

18/09/2018

Dear Jon,

We welcome the opportunity to respond on Ofgem's consultation on the possible options for reform of electricity access and forward-looking charges, as well as the mechanisms to deliver change.

Who we are

National Grid Electricity Transmission (NGET) is responsible for building, operating and maintaining the high voltage electricity system in England & Wales under licence as a Transmission Owner (TO).

Twelve out of the fourteen Distribution Network Operator companies have connections to our Network; we also connect larger-scale demand users and Generators from a broad range of technologies and exit/entry capacities.

From April 2019 we will be legally separated from the National Grid Electricity System Operator business, and will operate independently from one another commercially, including for matters such as access arrangements and charging.

Timing

We are supportive of the intent behind Ofgem's review, and are pleased that your proposals have been set out so quickly since convening the Charging Futures Forum and the Task Forces late in 2017. However the timing of delivering reform is also critical to avoid uncertainty to all market participants, not least new market entrants, as well as regulated organisations like NGET who are rapidly nearing a new price control period in 2021.

We note that the majority of the proposals will not be in place by this time. Reforms of this nature are likely to have a significant impact on customers and the associated investment network companies need to undertake. Ofgem should therefore take steps to ensure that future price control arrangements can take into account the outcomes of this review and the associated framework changes that are envisaged.

As you state in your consultation document, our sector is at a point of significant change (with a lot of change already behind us) and the challenges we all see will not wait for us. There is always a risk with all-encompassing reviews that reform takes many years, typically due to 'analysis paralysis' but also due to understandable vested interests. To ensure that the necessary reforms are timely, Ofgem and the organisations charged with leading the reform should consider expediting any 'quick wins' which can be achieved well before 2021 where possible. Where this is not possible, Ofgem need to determine a very clear delivery plan which focuses industry effort and avoids proposals being developed that are not in consumers' interest.

Scope

In general, we support the scope of the proposals, but would recommend to Ofgem that distribution and transmission access and charging arrangements needs to be considered together as a whole rather than specific arrangements be set in isolation.

As we have seen in recent months from connection applications made to our network, many customers are increasingly network agnostic. While they are focused on the cost of connection, they also value of factors such as speed of connection and customer service. Against this background, the reforms need to ensure a level playing field as much as possible, to avoid confusion or contradictory processes for users that have a choice of access to transmission and distribution networks.

We are of the view, for example, that the network licencees should not be able to lever charging arrangements as a competitive advantage when doing business with new users. We therefore support the proposal to align the distribution connection boundaries for charging with that of transmission. However this should not be as arbitrary as simply applying the transmission rules on distribution without proper assessment of any possible unforeseen consequences and considering other interrelated aspects of the access framework. In particular, user commitment arrangements for both networks need to be considered, to appropriately allocate risk and support the needs case for wider network reinforcement.

The involvement of TOs

In respect to the parties Ofgem has recommended leading the reform, we are somewhat disappointed that both the Task Forces and the Ofgem consultation document do not consider the positive role the TOs can contribute.

In a world where NGET is legally separated from the Electricity System Operator (ESO), we have an increasing role to play in innovating access arrangements for our customers, alongside our ESO and DNO colleagues. We are already working today to find ways to better utilise the existing capacity we have on our network to connect new users, rather than making new investment. We also believe it is important that any reform of access arrangements does not stifle the network companies' ability to innovate, which would reduce competition, diluting customer choice and potentially increasing costs.

We therefore believe it sensible and reasonable to deem the TO organisations as 'materially impacted' for the sections of the CUSC which deal with charging and access arrangements. It is highly inefficient for the TOs to not have a direct link to influence reform in the CUSC. There is a clear link to modifications to the CUSC and an impact on how the TOs do business; we need to ensure that any revised processes, which depend on the TO, are efficient and deliverable. The risk of a procedural disconnect between the STC and the CUSC is currently only really determinable by the ESO, when the TOs could equally have a role to ensure alignment, whilst also providing a more efficient modification process.

Above all, we encourage you to consider the best route to ensure equitable involvement in the process from all network licencees, as well as the wider industry.

