

STC Modification Proposal Form

CM095: Implementing Connections Reform

Overview: The current connections process is not enabling the timely connection of projects to meet net zero. A wholesale revision is needed to the connections process to meet those targets and the needs of project developers and consumers. This proposal introduces new processes and definitions that will update the existing processes and enable projects that are most ready to progress more rapidly to connection.

Modification process & timetable



Status summary: The Proposer has raised a modification and is seeking a decision from the Panel on the governance route to be taken.

This modification is expected to have a: High impact

Transmission Owners, Interconnectors, Generators, Demand, Distribution Network Operators, Independent Distribution Network Operators, Electricity System Operator and Consumers

Proposer’s recommendation of governance route

Urgent modification to proceed under a timetable agreed by the Authority (with an Authority decision)

Who can I talk to about the change?

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What is the issue?

The current connections process is not enabling the timely connection of projects to meet net zero. A wholesale revision is needed to the connections process to meet those targets and the needs of project developers. This proposal introduces new processes and definitions that will update the existing processes and enable more ready projects to progress more rapidly to connection.

In December 2022, we published our [Case for Change](#), to conclude Phase 1 of our GB Connections Reform project, in respect of longer term reform of the connections process i.e. the process by which projects apply to connect to or use the electricity transmission system in Great Britain. We subsequently worked with stakeholders during early 2023 to develop and explore options in relation to a longer-term reformed process for connections and we set out our initial recommendations for reform in a [consultation](#) in June 2023. We have continued to engage and develop our thinking based on the ~80 responses to our consultation, and we set out our [final recommendations](#) for longer-term connections reform on 5 December 2023, which identified policy areas that we needed to finalise before raising changes to the codes. This concluded Phase 2 of our GB Connections Reform project. Just before this, DESNZ/Ofgem published their [Connections Action Plan](#), which stated the following in relation to Connections Reform:

“Desired Outcome: Connections reforms delivered with a high degree of confidence in quality, pace, ambition and coordination of reform delivery, ensuring greater and faster impact of connection reform in reducing connection times as well as lower system and/or connection costs.

In selecting the most appropriate implementation approach for the Connections Action Plan, we were guided by a range of factors and principles. We want an implementation approach that ensures sufficient industry engagement and efficient and coordinated delivery of changes, taking into account the interests of all stakeholders, as well as wider strategic objectives related to achieving net zero goals and enabling reforms to be substantially delivered by 2025 to ensure energy security and investability across the network”¹

Since publication of our final recommendations and noting the asks on us within the Connections Action Plan, we have continued to engage across industry on key policy decisions and how to incorporate these changes within the codes. As a result of this further policy development and industry engagement we have published [an update to our final recommendations](#) setting out what has changed and why, and to inform code changes.

The issue we are now seeking to resolve with this code modification as part of Phase 3 (detailed process design and implementation) of our GB Connections Reform project is to update the current and relevant codified aspects of the connection process (assuming the necessary corresponding licence changes are undertaken by Ofgem in due course), to align with our recommendations for a reformed connections process.

¹ Page 83 and 84

Scope

Given the breadth of the scope of our final recommendations, we are only proposing changes related to the final recommendations that are needed for what we consider to be our Minimum Viable Product (MVP) i.e. those changes that are essential for Day 1 (planned for 1 January 2025).

Therefore, the scope of the MVP change for the related CUSC “Implementing Connections Reform” Modification is:

- Introducing an annual application window and two formal gates, which are known as Gate 1 and Gate 2 (i.e. the primary process).
- Clarifying which projects go through the primary process.
- Clarifying any deviations from primary process e.g. for certain technologies.
- Setting out the process and criteria in relation to Application Windows and Gate 1, including introducing an offshore Letter of Authority as an application window entry requirement for offshore projects.
- Setting out the criteria for demonstrating Gate 2 has been achieved and setting out the obligations imposed once Gate 2 has been achieved.
 - Incorporate necessary amendments of M1 and M3 Queue Management Milestones in relation to projects which have met the Gate 2 criteria.
 - For Letter of Authority:
 - Setting out what are allowable amendments to red line boundaries once Gate 2 has been achieved; and
 - The introduction of Duplication Checks once a project reaches Gate 2.
- Setting out the general arrangements in relation to Gate 2.
- Changing ESO’s connection offer timescales to align with the primary process timescales (i.e. a move away from three months for making licenced offers).
- Introducing the concept of a Connections Network Design Methodology (the content and any approvals of this to be covered outside the Code Modification process).
- Introducing the concept of a Distribution Forecasted Transmission Capacity (DFTC) submission process for Distribution Network Operator’s (DNOs) to forecast capacity on an anticipatory basis for Relevant Embedded Small Power Stations or Relevant Embedded Medium Power Stations² in the Application Window.
- Set out the process for how DNO’s notify the ESO of Relevant Embedded Small Power Stations or Relevant Embedded Medium Power Stations which meet the Gate 2 criteria.

As part of the [final recommendations](#) that we published on 5 December 2023, we noted some areas that we would ideally include but do not meet our Minimum Viable Product.³ These may be taken up as part of future Modifications.

