

Access and forward-looking charges significant code review: Consultation on Updates to Minded to Positions

24th January 2022

Roadnight Taylor response

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?
The generation high-cost cap is good in some places, as it can prevent very costly reinforcements for small connections, with little prospect of the capacity being used by other generators. But it can also be bad, blocking reinforcements which would undoubtedly be used by other generators, but which are never triggered as the triggering party picks up the high-cost cap. The advantage with generation schemes over demand is that they can choose where in the country they can locate. If a high-cost cap prevents connection in one place, then they can move to another location. However, demand customers cannot choose where to locate in the same way that generation can. A new housing estate for a certain town has to be in a specific location – it can't move across the country. If it was faced with a high-cost cap it would simply make the development financially unviable and stifle growth in that area. So we are not in favour of a high-cost cap for demand, but believe it makes sense to keep it for generation. A more sensible approach would be to introduce DNO discretion and a CBA process, where a DNO can give evidence as to why a certain reinforcement scheme is not appropriate, e.g. the extent of the reinforcement is extremely expensive, or there is very little chance of the full capacity being used. The downside to this is that DNOs could abuse such a process, so clear rules would need to be set. But this is better than a high-cost cap for demand.
- ii. Do you believe that our proposals to do so represent sufficient and proportionate protection for DUoS billpayers against excessively expensive connections driven reinforcement?
No answer.
- 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)?
Having different voltage rules for the HCC and the general charging boundary is too confusing. It is best to align the HCC with the general charging boundary rules, but give the DNOs a CBA process to not undertake reinforcements in extreme cases.

In many instances, the 'two voltage level' HCC is a blocker to any further connections in an area. Because the HCC is applied to the first comer, very few customers are therefore willing to trigger the reinforcement. Maintaining the two-voltage rule for calculating the HCC will not change this and will undo the good work of reducing the connection charge for generation.

- 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?

We do not believe that the implementation of a high-cost cap for demand is appropriate at any level.

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)?

Not answered

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 current definition of a speculative connection is not appropriate and effectively means that every new housing development must get treated as speculative. This appears to inappropriately disadvantage one particular sector.

The rules should change such that the charging is retrospective: a development could be treated as speculative to start with, as per the current definition, and would therefore pick up the full cost of any reinforcements in any offers. But as the development becomes more certain, the speculative definition can be removed and the charges then applied as if it was a normal connection. This means that at some point in the process such a development is likely to be given either a revised offer with lower costs (in the connection has not yet been made) or a refund (if the connection has been made and payments already made towards the reinforcement), so that ultimately every development that proceeds is charged as if it is non-speculative.

- 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?

No answer.

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?

Not answered

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?

The wording in the consultation is not clear on page 41 about Ofgem's minded to position, which says, "storage connections are required to contribute to reinforcement works at their connection voltage according to their export capability and *would not be exempted from reinforcement contributions if their import reinforcement works take precedence.*" The second half of the sentence (in italics for emphasis) seems to contradict the statement in the consultation that storage will be treated as generation. If storage is treated as generation, why would the import be considered at all?

Or was the thrust of this section to suggest that storage import is effectively treated as negative generation? If so, this would mean that storage is charged on the generation principle (i.e. for reinforcements on the same voltage level only), but for both issued caused by export and import. Whilst storage has high locational flexibility, this pricing signal would potentially push storage away from demand constrained areas. However, storage is very useful in demand constrained areas, if it participates in flexibility services. This proposal would therefore result in fewer batteries available to solve demand constraints, which is a negative outcome.

This needs clarification, as the consultation was not clear. Some examples of how batteries would have the connection charges applied in different reinforcement scenarios are needed, e.g. when the export but not the import triggers reinforcement, when the import but not the export triggers reinforcement, and when both import and export trigger different reinforcements.

This proposal needs to be more closely linked with the treatment of storage in demand security standards (P2 and SQSS). Different treatment in these standards could mean less reinforcement being triggered for the import of storage, and therefore less of an impact if this minded-to position is implemented.

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?

Agreed.

Question 2g:

Do you agree with our proposals to retain the existing arrangements for managing interactive applications?

Agreed.

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)?

Agreed.

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?