Approach for delivering change

We believe that a Significant Code Review is the most appropriate route to deliver this change, noting our earlier comment that some packages of work could be 'fast-tracked' and taken forward earlier by the industry, if deemed appropriate.

However we believe an industry-led process for the code modification work would be most appropriate, but we flag again the need for all network companies to be involved in the process.

In order for this process to be efficient and coordinated Ofgem must set clear guidance on the outcomes it expects this reform to achieve, as well as any areas that are clearly not in scope, or not in consumers interests, and can therefore be disregarded.

We believe that specific licence terms to compel these leading parties to deliver the change is unnecessary, given there is already an obligation on the network companies to maintain the code frameworks containing the methodologies for charging and access.

Some fuller points on the consultation questions are provided further in this document. If you would like to discuss any aspect of our response in more detail please feel free to contact us.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'A V Brown'.

Adam Brown
Business Planning Manager
National Grid Electricity Transmission

Question 1: Do you agree with the case for change as set out in chapter 2?

NGET position: AGREE

We agree that the rapid evolution of the energy system, particularly in the last ten years, necessitates progressive reform to ensure that system access arrangements set out in the code frameworks provide effective facilitation for new connections to, and wider development of, the energy system. They should also avoid complexity and ambiguity so they don't present a barrier entry to new entrants to the energy market.

Reform should also consider how to deliver improvements to arrangements for existing users too, allowing them to flex their capacity requirements to reflect changing system conditions to support the alleviation of constraints.

At the same time, any reform needs to ensure that network investments providing additional capacity, or reinforcing the system to mitigate constraints, are not taken off the table. All options need to be considered on their respective economic merits, rather than whether they are market-led or network licensee-led. For instance, new technology is opening up new lower investment transmission solutions to provide flexible short-term capacity, which facilitates increased access (as well as improved network flexibility).

When considering a new investment, NGET already take steps to minimise network investment by seeking to consider the likely future operation of the customers. For instance, depending on existing customers on the transmission network, we will invest differently for a new low load-factor customer compared to one that is expected to make greater use of the network. Accordingly, flexibility inherent in the network is already being used. Against this background, we are keen that Ofgem's reform does not stifle Network Owners' ability to innovate their own products and services to address some of the challenges brought out in the consultation.

The goal for this reform should be to ensure equitability between existing network users and network operators alike, as well as the new flexible parties foreseen in the consultation document. It should also permit positive innovation and differentiation between the connection providers wherever possible.

Question 2: Do you agree with our proposal that access rights should be reviewed, with the aim to improve their definition and choice?

NGET position: AGREE

We agree that access rights could be improved to present better connection and use of system options for customers with existing and new business models, who may not necessarily favour the 'traditional' long-term access product associated with transmission connections.

Through appropriate reform, access choices across transmission and distribution can be better defined to reflect the specific and differing needs of customers, ensuring these are consistent (where appropriate) between voltage levels, and provide robust need cases for new investment. To the extent this is not addressed, there is a risk that inconsistencies between arrangements for transmission and distribution access and charging (and associated process) create inefficiencies for customers, which erodes choice and customer value.

We are pleased that queue management and a more robust approach to initial capacity allocation is being considered in the reform. We observe issues for possible connectees in instances where they arrive 'second' and future capacity has been allocated to a first-comer who is unable to proceed (e.g. due to a planning issue).

We agree that improved secondary allocation or trading arrangements of existing capacity would provide a means to ensure best use of the network. However, care is needed to ensure that these arrangements, if applied to future capacity, do not allow parties in an access queue to extract rent from their queue position. Against this background, some form "of use it or lose it" might be more appropriate although this will require careful design.

We also believe that once capacity has been allocated, appropriate financial commitments should be made. This should be considered in the round to avoid new distortions between transmission and distribution networks. We are disappointed that this is not in the scope of the reform that has been consulted upon and so will be looking at the possibility of raising code modifications to ensure the risk and costs associated with contract terminations are appropriately allocated. This complements CUSC amendments CMP288/289 on Delay Charges, aiming to pass the cost of delayed connections to customers, ensuring that network companies, and ultimately end consumers, do not unnecessarily bear the cost of this.