² Any projects which are above the upper threshold of the range for use of DFTC (i.e. projects which are 100MW and above in England and Wales, 30MW and above in Southern Scotland and 10MW and above in Northern Scotland) will need to submit a connection application direct to the ESO. We expect that this will be via the primary process (i.e. an application window). For the avoidance of doubt, Embedded Large Power Stations are not in scope of DFTC (whether they are Bilateral Embedded Generator Agreements (BEGA) or Bilateral Embedded Licence Exemptible Large Power Station Agreement (BELLAs). Clarity is still needed on how/if DFTC will work where a Relevant Embedded Small Power Station or Relevant Embedded Medium Power Station also wants a Bilateral Embedded Generator Agreement (BEGA).

³ See Section “4.5 MVP and Final Recommendation Firmness” on pages 52-54.

Additionally, there are a number of areas that are not within the scope of this proposal (or any of the related proposals) and these are set out in Appendix 1.

As a result of this, there will be impacts on STC and STCPs and in the “Proposer’s Solution” section of this document, we have set out the proposed CUSC changes and then added the related STC and STCPs solutions.

Summary of Code Changes related to Connections Reform

The table below summarises the changes, which are in summary:

Modification Grouping	Codes Impacted
Implementing Connections Reform Modification	CUSC, STC and DCUSA
Application of Gate 2 Criteria to existing contracted background	CUSC, STC and DCUSA

This proposal relates to the “Implementing Connections Reform” Modification for the STC referred to above and we are at the same time raising a “Implementing Connections Reform” Modification for the CUSC.

We will consider with the Workgroup the most appropriate time to raise the associated STCP changes but initial thinking is that these should be drafted in parallel with the CUSC and STC Modifications but the STCP changes are only approved at the next STC Panel following Authority decision (requested for 30 September 2024) so that they can be updated to reflect the Authority decision ahead of this STC Panel. However, we note that if a change is developed which has the potential to materially amend an existing STCP the Proposer is obligated to seek Panel’s views on materiality before proceeding⁴. If Panel agree the change is material, then the Proposer will need to seek Ofgem’s written approval to proceed and to clarify who should approve the change. Ofgem can then decide to allow Panel to approve/reject the STCP change or make the decision themselves and we need to be mindful of this when considering the timing of when we finalise the STCPs.

We have also identified the need for a potential DCUSA consequential Modification (e.g. to include reference to DFTC).

We are concurrently raising the “Application of Gate 2 Criteria to existing contracted background” change for the CUSC and STC, which will apply the Gate 2 Criteria (agreed in the “Implementing Connections Reform” Modification for the CUSC) to the existing contracted background. For STC specifically, we envisage the need for a section within STC to set out the transitional arrangements to ensure the contractual arrangements that ESO have with developers are reflected in the existing TOCAs if the Application of Gate 2 Criteria to existing contracted background” Modification is approved. There may be a need for consequential changes to the DCUSA as a result of this “Application of Gate 2 Criteria to existing contracted background” Modification, noting that the concept of Gate 2 will apply to Relevant Embedded Small and Relevant Embedded Medium Power Stations that apply for connection through the DNO.

⁴ See Ofgem decision letter on [CM084](#) (Clarify STCP modification approach for cross-code changes) for more detail

We recognise the scope of this “Implementing Connections Reform” change is wide and we considered splitting the Modification into smaller defined Modifications. In general, we believe it is more efficient to consolidate these changes into one Modification as it is easier to co-ordinate, noting the dependencies within. However, we have decided to separate out the “Application of Gate 2 Criteria to existing contracted background” from the rest of the “Implementing Connections Reform” Modification as this proposes applying the Gate 2 Criteria to the existing contracted queue, which may impact stakeholders that are not necessarily impacted by the rest of the scope of the “Implementing Connections Reform” Modification.

Why change?

Note that in our [consultation](#) (pages 73 to 78), we set out the benefits in more detail but in summary:

Overall, our connection reform proposals have three main benefits as follows:

- Quicker connections for projects that are best in a position to progress to connection.
- A more coordinated and efficient network design for connections that delivers benefits for customers and consumers, since allocating capacity more efficiently to projects that are most ready to proceed and studying connection applications in batches should lead to lower overall costs⁵.
- A process which helps to efficiently deliver Net Zero as currently, developers are waiting too long to connect and this is hindering progress to deliver Net Zero.

Of the options we considered prior to making final recommendations, our approach has:

- The opportunity for a first-ready, first-connected connection process; and) the overall opportunity for earlier/more efficient connection dates.
- More efficient and coordinated future planning of the network, with the benefits further enhanced with the proposed future introduction of the Strategic Spatial Energy Plan (SSEP) and Centralised Strategic Network Plan (CSNP). We believe our proposed solutions are materially aligned with the plans for CSNP and SSEP and as such will deliver increased benefits for customers and consumers.
- An ability to build network more efficiently in anticipation of need as the early batched assessment of connection applications under our proposed approach would also allow efficient inclusion of anticipatory investment in network design.
- Better facilitation of competition, innovation and introduction of non-build solutions e.g. a coordinated design helps introduce innovation into network designs by facilitating competition in the design and delivery of infrastructure related to connections - as planning in advance should provide clear scope and time for competitive tenders.
- Future-proofed design to align with other programmes e.g. we believe proposed solutions are future proof for the likely development and use of the SSEP, most

⁵ Note in our [consultation](#) (page 73), we note that the Holistic Network Design (HND) process is expected to lead to overall net consumer savings of approximately £5.5 billion when compared to an optimised radial design and expect similar benefit (although difficult to quantify) for our proposed reformed connections process

specifically with regards the use of application windows and the introduction of strategic coordinated network designs for connections.

What is the proposer’s solution?