The definition of minimum scheme is generally ok, but there are examples of DNOs applying it in inappropriate ways to suit their own purposes. Further clarification is required as follows:

- The CCCM needs to add a clause to force the DNOs to justify their choice of minimum scheme compared to other options. The non-contestable nature of DNOs deciding minimum scheme means that they often consider their decisions to be above scrutiny. On request, a DNO should be obliged to show the cost of the minimum scheme compared to two other potential options, with a high-level breakdown that a connecting customer can make their own assessment of.
- Better definition should be given as to what assumptions should be made. For example, it is in the DNO's interests to make the scheme with a higher element of connection assets look like the minimum scheme, in order to not trigger reinforcement for which they would pay a proportion. This has been done in the past by the DNO assuming cable routes are completed with a cheap soft dig to a remote POC (instead of a more realistic road dig), rather than connecting to an overhead line and installing a fibre wrap.
- The cost of transmission reinforcements at GSPs (so replacement or additional SGTs), should be factored into minimum scheme. The general principle of minimum scheme is to ignore who pays, but to work out the minimum overall cost. This must also include these GSP reinforcements, as it may be cheaper for a DNO to reinforce a section of 132kV circuit to allow a connection to one GSP, rather than force a connection to a different GSP that triggers a new SGT.
- With enhanced schemes (so customer choice in excess of minimum scheme), DNOs can apply O+M charges. However, some DNOs are applying O+M charges to all works, not just to the additional items. For example, for the enhanced scheme of adding just one line disconnector (value about £25k), the DNO added O+M charges to the entire scheme. The rules should be clarified to only apply O+M to the additional items.
- Some enhanced schemes actually benefit the DNO as well. There should be some mechanism for customers and DNOs to share the costs of mutually beneficial enhanced schemes.

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?

Whilst DNOs have a reasonably well established queue management system, this is in relation to a gradual flow of applications and potential connection dates. The implementation of this minded-to position could well see every, or at least a great number, of customers with existing non-firm access arrangements all applying on 1st April 2023 to be given a firm connection. This will be in addition to new applications from customers delaying applications until 1st April 2023 to be considered under the new rules, and customers with accepted offers terminating and reapplying on this same date. The pressure this puts on the DNOs, and the likely impact on customers receiving offers in a timely fashion (and indeed having meaningful conversations with the DNO about anything to do with new

connections) is very significant. Ofgem should expect a significant decline in DNO performance for at least 3 months from 1st April 2023 with this minded-to position, and the corresponding discussions customers will have with Ofgem as a result.

In general, it is right for DNOs to be able to make the most appropriate strategic reinforcement decisions based on new applications and knowing which non-firm schemes will want to change to being a firm connection (and which asset owner wouldn't want this?). However, there may be some reinforcements which are truly uneconomic, where excess capacity is not likely to be used. In such circumstances, as per the answer to 2a above, a CBA test could be used that allows a DNO to not make this change in unusual circumstances.

The minded-to position may need clarification on exactly what existing non-firm customers can apply for. For example, could a generation customer with a 33kV POC and ANM controlling power flows on both the 33kV network and 132kV network, request to be firm for constraints only on the 132kV network? Under the new rules they wouldn't pay for 132kV reinforcements so can ask to be firm for 132kV constraints without risk of being charged. But as they would pay for 33kV reinforcements, they would want to stay non-firm for 33kV constraints. This is likely technically possible in the way ANM systems work, but needs to be clarified by Ofgem as to whether this is allowed or not, as some DNOs may want to force customers to either have ANM for everything or for nothing.

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?

Timescales for the issue of offers are one of the very few targets DNOs can be held account for, and which they keep to. Relaxing this means that customer experience will become even worse. DNO performance in connections (especially for larger EHV connections) is already quite poor in many companies, with difficulties in even being able to contact staff, let alone to resolve issues. The answer to an increased workload is not to extend timeframes for issuing offers, but to allow the DNOs to recruit more connections staff and system planners. In every DNO without exception, the connections and planning teams are stretched to breaking-point and additional staffing is required. This is where Ofgem needs to focus their attention, especially by quizzing the DNOs through the ED2 process as to whether each DNO has provided for a sufficient increase in connections and planning staff, rather than just funnelling additional DUOS income to shareholders.

As per 2i above, applications from non-firm access customers should either be brought forward or deferred, as this would help to prevent the bow wave of applications that the extension of timescales is hoping to resolve.

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?

Customer interruptions (for outages of network to which customers are connected) are not curtailment and should be excluded from the definition. However, DNOs need to be clear what this risk is, as it will add to the overall loss of energy output experienced by a customer.