Question 3: Specifically, do you have views on whether options should be developed in the following areas as part of a review?

a) Establishing a clear access limit for small users, with greater choice of options (as considered under b) and c) below) above a core threshold – do you agree with our proposal in paragraphs 3.5-3.10 that this should be considered? Do you have views on how a core threshold could be set?

NGET position: SUPPORTIVE

We recognise the need for access choice options to evolve as customer (large, small, or domestic) requirements change. The associated commercial arrangements do need to set the tone for appropriate system usage though, to avoid energy balancing or system constraint issues, e.g. unhindered spill of embedded generation during minimum demand periods.

Distribution system flows, when aggregated, have a knock-on impact on transmission increasing or decreasing flows on the wider network (location dependent) and triggering reinforcements at the interface between transmission and distribution networks. We have seen all these phenomena following the rapid proliferation of embedded generation (including sub 1MW domestic level usage) in recent years. It is therefore important for the reform to consider the consequence of liberalising access arrangements on a whole system basis.

For small users who may in future face revised charges for system usage, there is clearly a balance to be struck between levying cost reflective tariffs on users who can self-regulate (and therefore respond to charging signals) versus vulnerable customers or inflexible customers who cannot. Therefore, specific actions or usage types needs to be considered as opposed to considering a single basic 'core' access need.

b) Firm/non-firm and time-profiled access – do you agree with our proposal outlined in paragraphs 3.15-3.21 that these options should be developed?

c) Duration and depth of access, discussed in paragraph 3.25-3.32 - would these options be feasible and beneficial?

NGET position: SUPPORTIVE

We agree with the proposals to better articulate explicit non-firm or time-profiled options for connection to and / or wider use of the transmission network and aligning these where possible with any new arrangements for distribution. However, it is worth noting that transmission owners offer non-firm connections already to enable customers to connect earlier or to avoid certain charges.

As noted above, a customer's expected behaviour is also considered (e.g. intermittent load generation vs. stable predictable output generation) when designing network reinforcements. It is therefore important that reform of access complements the design process. In developing a wider range of access products, a cost-benefit analysis is required to justify the increase in complexity for the System Operator (and DNOs), including the necessary monitoring arrangements to ensure that users do not physically exceed their contracted position. This becomes more difficult as the range of flexible products increases.

d) At transmission or distribution in particular, or are both equally important – as discussed in this chapter?

NGET position: BOTH - TRANSMISSION *AND* DISTRIBUTION

We believe it would be a mistake to develop access options for transmission and distribution in isolation to one another unless this can be objectively justified; without this, there is a high likelihood of distortions in the options and signals provided to customers and may limit customer choice. There are many future customers that are network agnostic, so it is vital that these arrangements support their choice (and therefore facilitate competition) rather than limiting it.

Furthermore, there is a risk that if transmission and distribution arrangements aren't considered together, the frameworks will inadvertently create unforeseen 'break points' due to the aggregation of many small users. This was seen in technical connection requirements for embedded generation, for example, where some compliance requirements have had to be adjusted as the aggregated risk at transmission level was too great (Grid Code/D-Code mods GC0036; GC/DC0079).

Question 4: Do you agree with the key links between access and charging we have identified in table 1? Why or why not? Do you think there are other key links we have not identified? Where possible, please provide evidence to support your views.

In general, we agree with the key links set out in consultation. There is, however, a need to balance economic purity with complexity and pragmatism. For instance, flexing charges according to time-period assumes the costs for providing access at these times can be identified robustly. Alternatively, potentially asking customers make upfront charges for long-term access rights or be liable for exit charges is likely to increase user commitment, which we would support.

However, it may add unsustainable costs to customers who may also be required to secure these financial liabilities. The interplay between multiple access products and their associated charges need also be understood, to ensure one does not undermine the other. For instance, there are issues where firm capacity is provided without charge, simply because it is considered spare.