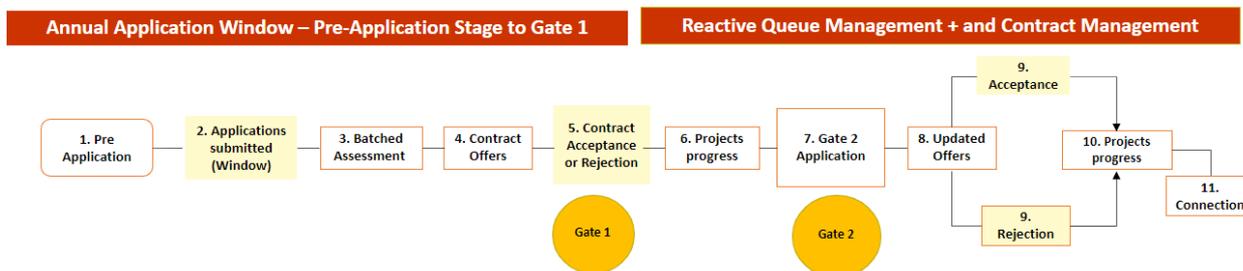
In relation to each aspect of the proposed solution we will consider the appropriate level of codification and where appropriate we will also explore use of guidance to support the reformed process, instead of or as well as proposed solution codification.

Introducing an annual application window and two formal gates, which are known as Gate 1 and Gate 2 (i.e. the primary process).

Following our final recommendations for connections reform, we plan to implement a new connections process based on an annual application window and two formal gates. This new connections process will apply to relevant applications (see below in respect of the primary process) received after the new process ‘go live’ date (planned for 1 January 2025).

Under this (see Figure 1 below for an illustration), Gate 1 will provide an indicative connection date and location following the batched assessment⁶. Gate 1 would also give the right to the capacity and technology applied for (subject to the applicant meeting the Gate 2 criteria). Gate 2 will be used to determine project specific queue position, confirm connection date and location, and include the requirement to provide User Commitment from point of acceptance of their Gate 2 Offer and comply with the Queue Management Milestones.

Figure 1



The above is our preferred model following our [consultation on Connections Reform](#) and further stakeholder engagement post consultation. We believe projects should demonstrate progress (via the Gate 2 Criteria / Milestone) to access their confirmed connection date. We therefore support this model that links queue position allocation to achieving the Gate 2 Criteria / Milestone.

Proposed STC/STCP changes:

- Define Application Windows and Gates and the touchpoints and timings between ESO (including reflecting touchpoints and timings between ESO and developers) and Transmission Owners so that we that can facilitate the Gate 1 and Gate 2 process in the required timescales.
- We need to agree the most efficient process for the ESO to submit Gate 1 applications to the Transmission Owners.

⁶ ESO would work with the Transmission Owners to carry out a batched assessment of all accepted (those that meet the application window entry criteria) connection applications received within the application window and develop an associated coordinated network design.

Clarifying which projects go through the primary process.

We propose that the following groups of customers will follow the primary process (Gate 1) from ‘go live’ date (planned for 1 January 2025):

- New Directly Connected Generation, New Directly Connected Demand, New Interconnectors (and Offshore Hybrid Assets), New Relevant Embedded Small Power Stations (via the DNO), New Relevant Embedded Medium Power Stations (via the DNO), New Embedded Large Power Stations and any significant Modification Applications in relation to such projects.

We expect agreement on what constitutes a significant Modification Application to be confirmed in one of the early Workgroups.

Proposed STC/STCP changes:

- Set out which groups of customers would follow the primary process
- Set out what constitutes a significant Modification so Transmission Owners will be clear which types of applications go through which process.

However, we propose that both of the above are aligned with the solution that is approved (if approved) as part of the related CUSC Modification.

Clarifying any deviations from primary process e.g. for certain technologies.

Our initial view (to be discussed in the Workgroup phase) is:

Customer Group	Deviation from Primary Process
Relevant Embedded Small Power Stations and Relevant Embedded Medium Power Station Projects	The introduction of DFTC to allow DNOs to forecast capacity on behalf of Relevant Embedded Small Power Stations and Relevant Embedded Medium Power Stations on an anticipatory basis so that the DNO’s can continue to make connection offers to their customers. The connection offer from the DNO to the Relevant Embedded Small/Medium Power Station would have a transmission component similar to a Gate 1 offer at transmission i.e. it would provide an indicative connection date and location. They would only receive a confirmed offer after a Relevant Embedded Small/Medium Power Station has gone through Gate 2. The concept of Gate 2 will apply to Relevant Embedded Small/Medium Power Stations that demonstrate they have met the Gate 2 criteria through the DNO.
Offshore Projects	The Crown Estate and/or Crown Estate Scotland to have the option to apply in an application window to reserve capacity in relation to offshore developers who will be competing in a future leasing round, rather than waiting for offshore developers to apply themselves.

If the Crown Estate and/or Crown Estate Scotland chose to trigger this process, Gate 1 capacity would be allocated accordingly and Developers successful in the offshore wind leasing round would be provided with their Gate 2 connection offers/contracts through the appropriate process once the outcome of the leasing round was known. Where not triggered, offshore developers would continue to apply themselves but would need to have an offshore Letter of Authority equivalent (to also be introduced by this code Modification) to submit as part of their connection application, in order for it to be effective.

Where an offshore developer obtains a seabed lease through a process other than a leasing round (e.g. interconnectors) then the option for The Crown Estate and/or Crown Estate Scotland to request/reserve capacity would not be available; these offshore developers would still require an offshore Letter of Authority equivalent.

