revenue will be outweighed by consumer savings this comment is not taken further and the distributional impact is not quantified.

Question 13: Are there any sectors that we may have overlooked?

No comment.

Question 14: Do you agree with our modelling approach?

No.

The modelling is not comprehensive. In particular it does not consider sensitivities on:

- Changes in transmission network costs, including scenarios on future offshore costs
- Changes in system balancing costs

Question 15: Do you think that our background assumptions and using FES data is an appropriate approximation for status quo?

No.

Veolia has two main concerns with assumptions used in the modelling work. Whilst we accept the principles based approach it must be backed by modelling that does not put the principles in doubt. We feel that updating the modelling to take into account the comments below could call into question the assumptions on the appropriate size of the TDR payment to EG.

1. Gas reciprocating engine efficiency is more like 45% than 32% in reality. Anecdotal evidence from manufacturers suggests that developers in the EG space are looking for highly efficient gas reciprocating engines that can run mid merit partly in order to hit all three Triads. If the modelling were redone with a higher efficiency the benefit of switching to new build CCGT would be significantly reduced.

The work on competition between new build diesel and CCGT will be rendered obsolete by Defra's proposed emissions limits on new build generating plant operating more than 50 hours per year.

2. BEIS low capex numbers for new build CCGT have been used. The danger of this assumption is that TDR payments are taken away and Capacity Market clearing prices go up but little or no new CCGT is built, leaving everyone worse off. Alternatively, Capacity Market prices will go up so high that any consumer saving from peakier power prices will be wiped out.

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Question 16: Where WACMs are not modelled directly, do you think our assessment is appropriate?

No comment.

Question 17: Of the options available to us, do you agree that WACM4 best facilitates the applicable CUSC objectives?

No.

Veolia considers that WACM4 is not adequately cost reflective. By placing a floor on the TDR payment for EG at zero, the locational signal is dampened and where a plant is in relation to the arbitrary reference node becomes the determining factor in whether or not it receives TDR payments. We recommend that WACM7 be taken forward because it preserves the full amplitude of the locational signal. At the same time we strongly urge Ofgem to start work on a Significant Code Review without delay that would allow:

- transmission charging to be considered in the round, including the causes of the rising residual; and
- time for more detailed work on the true value of avoided GSP costs and the system benefits that EG provides.

Question 18: Do you believe that an implementation date of April 2018 best facilitate the applicable CUSC objectives?

No.

As stated above, whilst phased implementation of changes is welcome, it would be better to avoid making changes that are subsequently reversed or dampened by future reviews. There is no need for a rushed implementation date of April 2018.