

Energy Systems Catapult

Access and Forward Looking Charges – Significant Code Review – Minded to Positions

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About Energy Systems Catapult

Energy Systems Catapult (ESC) was set up to accelerate the transformation of the UK's energy system and ensure UK businesses and consumers capture the opportunities of clean growth. ESC is an independent, not-for-profit centre of excellence that bridges the gap between industry, government, academia and research. We take a whole-system view of the energy sector, helping us to identify and address innovation priorities and market barriers, in order to decarbonise the energy system at the lowest cost.

Responses to selected questions

2. Distribution connection charging boundary

Question 2a:

- i. Do you believe that it is necessary to introduce a High Cost Cap (HCC) for demand, and to retain one for generation?

Yes, the Catapult supports the use of an HCC to protect customers as a whole from incurring excessive costs associated with a few connections. While it is appropriate to mitigate the risk of connection charges limiting the adoption of electric vehicles and heat pumps, this should not be a blank cheque to completely disregard network costs. The lack of a HCC could also be gamed by initially connecting a small load which could be accommodated by extending the LV network, before making a larger application that would require the establishment of a local substation.

- ii. Do you believe that our proposals to do so represent sufficient and proportionate protection for DUoS billpayers against excessively expensive connections driven reinforcement?

While we believe the HCC is good starting point, both the functioning of the HCC and the £/kW limit will both need to be reviewed in action to assess how well they protect DUoS bill payers.

- iii. What are your views on retaining the current 'voltage rule' to determine whether the HCC is breached (ie considering the cost of reinforcement at the voltage level at point of connection and the voltage level above)?

It will be important to consider both voltage levels when assessing the costs imposed on other customers by the connection. More broadly, not considering the higher voltage would create a strong incentive to limit the voltage of the connection point which could distort investment decisions. For example, a large load could apply for multiple LV connections rather than a single HV connection.

- iv. What are your views on the principles we have proposed to determine an appropriate HCC level for demand, including the potential for this to be set at a different level to generation under these principles?

In addition to the principles outlined consideration also needs to be given the implications for those adopting low carbon technologies. For example, what percentage of homes or other buildings would trigger the HCC if they wanted to install either a heat pump or an electric vehicle charger? The rules need to deliver a balance between protecting DUoS bill payers from excessive costs while facilitating the widespread adoption of low carbon technologies. Care also needs to be taken to prevent connecting parties from “diluting” the £/kW cost of upstream investments by artificially inflating the size of the connection that they request.

Question 2b: What are your views on our proposals to maintain the requirement for three-phase connection requests to pay the full costs of reinforcement, in excess of Minimum Scheme (ie lowest overall capital cost)?

The requirement for a three-phase supply for a relatively low load implies that the customer anticipating a financial benefit from it. In this case it seems reasonable that the customer is exposed to the incremental costs so that they choose the lowest overall cost for their project.

Question 2c:

- i. Do you agree with our proposals to maintain the current treatment of speculative connections and is there a need for further clarification on the definition of speculative connections?

The Catapult supports the retention of the existing arrangements for speculative connections. This mitigates two risks. Firstly, as the consultation identifies, the risk of DUoS bill payers seeing increased costs relating to speculative projects and secondly, the need to construct additional HV capacity because the existing capacity has been allocated cheaply and is not being used.

- ii. Do you agree that our wider connection boundary proposals broaden the disparity between connections deemed to be speculative versus non-speculative? If so, do you believe this needs to be addressed and how?

The Catapult supports a review of the definition of speculative projects as a way of ensuring that the proposed arrangements are not unduly harsh in how they apply to some projects.

Question 2d: Do you consider that our proposed DUoS mitigations (a demand HCC, and retaining reinforcement payments for three phase and speculative connection contributions) present a cohesive package of protections for DUoS billpayers? Do you consider these proposals to interact in any way that could counter their effectiveness, and if so, how?

As discussed above, we believe that the arrangements proposed will strike a balance between the costs imposed on existing DUoS bill payers on the one hand and the risk of limiting the adoption of low carbon technologies on the other. We have not identified any problematic interactions between the proposals.

