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Targeted Charging Review: a consultation

5 May, 2017

Dear Judith,

Thank you for the opportunity to respond to the above consultation. This response is made on behalf of Uniper UK Limited.

Uniper is an experienced international energy company focused on power generation, energy trading, transportation, and storage, as well as a provider of specialist power engineering services. In the UK we own seven power stations comprising over 6GW of flexible installed capacity, as well as a fast churn gas storage site. As such Uniper is the fifth largest generator in GB and is making a major contribution to ensuring security of supply and providing a bridge to the energy market of the future.

The main points we wish to make are:

- We agree that there should be a review of how residual charging is undertaken to ensure that cost reflective signals are not distorted.
- CMP264/5 should be progressed as a matter of priority. We favour WACM3 as this brings benefits to customers sooner.
- Consideration should be given to whether residual charges should be levied entirely on demand to ensure more efficient recovery. This would also provide consistent treatment between those who trade over interconnectors and GB wholesale market participants.
- We do not believe that negative residual charges for generation are an issue in themselves, as some form of adjustment is necessary to ensure that European charging limits are not breached. The adjustment could be made within the locational charge, however, to ensure that demand and generation users see consistent signals.
- Consideration should be given to whether it continues to be appropriate for generation to pay BSUoS charges.
- Users should pay charges consistent with the impact they have on the system. If storage is to be treated as generation, then it may make sense for it to be subject to similar charging arrangements.
- We agree that the review should be undertaken using the Significant Code Review process.

- The Charging Coordination Group should represent a wide range of stakeholders, and members must have sufficient knowledge of the range of issues and arrangements relevant to the Targeted Charging Review.

Our answers to the specific questions raised in the consultation are as follows:

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?

Yes. The recovery of costs through residual charges should result in a charging structure which leads to efficient market outcomes. The current mechanisms fail to reflect market fundamentals, distorting signals to system users/market participants. Therefore, a review of the principles for how they are recovered is welcome.

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

As technology and business models change in the wholesale market, then it is appropriate to review the charging regime to ensure that it remains fit for purpose. The most urgent of the issues with the current methodology, the significant distortion provided by the current TNUoS Demand Residual, is in the process of being addressed through CUSC modifications CMP264/5. However, concerns remain that the structure of charges could still provide inappropriate incentives and unduly differentiate between different network users.

A further, more holistic review will ensure that the arrangements are more appropriate and consistent going forwards.

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.

The real priority is addressing the issues with the TNUoS Demand Residual under CMP264/5. As you will see in our response to Ofgem's "minded to" position on CMP264/5, we believe that option WACM3 should be implemented as a matter of urgency with an implementation date of April 2018 to prevent further damage to competition in the wholesale capacity and energy markets.

We note that concerns have been raised about negative TNUoS Generation Residual charges. We are not clear this should be particularly problematic, but agree that it is something that should be looked at under the review. It is worth noting that the role of the residual charges is twofold:

1. To ensure that the correct amount of money is recovered from TNUoS payers; and
2. That this is done in the correct proportions between generation and demand.

The proportion recovered from generation is also affected by the €2.5/MWh limit imposed by European regulation of course. Therefore whilst negative residuals may not instinctively seem to make sense, they are a necessary feature to ensure that charges do not breach the limits under which they are constructed. We provide further views on this in our response to question 7.

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

Yes, the real examples provided in chapter 4 are interesting and could form the basis of arrangements in the GB market. Indeed, they are the sorts of options currently being considered by the industry in assessing CUSC modifications such as CMP271 and 274, which are looking at more appropriate ways to levy demand charges.

It appears that charging based on peak usage for residual charges offers the most scope for market distortion, so any option which moves away from this is likely to provide a better alternative. This may mean a MWh charge spread over a wider period of consumption, a capacity based charge, some other method, or a combination of methods. The review should spend some time analysing the potential benefits and disadvantages of these options to develop the best option for our particular market circumstances.

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

Not at this time.

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.

Yes, in general the correct principles have been identified. We have comments on three main aspects of this, but our general view is that residual charging should be based on efficient collection of revenue and avoiding market distortions.

Cost reflectivity

We believe that a key focus of the review should be on avoiding distortions to cost reflective signals. The issues caused in the wholesale market by the current high and non-cost reflective levels of TNUoS Demand Residual charges, as identified in the work for CMP264/5, are a clear case in point on why avoiding market distortions should be a priority.