Network intertrips for parts of the network to which a customer is not directly connected should be considered as curtailment. Intertrips are typically binary, so the site is either on or off, with no turn down. These intertrips are often used instead of ANM, so are directly comparable to ANM in terms of curtailment.

Active Network Management caused by transmission constraints should **definitely** form part of the definition of curtailment. In many parts of the country, transmission ANM (which is almost exclusively due to reverse power flow through supergrid transformers), forms the biggest part of a customer's ANM curtailment. Not including this transmission element would be moving away from an open and transparent way of DNOs communicating with customers. Customers don't care whether the curtailment is coming from a distribution asset or a transmission asset, so the definition needs to include both. Curtailment reports should perhaps split out the D and T elements, but they both need to be there.

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?

A curtailment limit is a sensible approach that would give developers more certainty with flexible offers. The following should be taken into account:

- How will networks set an appropriate limit? What criteria would be used? ENWL currently imposes a curtailment limit (which seems to incorporate network interruptions as well). However, it is a very high limit and assessed over a 6 year period, with then no timescale specified as to how quickly it will be addressed. As such, it only provides limited to no protection for customers. Any new limits need to be better than this.
- Over how many years will DNOs assess the curtailment before they deem it to be exceeded?
- If the curtailment limit is exceeded, will DNOs have the opportunity to pay generators for the lost energy above the curtailment limit until such time that the network reinforcements are completed? Otherwise the curtailment limits could be exceeded for many years before they are resolved. This could be through the procurement of a flexibility service.

Question 3c:

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

See 3b above. Any limits need the input of the generation community to ensure that they make an appreciable difference in terms of investors signing up to risk at the beginning of scheme development.

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. High flexibility charges give the DNO an appropriate signal to reinforce, rather than continuing to make high flexibility payments. Putting a cap in place gives the DNO false signals as to the cost of curtailment.

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?

An explicit end date for customers who are given non-firm access as an interim measure is required, to ensure the DNO undertakes the reinforcement. This will be more of a requirement in the new charging arrangement, where customers may specifically request a 33kV POC to avoid reinforcement costs on the 132kV network. Such customers should not need to wait indefinitely for the reinforcement to be completed.

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?

Such end dates should take account of the likely timescale for the specific known reinforcement works to be designed and completed, but should not allow time for DNOs to delay in their decision making. If DNOs are always waiting for wider developments to happen, in order to design the perfect solution, it is quite possible that they will never do anything.

Question 3g:

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

Shoulder periods, caused by timed connections operating immediately before and after the time constraint period, can cause artificial peaks which then need to be managed by DNOs. So there should perhaps be a limit as to how many timed connections there can be on any given part of the network, such as a percentage of the capacity of the network.

Question 5a:

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

No answer

Question 5b:

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

Potential change in behaviour caused by the new charging rules

Whilst the new charging rules are good for both demand and generation, it is likely that they will drive behaviour changes, especially with generators. For example, solar developers may well want to redirect their attentions to the high solar irradiance of Cornwall, which currently has significant 132kV circuit constraints. Lots of smaller scale connections at 33kV could trigger massive 132kV reinforcements that will be very expensive to resolve, and might even lead to transmission circuit reinforcement as well. Whilst non-firm connections may possibly be available as an interim measure before the wider reinforcement works, the timescales for connections to be given firm access could take a very long time, irrespective of any arbitrary end dates that are introduced (see Question 3e above).

Transmission reinforcement charging

Sections 2.57 to 2.64 of this consultation give feedback on the issue of transmission reinforcement raised in the first consultation. However, there is then no further mention of the issue in this most recent consultation. It is assumed that Ofgem considers this issue to be lumped in with reform to TNUOS and therefore not considered as part of this SCR. This is not a sensible position to take, because the cost and cost allocation of transmission reinforcements, specifically of supergrid transformers at Grid Supply Points, are very quickly becoming the biggest blocker to distributed generation connections proceeding in a timely fashion. Distribution customers can be faced with the full cost of an SGT (easily £12m) which very few projects can accommodate. Ofgem should be addressing this issue as quickly as possible and not waiting for the wider TNUOS reforms. One option would be to allow DNOs to apportion costs on the basis of network capacity, and for DNOs to then make a separate claim to Ofgem for the residual charges not recovered by connecting customers.

ECCR changes

Whilst the consultation made clear that BEIS is in charge of amendments to ECCR, it should be highlighted that this is still an area of significant concern for connections which have been made on the explicit basis of recovering second comer contributions. These rights must be protected in the revised ECCR legislation.