Proposed STC/STCP changes:

- Reflect the process deviations noting that it may be impractical for the above Customer groups to provide full technical data as currently envisaged by STCP 18-1 if e.g. The Crown Estate and/or Crown Estate Scotland apply in an application window to reserve capacity in relation to offshore developers who will be competing in a future leasing round. We will need to agree a suitable proxy to allow Transmission Owners to have sufficient information to carry out network studies.

Setting out the process and criteria in relation to Application Windows and Gate 1, including introducing an offshore Letter of Authority equivalent as an application window entry requirement for offshore projects.

There will be, at least in the first instance, an annual application window. For any projects which need to go through the annual application window (as above) the developers of those projects will only be able to submit their applications within January and February each year (assuming a 1 January go-live date).

Application window entry requirements leading up to Gate 1 will be as current CUSC requirements, and will be introducing an offshore Letter of Authority although we will also keep under consideration the use of financial instruments at Gate 1 (e.g. a capacity holding charge to apply from Gate 1 through to Gate 2) to encourage only viable projects to enter and remain in the connections process. The requirement for an offshore Letter of Authority will be an application window entry requirement for offshore developers (including interconnectors and offshore hybrid assets). In the event a project has met the Gate 2

criteria for their project at point of application into an application window, this will also need to be evidenced at this stage.

Applications that have met the application window entry requirements by the end of the application window will be batched up for the coordinated network design process (the methodology for which, including attrition and anticipatory investment, is not in scope of this modification). Those that have not reached competency will need to re-apply in the following window. Applicants will have a right to dispute where they disagree with ESO's decision that the developer has not met the application window entry requirements. We propose that this dispute process is fast-tracked (i.e. disputes are resolved in defined shorter timescales than today) and the development of such a fast-tracked dispute process is within the scope of this code modification.

A connection offer at Gate 1 will include an indicative connection date and an indicative connection site and give the right to the capacity and technology applied for (subject to the applicant meeting Gate 2 criteria). However, no queue position will be allocated (as queue position will only be allocated once a project meets the Gate 2 criteria) nor will there be a requirement for User Commitment⁷ or meeting Queue Management Milestones (as there will not yet be a confirmed connection date).

Consideration is also required on whether it is ever possible to bypass Gate 1 i.e. should the code allow a project/capacity to move directly to Gate 2.

Proposed STC/STCP changes:

- Amend process and timescales to reflect (at a high-level) the proposed reformed Connections process and timescales as set out in Appendix 2 of this document in respect to Gate 1.
- The process that Transmission Owners' follow for assessing the competency of applications will remain the same but timescales in STCP 18-1 may need to be reviewed to check they are still viable under the new reformed process. Note that checks associated with the Letter of Authority are a role undertaken by the ESO.
- Reflect our proposal that individual Transmission Owner Connection Offers (TOCOs) will not be created and the design will not be broken down into project specific works. As the CUSC connection offer at Gate 1 will include an indicative connection date and an indicative connection site, we need to agree how the Transmission Owners' provide this to the ESO in the absence of a TOCO.
- We propose to publish a list of planned and ongoing transmission reinforcement works and their expected Completion Dates so need to agree how this will work in practice.
- We propose the inclusion of a fast track dispute process where the ESO do not agree that the Developer has met the application window entry requirements and

⁷ We also originally planned to raise a "User Commitment" change to ensure that the User Commitment methodology is aligned with the reformed connections process and ensure developers weren't oversecuring at Gate 1. However, there is no longer proposed to be a requirement for User Commitment at Gate 1.

note that the Transmission Owner will be brought into this process if the dispute relates to technical competence of the application.

- Although, the Transmission Owners will carry out the co-ordinated network design based on the Construction Planning Assumptions provided to them by the ESO, we propose to include a requirement for ESO to provide a list to the Transmission Owners of which individual projects (and DFTC requests) are required to be assessed in the co-ordinated network design batched process.
- No STC/STCP changes envisaged in introducing an offshore Letter of Authority equivalent as an application window entry requirement for offshore developers (including interconnectors and offshore hybrid assets).

Setting out the criteria for demonstrating Gate 2 has been achieved and setting out the obligations imposed once Gate 2 has been achieved.

- **Incorporate necessary amendments of M1 and M3 Queue Management Milestones in relation to projects which have met the Gate 2 criteria.**

We propose the criteria to meet Gate 2 (in respect of the milestone achievement aspects) to be:

- Developer has secured the rights to lease or own the land (or already leases or owns the land) on which the Site is planned to be located⁸ and this is within appropriate parameters e.g. any option agreement should have a minimum and maximum term.
- Restrictions on changes in project Site red line boundaries once Gate 2 has been met; and
- Requirement to submit the application for planning consent at the earliest of: i) the Queue Management Milestone M1 ("M1") calculated back from the connection date (as per current CMP376 methodology); or ii) M1 calculated forwards (based on an agreed standard time period for each planning type) to move from Queue Management Milestone M3 ("M3") to M1.

The above represents our current minded to position on the Gate 2 criteria following stakeholder engagement and these criteria will continue to be developed through the code modification process. As part of this, we will keep under consideration the use of financial instruments at Gate 2 to (if required) further strengthen the Gate 2 criteria (e.g. in addition to User Commitment, introducing some form of capacity holding securities from Gate 2 through to connection) to encourage only viable projects to remain in the connections process.