Question 2e: Do our updated proposals to treat storage in line with generation for the purposes of connection charging simplify charging arrangements for these sites and better align with the broader regulatory and legislative framework?

While we understand the motivation for the proposed change, we are concerned that there could be sites where the additional demand could drive significant investment costs. Hence, we would suggest that the demand HCC should still apply to storage as a way of protecting other DUoS bill payers.

Question 2f: Do you agree with our proposals regarding the treatment of in-flight projects (ie that they should not be permitted to reset their connection agreement and retain their position in the queue), noting they retain the right to terminate and reapply from 1 April 2023 should they wish to be treated under the proposed connection charging boundary?

There are, at least, two issues to consider here. While the proposed arrangements have the merit of treating those in the queue on an equal basis, we must also consider the wider issue of facilitating the adoption of low carbon technologies. For example, the proposals have the potential to delay the deployment of EV charging points at a crucial point in the roll out of electric vehicles. We would urge Ofgem to look at ways of minimising the delay to projects that, understandably, wish to come under the new arrangements.

Question 2g: Do you agree with our proposals to retain the existing arrangements for managing interactive applications? Do you agree with our proposals on the treatment of unsuccessful applicants (that the connection charges at original application date will continue to apply if queue position is retained)?

We are not aware of significant issues with the existing arrangements for interactive applications and support their retention.

Question 2h: Do you agree with continuing with the definition of the Minimum Scheme as currently set out in the CCCM? Do you believe this definition requires any further clarification or amendment, and if so, why?

No comment.

Question 2i: Are there any risks associated with our proposals to allow current non-firm connected customers to seek a firm connection following the changes proposed by our SCR? Do you agree that existing non-firm connected customers that do seek a firm connection should be processed through existing queue management processes as determined by DNOs?

It would seem likely that some non-firm customers will seek to become firm when the new arrangements are implemented and that this could lead to scheduling issues for the DNOs. However, preventing such applications for a significant period of time would be a disproportionate response raising further equity issues.

Question 2j: How necessary do you consider Ofgem intervention in Electricity Distribution Standard Licence Conditions 12, 15 and 15A? What duration might such measures be needed, or acceptable, following 1 April 2023? What value do you place on certainty of connection timeframes compared with time to connect?

No Comment.

3. Access rights

Question 3a: Do you agree with our proposal to exclude customer interruptions and transmission constraints from the definition of curtailment with respect to distribution network access arrangements?

Yes, provided that customers with non-firm access are at no greater risk of being affected by transmission constraints than other customers – i.e. DSOs will not be able to offer curtailment of non-firm customers as a service to the ESO for use in event of a transmission constraint without the consent of the customer concerned.

Question 3b: Do you agree that the curtailment limit should be offered by the network based on maximum network benefit and agreed with the connecting customer?

Yes.

Question 3c: Do you have any views on the principles that should be applied to ensure curtailment limits are set in a consistent manner?

No comment.

Question 3d: Do you agree with our proposal not to introduce a cap for flexibility payments made should any curtailment in excess of agreed limits be required?

Yes, this places non-firm customers on an equal footing with other customers once their curtailment limit has been reached.

Question 3e: Do you agree with our proposal to introduce explicit end-dates for non-firm arrangements? Are there any mitigations for DUoS billpayers we should consider?

Yes, but it will be important to recognise that this does not mandate the DNO to reinforce the network by this time. For example, a DNO may find that it is cheaper to enter into a flexibility agreement with a customer rather than investing in the network.

Question 3f: Do you have views on whether the end-dates should take into account only current known or likely works, or if it should allow time for wider developments to take place?

No comment.

Question 3g: Do you have any comment on our proposal not to further define or standardise time-profiled access arrangements?

It seems sensible to leave the definition of time profiled access to agreement between the customer and the DNO. This will allow the maximum opportunity to utilise the network capacity available.

4. Transmission Network Use of System Charges

[No consultation questions]

5. General questions

Question 5a: Has the additional information in this consultation affected any of the views you previously submitted in response to our June 2021 consultation (if so, in what way)?

No

Question 5b: Do you have any other information relevant to the subject matter of this consultation that we should consider in developing our proposals?

No