We accept that it will be difficult to ensure that distortions are fully removed. We also agree that it will not be possible to completely futureproof the arrangements. There is always a risk that future technological change or novel business models could result in actions being taken which lead to inefficient market outcomes. Therefore, whilst it is important that the possibility of this is minimised, market participants should also be aware that if a large proportion of the business case for an investment project is based on a benefit being conferred through the residual charging regime, that there is a risk that its economics may be affected by a subsequent change to the arrangements.

Fairness

Whilst we agree with the principle of assessing changes against a measure of whether charges are fair, this will largely be a subjective measure which depends on the viewpoint of the party concerned. Different parties will have quite legitimate differing views on what is seen as fair treatment. A more objective measure is to ensure consistent treatment and remove distortions to ensure an efficient and effective market.

Of course, we agree that vulnerable customers should not be disadvantaged by the new arrangements.

Ofgem's role will be to take an objective, neutral view on this amongst a wide variety of representations. Care will be needed to ensure that this decision isn't perceived as simply responding to whoever makes the most vigorous representations on the issue.

Proportionality and Practical Considerations

We also agree that proportionality and practical considerations should be borne in mind. We note that simplicity and stability have been identified as important considerations. We believe that these are important, but only in as much as they affect the predictability of charges. The electricity industry is by its very nature technologically complex. Therefore, all participants have to be sophisticated businesses that are able to deal with this complexity. They also have to deal with the volatility inherent in energy markets. What parties really struggle with is unpredictable costs which are impossible to hedge against, such as network charges. Of course, stability and simplicity can affect how predictable future charges are, but are not necessarily aims in themselves.

There will clearly be trade-offs between the different principles that need to be met and these will need to be identified and worked through as part of the review. The important aim is to ensure that customers ultimately benefit from the new regime through lower cost networks and more efficient market outcomes.

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?

In principle, there are a number of different ways that residual charges could be recovered from different users of networks. What is important is to ensure that consistent signals are provided to different types of network user by the combination of locational signals and residual charges, so that wholesale and retail markets are not distorted. Given the international nature of the electricity wholesale market, it is also important that incentives between individual geographic markets are consistent.

From a practical perspective, in order to efficiently recover costs through residual charges it would make sense to apply them as much as possible to end users. Those that presently apply to parties participating in the wholesale market end up being reflected within the prices offered within those markets wherever possible. This ultimately ends up with end users in the form of a difference in the energy price. A more efficient approach might be to cut out this middle stage and levy the residual charge directly to demand users. As well as being more efficient, this would be consistent with the approach adopted in many countries in the rest of Europe. Clearly this will need to be done in such a manner as not to distort market outcomes.

The current residual for generation charges is set at a level of -£1.85/kW, as it is assumed that the locational charge would breach the €2.5/MWh limit if not adjusted. In the absence of this limit being removed, it seems clear that some form of adjustment to the locational charge will be required for the foreseeable future to ensure compliance with the regulation. One option would be to adjust all locational charges in such a manner as to ensure that the limit is not breached for generation. So for instance, if charges for generation had to be reduced by 1.85/kW then an equivalent adjustment would be made to demand charges too. This would ensure consistency between

locational charges for generation and demand users. Thereafter, a demand residual could be set which recovers the correct amount of money overall and does not distort investment and operational decisions in the market.

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 a general rule we believe that the approach taken for transmission charging should be adopted for distribution charging too, approaches at both transmission and distribution level should not distort incentives in the wholesale and retail market.

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

All of the options will have advantages and disadvantages associated with them and should be explored. However, a MWh charge based on net demand is likely to be problematic as it would result in similar incentives that exist under the existing arrangements for the TNUoS Demand Residual, albeit spread over a longer period. If the net MWh only applies to behind the meter generation, which has traditionally been seen as a gross MWh solution, then this may be less of an issue.

It may be that a hybrid solution results in a more appropriate balance. For example, a maximum capacity solution may be suitable for larger customers, whereas a charge per meter based on customer type may be more appropriate for smaller business and domestic customers.

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

Not at this point.

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

Yes. Approaches which seek to recover residual charges during a specific defined peak, such as the Triad for TNUoS charges, should be discounted. This allows too much scope for consumption to be moved to a different time period, without the user's reliance on the networks concerned being reduced appreciably.

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, some analysis would appear sensible, although clearly a certain amount has already been carried out to inform table 2 in the document. It is clear an issue exists even if the TNUoS Demand Residual is charged differently under CMP264/5.

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

Different charging of Balancing Services Use of System (BSUoS) should be considered. This could look at removing the embedded benefit associated with BSUoS, but should also re-examine whether or not generation as a class should pay BSUoS charges at all.