We currently propose that there will be differences to the Gate 2 criteria for offshore wind, Interconnectors and Offshore Hybrid Assets and these are:

- For offshore wind, we propose this will be when the developer is awarded the agreement for lease from The Crown Estate or Crown Estate Scotland, and possibly also when capacity is reserved by an appropriate entity in relation to a leasing round.

⁸ In line with Queue Management Milestone M3 but remove the ability for Users to meet this with an exclusivity agreement for the Site.

This is to ensure onshore and offshore consistency but also to ensure that existing strategic planning is not adversely impacted.

- We propose that Interconnectors and Offshore Hybrid Assets must provide evidence from The Crown Estate or Crown Estate Scotland or possibly an appropriate onshore equivalent instead e.g. land rights for the onshore converter substation. This is to avoid an issue of circularity where the relevant land rights cannot be obtained to meet Gate 2 until the connection site is known and where the connection site is not known until after Gate 2 (i.e. as the co-ordinated network design results in great variability of connection sites for interconnectors and they cannot obtain land rights at all possible connection sites).

In addition, the Gate 2 criteria can also be achieved (irrespective of whether the progress milestone above has been achieved) in the event that NESO designate⁹ a project, project type or capacity as having Gate 2 status e.g. by building upon the existing ESO bay reservation powers within the STC. We also need to consider the circumstances in which (if any) it could be necessary/possible to obtain some form of Gate 2 criteria exemption (e.g. in relation to compulsory purchase requirements, etc). For the avoidance of doubt, applying in an application window leading to Gate 1 remains a pre-requisite in such circumstances. When a project/capacity meets Gate 2, via this route, further consideration is required in relation to the Post Gate 2 obligations (e.g. related to the Queue Management Milestones, as above) and the queue position of projects meeting Gate 2 via the different routes.

Proposed STC/STCP changes:

- Gate 2 criteria will be agreed as part of the associated CUSC Modification and we welcome Transmission Owners on the solutions that are developed in the joint CUSC/STC Workgroup. However, we are considering if the Gate 2 criteria definition and any deviations for specific technologies needs to be reflected for completeness in the STC.

For Letter of Authority:

- **Setting out what are allowable amendments to red line boundaries once Gate 2 has been achieved; and**
- **The introduction of Duplication Checks on Gate 2 projects.**

Amendments to red line boundaries: We will require customers to submit 100% of the land required for their project development to meet the M3 milestone (to be amended to remove the exclusivity agreement route) i.e. to meet Gate 2. This will be calculated using the Energy Density Table as defined under CMP427 and contained in the ESO guidance document on Letter of Authority. This modification will propose that any amendments made to the red line boundary post achievement of Milestone M3 (as amended) will have to meet criteria specified by the ESO e.g. no more than 'X%' change to the red line boundary once Gate 2 has been met, etc.

The introduction of Duplication Checks on pre-Gate 2 projects and Gate 2 projects: We will explore the extent to which new applications for projects that meet Gate 2 should not have any duplicate sites with any other projects, how this could be demonstrated

⁹ For example, in relation to projects that the ESO/NESO identifies as critical for system stability or security of supply.

(including in relation to any other projects) and the consequences for those where there are duplicates. We will also explore if and how this requires changes to the Letter of Authority required for new projects upon application whether or not they have met the Gate 2 criteria.

Proposed STC/STCP changes:

- None envisaged as both the above processes will be managed by the ESO with the developer. However, we welcome Transmission Owners on the solutions that are developed in the joint CUSC/STC Workgroup.

Setting out the general arrangements in relation to Gate 2

Transmission connected developers, Embedded Large Power Stations and other Customers unable to use the DFTC route will be able to submit a Gate 2 Application to the ESO once they have met the Gate 2 criteria. Assuming the ESO agrees that the developer has met the Gate 2 criteria, they will be individually assessed in the next Gate 2 tranche. It is our current intention to group projects together for Gate 2 assessment at regular intervals (with frequency to be confirmed and Appendix 2 showing a possible overall process) throughout the year, with one of those each year being aligned with the relevant Gate 2 design stage of the annual application window i.e. for projects which applied within an application window already having met Gate 2 (and noting Gate 1 is required prior to Gate 2).

Relevant Embedded Small/Medium Power Stations using the DFTC route will notify their DNO once they have met the Gate 2 criteria. Assuming the DNO agrees that they have met the Gate 2 criteria, the DNO will notify the ESO and they will be assessed within the relevant Gate 2 tranche, as above. This notification is expected to be akin to a full technical project progression assessment.

Applicants will have a right to dispute¹⁰ where they disagree with the ESO's decision that the developer has not met the Gate 2 criteria. We propose this is fast-tracked (i.e. disputes are resolved in defined shorter timescales than today), as above.

All projects that meet the Gate 2 criteria will be provided with a confirmed connection date and connection site and they will then be allocated a queue position. They will also be liable for Cancellation Charge/Final Sums, will be required to provide security from point of acceptance of their Gate 2 Offer, and will then have to comply with the Queue Management Milestones. This is the stage at which a directly connected developer could request earlier non-firm access (and/or a design variation) within their Gate 2 Application.

Developers who have already met the Gate 2 criteria at point of application within an application window will be provided with a Gate 2 connection offer (as above) within the application window timescales (as per Appendix 2) rather than a Gate 1 connection offer.