While charges do provide useful signals to customers, there is a risk these will be eroded by other initiatives, such as price caps, which should be considered in the trade-off noted above. Finally, we also understand from speaking to customers, particularly those associated with new technologies, that they value transparency. In developing any revised arrangements, the industry should remain mindful of this, to not create new barriers to entry.

Question 5: Do you agree with our proposal that targeted areas of allocation of access should be reviewed? Please give any specific views on the areas below, together with reasons for your response. Where possible, please provide evidence to support your views:

a) Improved queue management as the priority area for improving initial allocation of access, as outlined in paragraphs 3.41-3.44?

NGET position: AGREE

We agree that queue management needs reform, particularly in transmission where hoarding future TEC restricts or delays new connections which could otherwise be accommodated. It should be noted, however, the queue for transmission access is in fact a number of queues in different locations of the network and that not all “places in the queue” are the same because of the different ways different types of customer are expected to use their capacity. Further consideration also needs to be given to users that can bring forward their connection and its use faster than users that may have been ahead of them in a queue. It may be possible to do this being cognisant of other mechanisms affecting users’ readiness to proceed, such as securing contracts within the Capacity Mechanism.

b) Not to consider the potential role of auctions for initial allocation of access as part of a review at this time, as discussed in paragraph 3.44?

NGET position: AGREE

We share the view that auctions are likely to serve those with the most resources to be able to participate, which might restrict the ability of new entrants to obtain access to the network. We are not clear how smaller demand or generation users could reasonably participate in such auctions and may quite well find such mechanisms impractical to engage with on a frequent and dynamic basis.

c) To review the areas outlined in paragraphs 3.45-3.48 to support re-allocation of access?

NGET position: AGREE

We agree that access re-allocation needs to be reviewed. Different mechanisms might be necessary for reallocating capacity that already exists and capacity that will be delivered in the future and is subject to a queue. In the latter case, there is a significant risk that without careful design, parties will seek to extract rent by virtue of their place in the queue (having made no more commitment than their connection application) which might subsequently frustrate achieving the desired outcome.

Whilst there are processes to trade TEC in the CUSC for transmission users, these are not widely utilised today. It might be that the process is too complicated or restrictive, or is not considered commercially viable.

However, the trading of capacity rights also needs to consider the locational nature of these and how these might become more complex if rights are traded between networks. This is non-trivial and might require considerable network analysis and industry processes, to avoid creating new constraints.

We do endorse a carefully managed ‘use it or lose it’ approach for both queued connection offers and existing contacted capacity which may be under-utilised. However, it is difficult to ‘police’ the latter, particularly where a user may derive commercial advantage from retaining ‘surplus’ capacity for their own future use (e.g. re-powering an existing plant at the end of its life). To try and consider mechanisms to encourage these users to give up existing unused transmission capacity through charging is likely to be viewed as penal, as customers may view that they have already purchased a right to use this capacity.

Question 6: Do you agree that a comprehensive review of forward-looking DuoS charging methodologies, as outlined in paragraphs 4.3-4.7, should be undertaken?

Please provide reasons for your response and, where possible, evidence to support your position.

NGET Position: NEUTRAL

We have no strong opinion on detailed reforms to DUoS, though we understand the reasons for considering this. However, based on our experience of developing charging arrangements (e.g. Project Transmit) and direct discussions with customers, we would encourage Ofgem and the parties leading the reform to consider consequences of excessive tariff granularity as a means of achieving cost reflectivity. This may lead to undue volatility, as well as additional operational burdens, for those that are exposed to these charges. (as well as the overheads of deriving them in the first instance).

Locational or time of use charging must be predictable over time in order to drive the desired behavioural benefits. The aggregated affect of behaviour changes from small embedded users impacts the transmission system, so the setting of price signals needs to consider this consequential impact.

Question 7: Do you agree that the distribution connection charging boundary should be reviewed, but not the transmission connection boundary? Please provide reasons for your response and, where possible, evidence to support your position.

NGET Position: AGREE

We believe that there should be consistency between connection charging arrangements for transmission and distribution customers. Inconsistent charging arrangements will distort customers’ network connection choice and present obstacles for customers looking to decide where to connect (for example, being unable to readily compare the charges it would face by connecting to different networks).

