TMO4+ and “First Ready, First Connected” – reforming a disorderly queue?

Overview and Context

In this Law-Now we provide an update on (i) the recent developments in connection reform and the particularly significant recent announcements on a wide move to a “First Ready, First Connected” approach for transmission connections (referred to by NGESO as “**TMO4+**”); and (ii) the progress of some of the wider key initiatives, which we previously reported on here.

This time last year, Ofgem published its Open Letter on future reform to the electricity connections process highlighting the challenges faced in the connections reform process and expressing support for the range of shorter-term initiatives proposed by National Grid Electricity System Operator (“**NGESO**”) and the Energy Networks Association (“**ENA**”) to speed up timescales for new grid connections.

In November 2023 Ofgem and the Department for Energy Security and Net Zero (“**DESNZ**”) then published the Connections Action Plan (the “**CAP**”) which set out a summary of agreed actions for network companies, Ofgem and the Government to reduce grid connection timescales. The CAP identified six key practical actions:

— raising the barriers to entry for new direct connections to the transmission network by requiring the applicant to provide a letter of authority from the landowner in respect of the relevant site;

— termination rights/obligations in connection offers for new transmission connections where the relevant customer is failing to meet certain milestones in progressing their development – known as “Queue Management”;

— better utilisation of network capacity through less conservative assumptions in respect of how new connections will use capacity and better use of flexible/ “non-firm” connection arrangements;

— for projects that have secured and entered into connection offers, a move away from ordering the ultimate connection date on the basis of when the connection offer was entered into and towards prioritising projects that are ready to connect;

— improve transparency of data on the condition of networks such that those applying for new connections can be more targeted in their approach and sharpen the obligations and financial incentives on network companies to deliver timely connections and high-quality customer service.

However, despite the initiatives to date, the queue of projects that are in theory waiting to connect has continued to grow at an unprecedented rate and (for generation alone) as of 1 March 2024, stands at 701 GW across the transmission and distribution networks - this is estimated to rise to 800GW by the end of 2024. (We say in theory, as if all of these projects were connected, NGESO estimate we would have an amount of electricity generation that is over four times more than what is predicted we’ll need by 2050.)

The TMO4+ process

In essence NGESO's proposed "first ready, first connected" approach involves a radical change to prioritising connection dates for new power connections – moving away from determining this by reference to the timing of an application for a new connection and instead generally determining this by reference to when a project obtains certain land rights and applies for planning consent.

In December 2023, following an industry wide exercise to develop and explore options for connections reform and a formal consultation in June 2023, NGESO published its Final Recommendations Report which set out some of the longer-term proposals to reform the connection process.

Under NGESO's original proposal this fundamental change in approach would have only been applied to new connection applications (or applications for significant modifications to connection offers) received from 1 January 2025 onwards. However, in April 2024 NGESO announced proposals to widen the application of the move to the "first ready, first connected" approach, such that it will also retroactively apply to connection offers already in place and to refine the details to increase the potential for connection dates to move backwards.

Given the opaque nomenclature it may be easy to miss the fundamental nature of these proposals. However, the proposals as they currently stand make important amendments to connection offers – materially altering the risk profile for customers and applying across generation, demand and interconnector projects for direct transmission connections and a range of generation distribution connections.

We seek below to unpack the basics of how NGESO are suggesting the TMO4+ process should operate. Along with NGESO's proposal described above we would note that important further (and arguably clearer) detail is included in the formal industry code modification proposals that have now been kicked-off by NGESO as part of the process for seeking to legally implement the primary aspects of TMO4+: see in particular "CUSC Modification Proposals" ("**CMP**") 434 and 435.

We have referred to this information in setting out the below process. ***However, we emphasise that at the time of writing these remain relatively high-level and early proposals and will therefore be subject to change as the relevant implementation consultations and Ofgem approval decision process takes place. Dates stated below are subject to NGESO's aggressive timescales for implementation by 1 January 2025 being achieved***.

For new transmission connection applications received after 1 January 2025:

New process in chronological order	Timing	Further Explanation
Annual Application Window: Applications for new connection offers must take place within a particular annual window.	Within January and February, each year, commencing 2025*.	Under the current process connection applications can be submitted to NGESO at any time. This new approach appears designed to assist NGESO in co-ordinating its network design across a known batch of projects that have submitted applications with the annual window. *NGESO appear to envisage that for applications in the first such window (i.e. in 2025) that fulfil the below "gate 2" criteria can immediately be granted a gate 2 offer (see CMP 435 proposal form). See below for treatment of connections for relevant embedded small and medium-sized generation projects.
Applications for new connection offers are checked for validity on a similar basis to the current position (i.e. limited requirements), with the key additional requirement versus the present position being:	NGESO suggest that the current 3 month timescale for NGESO to provide connection offers will be amended to align with this wider process.	
– **"Letter of Authority" requirement**: For onshore connections: letter (template form to be provided) confirming that either (i) the relevant project developer has formally engaged in discussions with the landowner(s) in respect of the rights needed to enable the construction of the project on their land, or (ii) the project developer is the land owner. The position for offshore project connections appears to be subject to ongoing further consideration.	Reviewed by NGESO as part of assessing a new connection application	See separate CMP427 for further detail on this change in respect of onshore connections. CMP427 proposal form also references the potential for a separate CUSC modification process for letters of authority offshore project connections.
– **Financial instruments**: NGESO notes it is continuing to keep under consideration the possibility of raising the barriers to entry through having a financial instrument (such as a "capacity holding" charge) for	We would expect, if implemented, this to be required by NGESO as part of accepting a connection offer.	See CMP434 proposal form for NGESO briefly noting this remains under general consideration but is not part of the CMP434 proposals.

New process in chronological order	Timing	Further Explanation
connection offer applications at this stage.		
"Gate 1" Connection Offer issued: The most fundamental aspect of these reforms is that the timings up to reaching this point in the process will not dictate a project's position in the queue for connections. Instead this will be determined by when a project reaches later milestones, as set out below. This position has a number of broad knock on consequences on the offer issued at this "gate 1" stage:	Timescales for customer to choose whether to accept gate 1 connection offers to be confirmed.	In essence, unlike the present position where the timing of an initial connection offer is key to determining a projects position in the queue versus other new connections, this early connection offer will be a very different beast of very limited relevance to this queue position.
– the offer will only provide an indicative connection date and connection point; – the offer will not require credit support from the customer in respect of early termination liabilities to be provided by the customer, in contrast to the current position; and – the separate project progression "queue management" termination rights in favour of NGESO will not apply to these offers. Note however that all of these elements will be added back into connection offers as a project reaches the "gate 2" criteria set out below.	Timescale for customers to accept issued connection offers to be confirmed.	NGESO propose a fast-tracked disputes process will apply (i.e. with short resolution timescales) where applicants disagree with NGESO's determination of whether the criteria for a gate 1 offer have been fulfilled.

New process in chronological order	Timing	Further Explanation
"Gate 2" – securing a place in the connection queue: Connection offers will only be adjusted to being full form and position in the queue for completion of a new connection will only be determined where the following "gate 2" criteria are both demonstrated as achieved. This "gate 2" connection date may be earlier or later than the originally estimated "gate 1" connection date, depending on when the gate 2 criteria are achieved versus other projects. – **Land Rights**: in respect of the site where the customer's project is located the customer must show it has either an option to purchase (a minimum and maximum term will be specified) or lease the land from the owner OR an agreement to lease the land from the owner. An exclusivity agreement will not be sufficient. For offshore wind NGESO propose the requirement will be the award of a Crown Estate/Crown Estate Scotland Agreement for Lease and "*possible also when capacity is reserved by an appropriate entity in relation to a leasing round*". For interconnectors and offshore hybrid assets, evidence from The Crown Estate/Crown Estate Scotland "*or possibly an appropriate onshore equivalent instead e.g. land rights for onshore converter substation*". – **Planning**: submission of planning application to the relevant Statutory Authority in respect of construction of the relevant project (or a statement that a statutory consent is not required).	Assessment to take place "at regular intervals throughout the year" for projects that apply to NGESO.	At the time of writing the gate 2 criteria are set out, somewhat unclearly, across a combination of NGESO's connections reform publications, CMP 434 and the cross reference to the existing CUSC Section 16 land rights and planning application queue management process milestones. We hope further clarity will be provided on these criteria and in particular any interface with/changes to the existing queue management milestones – the current content on this is unclear. NGESO state that capacity freed up by the TMO4+ approach will be used to offer better connection dates to future projects, as well as existing projects that have met the gate 2 criteria, if they wish to be accelerated.

New process in chronological order	Timing	Further Explanation
The current information on how these deadlines will interact with the current equivalent termination milestone deadlines appears to us very unclear – we hope further clarity on this will be provided as the consultation process develops. **Alternative NGESO designation**: NGESO suggest that where these criteria are not met they will also have a certain amount of discretion (by building on existing powers under the System Operator Transmission Code) to designate projects as meeting gate 2 – they appear to view this as of limited application e.g. for projects identified as critical for system stability or security of supply. **Potential for further financial instruments**: NGESO notes it is continuing to keep under consideration the possibility of raising the barriers to entry through having a financial instrument (such as a "capacity holding" charge) to move to gate 2 (in addition to the existing security for termination liabilities).		
Impact of achieving the "gate 2" criteria (set out above): Full connection offer issued with security for termination liabilities, a secured place in the queue, and relevant queen management milestone termination rights. Limited rights to amend the red line boundary of projects versus land rights demonstrated.	The intended approach appears to be that following a successful gate 2 application a new connection offer will be made, which can either be accepted or not-accepted by the customer. We assume a failure to accept by a particular deadline will lead to a loss of the connection offer.	**Disputes**: NGESO propose a fast-tracked disputes process will apply (i.e. with short resolution timescales) where applicants disagree with NGESO's determination of whether the criteria for a gate 2 offer have been fulfilled.