Work under CMP250 has made it clear that BSUoS does not provide an effective signal to the market to drive more efficient actions amongst parties. It is simply a cost recovery mechanism and as such it might be more efficient to recover charges from demand as a class. It would also ensure consistent treatment between generation users and interconnector users who are not subject to BSUoS charges.

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

Yes. The TNUoS Demand Residual is the largest issue to address and should be a priority. Therefore, not only should the present situation be addressed urgently through CMP264/5, but the arrangements for recovering the residual in future should not introduce any new distortions.

The next most important issue to address is the impact of BSUoS. Although not of the same magnitude as the TNUoS Demand Residual issue, this is still a significant distortion in the market.

We notice that transmission losses have not been included in the list of embedded benefits. Whilst this is currently a small benefit, this might change as the result of locational losses introduced under P350. It may therefore be an issue to consider.

There could be aspects of current distribution charging which are conveying an advantage or disadvantage to embedded generators. It would make sense for these to be reviewed to ensure consistency across the distribution and transmission methodologies.

We would not categorise the locational TNUoS charge as being an embedded benefit as such. We believe that it is correct to exposed embedded generation to the negative of the demand TNUoS locational charge as it sends roughly the correct locational signal. The disparity which exists between the locational signals for demand and generation is mainly caused by the fact that demand has different charging zones to generation. This difference is mainly driven by central systems for settlement which means that demand zones have to be fixed, whereas generation zones can change. There are more zones for generation than for demand and therefore prices are less averaged with a wider range across all zones.

Additionally, demand and generation locational prices are levied in different ways. Part of the generation locational charge is affected by the station's load factor and all of the charge is paid on a station's contracted Transmission Entry Capacity. By contrast, an embedded generation site attracts the charge on its output during the demand triad and there is no adjustment for its load factor.

There may be some scope to consider these differences. CUSC modifications CMP271 and CMP274 are looking at this element of charging for demand charges and

the work from this should prove useful towards informing Ofgem's targeted charging review.

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?

We are not in a position to respond to this specifically from experience. However, proper cost reflective charging and charging the residual in such a manner so as to avoid distortions to the market should support fair and efficient competition across the market.

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

Users should be charged based on the impact that they have on the system. If storage is to be considered as generation, then it would make sense to treat it as such for charging purposes.

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

This is less clear cut. We understand issues around storage sites being charged as if they are both generation and demand, and the scope for this to be regarded as double charging. Clearly storage should not avoid all charges as it is just as much a user of networks as other technologies. If storage is to be considered as generation for TNUoS charging purposes and other generation remains liable for paying generation BSUoS, then it would seem sensible to charge storage in the same manner. To do otherwise would appear to be unduly discriminatory.

The type and location of storage would also need to be considered. If a customer were to own batteries on its premises for its own use, then it is not clear that this proportion of its demand should be exempt from paying demand BSUoS. Therefore, de minimis rules may need to be established.

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

If it is assumed that storage will be classified as generation and that generation will continue to pay BSUoS, of the two options raised in the consultation document the option to introduce charging for storage based on gross generation would seem more appropriate. There may be practical issues associated with this in terms of the data available to do this. The option to charge based on a BMU's status would require all storage sites to have their own BMU. If a BMU with storage was to encompass more than one storage site, or a mixture of storage and non storage sites, then netting could occur which could introduce a further distortion into the arrangements.

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?

They could in theory, but any changes should be consistent with any change made to how BSUoS is charged more generally. For instance, if BSUoS is charged on a gross

basis so as to remove it as an embedded benefit, then this will have an implication on how it would work for storage. Similarly, if it is charged going forwards on demand alone, then this may have a different implication for the treatment of storage.

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.

The Charging Coordination Group should represent as wide a range of the industry as possible to ensure that different perspectives are captured. Parties on the group should have sufficient knowledge of the range of issues and arrangements which will be considered under the Targeted Charging Review, and the other reviews/changes which will impact on it.

The CCG should focus on ensuring that the various reviews in place drive towards a consistent outcome and that the right work is prioritised in the right place. The industry has limited resource to develop and assess change so this definitely needs to be prioritised. Changes should be assessed on the basis of the likely value they bring in promoting competition, by removing distortions from the market, to the ultimate benefit of customers.

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

This appears sensible.

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?

Yes. It will allow a more considered and wide ranging assessment of the issues and options, with hopefully more targeted and well considered changes as a consequence.

I hope the above comments prove helpful. Should you wish to discuss this further, please contact me on the above number in the first instance.

Yours sincerely,

Paul Jones
Head of UK Regulatory Management