While the shallow connection boundary in transmission has reduced the barriers to entry, it has diluted the local locational signals in transmission. This has been partially addressed through ‘local’ wider tariffs (e.g. the TNUoS local substation tariff) but these do not reflect all design options now being considered and therefore, there is a risk, customers may not make the right connection decisions. We therefore believe these arrangements should be reviewed alongside any change to the distribution connection boundary, rather than implement an imperfect transmission-orientated solution.

Question 8: Do you agree that the basis of forward-looking TNUoS charging should be reviewed in targeted areas? If you have views on whether we should review the following specific areas please also provide these:

Getting more out of our electricity networks by reforming access and forward looking charging arrangements

a) Do you agree that forward-looking TNUoS charges for small distributed generation (DG) should be reviewed, as outlined in paragraphs 4.19-4.23?

NGET Position: SUPPORTIVE

We agree the position put forward in the consultation that distributed generation, an increasing proportion of the total generation connected to the GB system, should be treated equitably to transmission-connection generation, so that all generation is exposed to the same locational signals. Without this, there will be perverse incentives that could lead to inefficient siting decisions.

We support the use of some form of agent to provide a contractual path to enable these charges to be levied. The choice of whether this is the DNO or supplier should consider economic, regulatory, and practical factors. For instance, using the DNO may be more pragmatic as the contractual relationship is fixed by the connection location rather than a commercial choice of supplier, which can change.

b) Do you consider that forward-looking TNUoS charges for demand should be reviewed, as outlined in paragraphs 4.24-4.27? Please provide reasons for your response and, where possible, evidence to support your position.

NGET Position: AGREE

We agree that the current demand charging arrangements have provided a strong incentive to reduce demand at the time of peak demand, which all other things being equal reduces the investment needed in networks. Nevertheless, the arrangements have been largely unchanged for over a decade. Against this background, there are merits reviewing the current demand charging arrangements, including whether the introduction of explicit demand capacity products, remain fit for purpose given the changing demand patterns and customer types. However, the efficacy of any new arrangements must be robustly tested.

Question 9: Do you agree that a broader review of forward-looking TNUoS charges, or the socialisation of Connect and Manage costs through BSUoS at this time, should not be prioritised for review? Please provide reasons for your response and, where possible, evidence to support your position.

NGET Position: DISAGREE (forward-looking TNUoS charges) / AGREE (socialisation of Connect and Manage costs through BSUoS)

We understand the need to prioritise the issues that are included as part of this review. However, there are a number of aspects of the TNUoS charging framework which should be reviewed in a timely fashion. In particular, whether the zoning criteria used to average locational cost signals and dampening changes are appropriate; and whether the methodology to determine forward-looking unit investment costs (e.g. the expansion factor and coefficients) is still appropriate. These parameters are updated at the start of each new price control, therefore there is only a limited window to consider these ahead of RIIO-T2.

Question 10: Do you agree that there would be value in further work in assessing options to make BSUoS more cost-reflective, and if so, that an ESO-led industry taskforce would be the best way to take this forward?

NGET Position: SUPPORTIVE

In terms of BSUoS, this charge does not currently provide a locational signal. Arguably, however, providing more flexible and short-term access products increases the need to reflect short-run cost signals to these customers, to ensure the outcomes are efficient. Therefore there may be merit in prioritising a review of this element of BSUoS charges.

In principle we believe that ESO-led industry taskforce would be the best way to take forward a review of BSUoS cost reflectivity, rather than consider as part of any SCR.

Question 11: What are your views on whether Ofgem or the industry should lead the review of different areas? Please specify which of SCR scope options A-C you favour, or describe your alternative proposal if applicable. Please give reasons for your view.

NGET Position: C – COMPREHENSIVE

We do not believe reform of this nature can be taken forward and deliver the desired outcomes if it sits outside an SCR. Progressing this under an SCR, be it one or more, seems the most sensible approach to give focus and rigor to the work, and to better coordinate aspects of the access arrangements that are intrinsically linked.