Proposed STC/STCP changes:

- Need to reflect that ESO will notify Transmission Owners which sites have met Gate 2 Criteria i.e. met competency for Gate 2 and clarify that meeting Gate 2 and submitting an effective Gate 2 Application to the Transmission Owner is the trigger for the ESO to receive a full Transmission Owner Connection Offer.

¹⁰ Something similar may be required in respect of DNOs where they are validating the achievement of the Gate 2 criteria for Relevant Embedded Generation.

- Amend process and timescales to reflect (at a high-level) the proposed reformed Connections process and timescales as set out in Appendix 2 of this document in respect to Gate 2.

Changing the offer and acceptance timescales to align with the primary process timescales (e.g. a move away from three months for making licenced offers)

Our initial view on timescales for each part of the primary process is that we will need to change the current codified application and offer timescales to align with the primary process timescales (e.g. a move away from applying at any time and three months for making licenced offers).¹¹ This will also require licence changes, which we expect will be consulted upon by Ofgem in due course, and the ESO will identify licence changes during the Workgroup phase to allow Ofgem to run the required statutory process for licence changes.

Proposed STC/STCP changes:

- Amend process and timescales to reflect (at a high-level) the proposed reformed Connections process and timescales as set out in Appendix 2 of this document.

Introducing the concept of a Connections Network Design Methodology (the content and any approvals of this to be covered outside Code Modification process)

The final recommendation for a reformed connections process includes a move away from an incremental and ad-hoc approach to assessing applications and network requirements, to a batched window-based approach to facilitate a more co-ordinated approach to network design for connections. This will require the development of a new ESO/Transmission Owner (TO) Connections Network Design Methodology, to set out how co-ordinated network design will be undertaken for those applying to connect (and for any connections-related anticipatory investment) within these application windows in future.

We propose to include an obligation on the ESO and TOs to have a Connections Network Design Methodology. Additionally, we also propose to include an obligation on the ESO to publish this Connections Network Design Methodology, engage with industry on its content, and keep it up to date. Note that outside the CUSC/Code Modification process, we would seek approval from Ofgem to approve the process we have followed to develop (and potentially the content of) the Connections Network Design Methodology.

Proposed STC/STCP changes:

- Include an obligation on Transmission Owners (alongside the ESO) to have a Connections Network Design Methodology, follow it and engage to ensure it is up to date. Note that creation and refinement of the content of this methodology will be outside the Code Modification process.

¹¹ More detail on this is set out in Appendix 2.

Introducing the concept of a Distribution Forecasted Transmission Capacity (DFTC) submission process for Distribution Network Operator's (DNOs) to forecast capacity on an anticipatory basis for Relevant Embedded Small Power Stations or Relevant Embedded Medium Power Stations¹² in the Application Window.

Set out the process for how DNO's notify the ESO of Relevant Embedded Small Power Stations or Relevant Embedded Medium Power Stations which meet Gate 2 criteria.

We intend to create a DFTC process so that DNOs can forecast capacity within application windows on an anticipatory basis. DNO's will do this within an application window by submitting a DFTC forecast, and at Gate 1, the DNOs will receive back indicative connection dates and locations.

When Relevant Embedded Small/Medium Power Station projects that can utilise DFTC apply to connect to the DNO, the DNO can then provide an indicative Transmission connection date and location at the same time that the distribution connection date is provided.

Therefore, the DFTC process:

- provides a mechanism for more strategic network planning in relation to connections; and
- is a proxy for a 'standard' Gate 1 and so avoids Relevant Embedded Small/Medium Power Stations needing to await the next application window to get a contract with an indicative connection date (from a Transmission perspective).

For the avoidance of doubt, Embedded Large Power Stations are not in scope of DFTC and these projects need to submit a connection application direct to the ESO (whether they are Bilateral Embedded Generator Agreement (BEGAs) or Bilateral Embedded Licence Exemptible Large Power Station Agreement (BELLAs)). We expect that this will be via the primary process (i.e. an application window).

Clarity is still needed how/if DFTC will work where Relevant Embedded Small/Medium Power Stations also want a BEGA.

The Relevant Embedded Small/Medium Power station project can (via the DNO) be provided with a confirmed connection date (from a Transmission perspective), location and full works and costs once the Gate 2 criteria has been met. The submission of projects that meet the Gate 2 criteria will be issued to the ESO by the DNO via a batched submission. This process will need to be defined. The process by which DNO's notify the ESO of projects which meet the Gate 2 criteria, is outside the scope of DFTC.

We do not anticipate that DFTC will be securable by the DNOs under the prevailing approach to liability and security, but Relevant Embedded Small/Medium Power Stations will be liable for and secure as normal once they are contracted with the DNO and pass Gate 2.

¹² Any projects which are above the upper threshold of the range for use of DFTC (i.e. projects which are 100MW and above in England and Wales, 30MW and above in Southern Scotland and 10MW and above in Northern Scotland) will need to submit a connection application direct to the ESO. We expect that this will be via the primary process (i.e. an application window). For the avoidance of doubt, Embedded Large Power Stations are not in scope of DFTC (whether they are Bilateral Embedded Generator Agreements (BEGA) or Bilateral Embedded Licence Exemptible Large Power Station Agreement (BELLAs)). Clarity is still needed on how/if DFTC will work where a Relevant Embedded Small Power Station or Relevant Embedded Medium Power Station also wants a Bilateral Embedded Generator Agreement (BEGA).