There may be merits in splitting to two SCRs, one covering distribution-centric issues, and one covering those that have joint impact or are more transmission-centric. This permits industry stakeholders to more specifically focus their involvement in relevant areas of code modification work. This approach should also better allow for more efficient prioritisation to expedite the more straight forward aspects of reform to conclusion.

We have illustrated how these issues could be covered in the table below.

SCR 1 – Distribution-centric	SCR 2 – Joint impact/Transmission-centric
a) A comprehensive review of forward-looking DuoS charging arrangements b) Review of distribution connection charging boundary d) Reviewing options to improve definition and choice of access rights for small users, including households	c) Focused review of forward-looking TNUoS charging arrangements e) Reviewing definition and choice of access rights for larger users f) Reviewing allocation of access rights.

Question 12: Do you agree with our proposal to launch an ‘Option 1’ SCR for areas of review that we lead on? Please give reasons for your view.

NGET Position: OPTION 1

We believe Ofgem have a positive role play to navigate the wider industry to the point of a clear scope for any reform, and to ensure the views and interests of end consumers are factored into any industry discussions.

However, we do not think it necessary for Ofgem to raise code modifications themselves (as per option 2/3). As explained in our answer for Question 13, we believe the network licensees have already got the necessary regulatory drivers to lead this work for the industry, and are well placed to deliver this with Ofgem support where needed. This allows Ofgem to consider the package of modification proposals from a more neutral perspective.

Question 13: Do you agree with the introduction of a licence condition on the basis described in paragraphs 5.11 and 5.12 and Appendix 5? Why or why not?

Do you have any comments on the key elements set out in table 7 of Appendix 5a, or consider there are any other key elements which should be included? Please give reasons for your view.

NGET Position: DISAGREE

We believe there are already robust mechanisms through the licence to compel the network companies to lead the work necessary to deliver this reform. For example, there are existing provisions for maintaining codes governing access and charging arrangements for transmission through standard condition B12 (STC) and C10 (CUSC - ESO), which also consider code administrator arrangements and actions where Ofgem kick-off an SCR. Standard Condition C5 also requires the transmission licensee to keep charging methodologies under constant review, and that changes should facilitate competition.

Notwithstanding these points, the draft licence conditions presented in the consultation seem to create a parallel process and addition process steps, neither of which have been justified or appear efficient. Furthermore, the ability for a licensee to discharge these conditions should not depend on the actions or inactions of others, who may not have these licence conditions.

Question 14: Do you have any comments on the draft wording of the outline licence condition included at Appendix 5b? Please give reasons for your view.

NGET Position: See response for Q13 above

Question 15: What are your views on our indicative timelines? Do you foresee any potential challenges to, or implications of, the proposed timelines and how could these be mitigated?

There are several ways in which the charging and access framework interact with the price controls. For example, revenue from excluded services includes revenue from sole user connections or the allocation of risk between industry parties, which could be changed through these reforms. Therefore, we believe these changes should be applied in the appropriate codes in time for the implementation of RIIO-T2 or, failing that, provide sufficient flexibility in the controls to take account of the any changes that are approved.

Question 16: What are your views on our proposals for coordinating and engaging stakeholders in this work?

We agree that Charging Futures should continue to meet on a quarterly basis to summarise progress, and to provide engagement opportunities for stakeholders unable to attend what will likely be frequent code modification workgroup meetings.

We also believe that Charging Futures has a continuing educational role for charging and access topics to support possible new participants in the code change process, increasing the likelihood of broader workgroup attendance and hopefully more comprehensive solutions.

The respective Code Panels and Code Administrators for STC, CUSC and DCUSA, as well as the Charging Delivery Body, need to be much more closely coordinated once any SCR commences. They need to ensure there is due consideration of alignment between transmission and distribution proposals; that the packaging of modification work is efficient, and ensure comprehensive industry participation/engagement.

There is also a role to closer scrutinise any industry-led changes that may be permitted which address areas related to, but not included in, SCR scope areas, avoiding conflict in on-going proposals and/or duplication of effort.