The approach DNOs take to forecast DFTC is not within the scope of this Modification and will be progressed through the Energy Networks Association via a DFTC methodology document.

Proposed STC/STCP changes:

- Define DFTC and the information related to DFTC that Transmission Owners need to be able to carry out network assessment in respect of DFTC (as part of the Construction Planning Assumptions).

Draft legal text

Legal Text to be agreed in the Workgroup phase but we have included our initial thoughts on which sections of STC and/or STCPs we think need to be changed and why:

STC/STCP	Summary of proposed changes
STC Section D	To reflect that there will be no project specific Transmission Owner Construction Offer at Gate 1 but will be at Gate 2. (There may still need to be a more general TOCO related to the outcome of an application window e.g. in relation to any anticipatory investments).
Section D Part 1	Add obligations to have and follow a Connections Network Design Methodology and obligations to ensure it is kept live.
STC Section D Part 2, Schedule 5 to Schedule 7 inclusive, STCP 18-1 to 18-6 inclusive and 19-2	Amend process and timescales to reflect (at a high-level) the proposed reformed Connections process and timescales. For Schedules 5, 6 and 7 changes to information required in respect of Distribution Forecasted Transmission Capacity (DFTC) and offshore (if the Crown Estate and/or Crown Estate Scotland apply in an application window to reserve capacity in relation to offshore developers who will be competing in a future leasing round) and NESO (through that specific route to achieving the Gate 2 criteria).
STC Section D Part 4, STCP 18-4 and Schedule 13	Introducing the concept of a Distribution Forecasted Transmission Capacity (DFTC) submission + defining information that the Transmission Owners need re: DFTC. Review/amendment of Statement of Works, Confirmation of Project Progression and Transmission Impact Assessment processes.
STC Section J	New definitions to include: "Application Window," "Gate 1", "Gate 2", "Gate 1 Criteria", "Gate 2 Criteria", "Gate 2 Application", "Gate 2 Offer", "Distribution Forecasted Transmission Capacity", "Connections Network Design Methodology".
STCP 16-1	Possible changes to Investment Planning process STCP to reflect batched assessment process.
STCP 17-2	Possible changes to Queue Management Coordination STCP to reflect that Queue Management reporting won't apply to pre-Gate 2 projects.
Other	We propose the inclusion of a fast track dispute process where the developer does not agree with ESO's decision that the requirements have not been met. Note that the Transmission Owner will brought

	<p>into this process if the dispute relates to technical competence of the application.</p> <p>Changes to the Scheme Briefing Note (the Construction application that ESO send to Transmission Owners) to reflect Gate 1 and Gate 2 requirements.</p>
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What is the impact of this change?

Proposer’s assessment against STC Objectives	
Relevant Objective	Identified impact
<p>(a) efficient discharge of the obligations imposed upon transmission licensees by transmission licences and the Act</p>	<p>Positive</p> <p>Includes a gated process that prioritises readier and/or more viable projects enabling us to help the government to meet its Net Zero targets. Currently, project developers are waiting too long to connect and this is hindering progress to deliver Net Zero.</p>
<p>(b) development, maintenance and operation of an efficient, economical and coordinated system of electricity transmission</p>	<p>Positive</p> <p>More efficient and coordinated future planning of the network, with the benefits further enhanced with the proposed future introduction of the Strategic Spatial Energy Plan (SSEP) and Centralised Strategic Network Plan (CSNP). We believe our proposed solutions are materially aligned with the plans for CSNP and SSEP and as such will deliver increased benefits for customers and consumers.</p>

<p>(c) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the distribution of electricity</p>	<p>Positive</p> <p>Quicker connections for viable projects needed to deliver Net Zero. Currently, project developers are waiting too long to connect and this is hindering progress to deliver Net Zero.</p>
<p>(d) protection of the security and quality of supply and safe operation of the national electricity transmission system insofar as it relates to interactions between transmission licensees</p>	<p>Neutral</p>
<p>(e) promotion of good industry practice and efficiency in the implementation and administration of the arrangements described in the STC</p>	<p>Positive</p> <p>The more coordinated and efficient network design for connections also delivers benefits for customers and consumers as allocates capacity more efficiently to projects that are ready to proceed and studying connections applications in batches should lead to lower overall costs</p>
<p>(f) facilitation of access to the national electricity transmission system for generation not yet connected to the national electricity transmission system or distribution system;</p>	<p>Positive</p> <p>Prioritises readier and/or more viable projects</p>
<p>(g) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency.</p>	<p>Neutral</p>

When will this change take place?

Implementation date

1 January 2025

Date decision required by

30 September 2024

Implementation approach

Although there has been wide consultation and engagement on Connections Reform, it is imperative that there is a transition period to enable stakeholders to fully understand how the new reformed process will apply to them. With this in mind, supporting guidance will be

developed and October (assuming the Modification is approved) to December 2024 will be primarily used to get stakeholders up to speed with the new process and ensure the supporting guidance is clear. We believe that a decision by 30 September 2024 provides the right balance between Modification scrutiny and enabling a suitable transition period.

Proposer's justification for governance route

Governance route: Urgent modification to proceed under a timetable agreed by the Authority (with an Authority decision)

This modification will need Workgroup scrutiny. The ESO propose joint working with CUSC on the policy and process to ensure alignment on proposed solutions and CUSC and STC Workgroups to only break off, to e.g. develop legal text, assess against the applicable Code objectives, once solutions are clear. Early workgroups will focus on the scope, who needs to follow the process (and identify any exceptions) and the policy with later workgroups focusing on the process.

This should be progressed via a separate Workgroup to the 'Application of Gate 2 Criteria to existing contracted background' Modifications as the 'Application of Gate 2 Criteria to existing contracted background' Modifications focus on impacts for existing contracted parties. The intention is for the Final Modification Report for the suite of 'Implementing Connections Reform' Modifications and the 'Application of Gate 2 Criteria to existing contracted background' Modifications to be sent to the Authority for decision at the same time.

Urgency

In seeking urgency, we are mindful of Ofgem's Urgency Criteria. In our view, this is "a current issue that if not urgently addressed" will have "a significant commercial impact on parties, consumers or other stakeholder(s)" and therefore meets Ofgem's Urgency Criteria (a). We consider that Urgent treatment of the "Application of Gate 2 Criteria to existing contracted background" Modification is also required in parallel in order to have combined significant impact from the go live date of 1 January 2025.

The [Energy Act 2023](#) gave OFGEM a statutory net zero duty to protect the interests of existing and future energy consumers, supporting the government in meeting its legal obligation to meet net zero by 2050.

The Connections Reform modifications are part of the suite of [Connections Action Plan](#) (CAP) initiatives that Ofgem and DESNZ are proposing to speed up connection queue timescales. Specifically, the CAP sets out a desired outcome of "*Connections reforms delivered with a high degree of confidence in quality, pace, ambition and coordination of reform delivery, ensuring greater and faster impact of connection reform in reducing connection times as well as lower system and/or connection costs.*" Furthermore, there is an ask for enabling reforms to be substantially delivered by 2025 to ensure energy security and investability¹³ across the network"¹⁴. As such, we consider that the Connections Reform modifications directly support the CAP ambition for "transmission connection dates offered to be on average no more than 6 months beyond the date requested by the customer." They also align directly with the Connection Action Areas in the CAP by: 1)

¹³ Investment would be disincentivised by the increasing connections queue and current connection dates

¹⁴ Page 83 and 84

raising entry requirements; (2) removing stalled projects; (3) better utilising existing network capacity; and (4) better allocating available network capacity.

Given the scrutiny that will be required for these changes, delivery by 2025 can only be achieved on an urgent timeline even though we are only progressing the changes set out in our Minimum Viable Product.

Since publication of the Connections Action Plan in November 2023, the transmission and distribution connection queue has continued to grow relentlessly and, at the current rate of growth, the total connections queue is likely to exceed 800GW by the end of 2024. Without intervention, we expect this trend to continue with a forecast average increase of ~20GW for transmission being added every month beyond end 2024, which could lead to a 1000GW+ queue by the time necessary changes are in place if an urgent timeline is not followed.

With regards to the shared ambition of ESO, DESNZ and Ofgem to deliver connection offers that are within 6 months of the connection date requested, the current average time difference between offered and requested connection date is 47 months. In 2023 that difference was ~30 months (when the transmission queue was ~350GW), and in 2022 that difference was ~20 months (when the queue was ~200GW). As such, it is a reasonable expectation that increasing the connections queue as per the figures quoted above would further widen this difference (potentially to ~60 months by end 2024 and to ~75 months by end 2025). We therefore need to take action as soon as possible to have the best chance of realising the ambition of delivering connection offers within 6 months of the connection date requested.

This modification is intended to ensure that viable, ready to progress projects can receive earlier connection dates, and more quickly remove speculative connection applications from the queue. This should address the current issue that ready to progress projects are held up behind stalled, slow to progress or speculative applications. The gated process, proposed by this change, supports this by prioritising readier and/or more viable projects as it avoids allocating capacity to projects that aren't ready to progress.

Interactions

- | | | | |
|---|---|---|-------------------------------|
| <input type="checkbox"/> Grid Code | <input type="checkbox"/> BSC | <input type="checkbox"/> STC | <input type="checkbox"/> SQSS |
| <input type="checkbox"/> European Network Codes | <input checked="" type="checkbox"/> Other modifications | <input checked="" type="checkbox"/> Other – DCUSA, Transmission Licence Changes | |

We have set out above the proposed CUSC and STC changes and noted the need for potential DCUSA changes. We have also noted the potential need for changes to the Transmission Licence and we will crystallise our thinking on these during the Workgroup phase.

We do not foresee the need for Grid Code changes for our Minimum Viable Product and have verified this with industry.

Acronyms, key terms and reference material

Acronym / key term	Meaning
BSC	Balancing and Settlement Code
CAP	Connections Action Plan
CM	Code Modification
CMP	CUSC Modification Proposal
CUSC	Connection and Use of System Code
DCUSA	Distribution Connection and Use of System Agreement
DESNZ	Department for Energy Security and Net Zero
DNO	Distribution Network Operator
ESO	Electricity System Operator
STC	System Operator Transmission Owner Code
STCP	System Operator Transmission Owner Code Procedures
SQSS	Security and Quality of Supply Standards
T&Cs	Terms and Conditions

Reference material

None – key links embedded within Proposal Form

Appendices

- Appendix 1 – Areas out of Scope
- Appendix 2 – Connection Reformed Process + Indicative timescales

Appendix 1

Pre-Application Stage

DNO DFTC Forecasting Approach

Embedded Demand (other than in respect of DFTC)

Connections Network Design Methodology (Content and Approval Process)

Appendix 2

See separate attachment – note that this process remains conceptual and it will be subject to further development and change in the code modification process.