For transmission connection offers where the connection offer is in place prior to 1 January 2025 but which are not yet connected/haven't reached their completion date:

New process in chronological order	Timing	Further Explanation
NGESO aiming for the implementation of the new approach to be confirmed.	30 September 2024	This will be contingent on the approval and implementation of the relevant code/licence modifications. Ofgem agreed on 1 May 2024 that the relevant CUSC industry code amendments should be treated as urgent amendments.
Time period for connection offer holders to submit evidence that they meet the gate 2 criteria (see the table above for what these criteria are).	October 2024 to 31 December 2024	See CMP 434 proposal form.
Projects that have submitted evidence that they meet the gate 2 criteria have their submissions assessed by NGESO:	January 2025 and February 2025	See CMP 434 proposal form.
– Projects who have not submitted applications or are deemed to have failed to meet the criteria have their offers amended to gate 1 offers, with indicative connection dates and connection sites being provided, and the removal of termination liability security. – Projects who have successfully fulfilled gate 2 criteria within the period in the row above will retain their existing connection date and connection site and will also have the option to elect to be considered for an earlier connection date based on the reformed queue. As noted in the table above, it appears to also be envisaged that those applying for new connection offers in this 2025 window that fulfil the gate 2 criteria will also be granted a gate 2 offer.	January 2025 and February 2025	See CMP 434 proposal form.

Impact on connections to the distribution network:

New process in chronological order	Timing	Further Explanation
Timing of applications and issue of "Gate 1" connection offers: Applications for new connection offers for embedded small and medium generation projects ("**Relevant Embedded Projects**"), can be made to the relevant Distribution Network Operators ("**DNOs**") at any time of year (i.e. no need for applications to take place within a particular annual window) given that they will benefit from the Distribution Forecasted Transmission Capacity ("**DFTC**") (as described in further detail below). Similar to the position for transmission connection offers described above, we understand that for these types of generation projects the intention is that the distribution connection offer issued at 'gate 1' will only provide an indicative connection date and connection point, with no assignment of queue management milestones.	Applications to the DNO to be made at any time of year.	At this stage it is not clear what the equivalent 'gate 1' criteria will be for Relevant Embedded Projects – we hope further clarity will be provided in due course.
"Gate 2" – securing a place in the connection queue and the DNO interface with NGESO: It appears to be envisaged that Relevant Embedded Projects will be required to meet equivalent "gate 2" criteria and submit demonstrable evidence to the DNO, who will act as an intermediary and manage the interface with NGESO. As with transmission connections, such connection offers will be adjusted to being full form and a position in the queue will be determined once the necessary "gate 2" criteria (as set out above) have been demonstrated as achieved.	Assessment to take place "at regular intervals throughout the year" for projects that apply to NGESO.	At this stage it is not clear what the DNO-NGESO process consists of – we expect further clarity will be set out in the CUSC.

New process in chronological order	Timing	Further Explanation
Coordinated network design and DFTC: As part of the transmission-distribution interface, DNOs will be required to identify DFTC (formerly referred to as Reserved Developer Capacity or RDC) in respect of Relevant Embedded Projects, which will facilitate the methodology used to model the coordinated network design. DNOs will be required to apply for DFTC (for Relevant Embedded Projects meeting the specified MW thresholds) within the annual TMO4+ application windows.	DNOs will be expected to submit DFTC forecasts covering ten years to ensure that there will be sufficient future capacity available to allocate to Relevant Embedded Projects as and when they apply to the DNO for a connection.	At the time of writing, the specified thresholds for Relevant Embedded Projects are 1MW and 100MW capacity in England and Wales but only up to 30MW in the South and up to 10MW in the North of Scotland (although it is noted that the nominal limits remain subject to review). NGESO provide that generation projects which are above these upper threshold limits would be subject to the TMO4+ gate 1 application window process and would need to apply directly to NGESO (as well as the relevant DNO). Generation projects below 1MW may need to utilise DFTC depending on the impacts to the transmission system.

Where are we now?

In its Open Letter published on 19 April 2024, Ofgem noted that although the proposal in isolation would be unlikely to fulfil the overarching objective of the CAP (and further progress from the industry would be required across all actions), Ofgem welcomed NGESO's proposals and invited views from interested stakeholders on the position. Stakeholder responses were published on 10 May 2024 and noted the following points:

— many expressing concern around the application of TMO4+ to existing projects which are 'almost ready' and the adverse impact of such uncertainty on investor confidence. There were also suggestions that a more targeted approach to remove stalled projects would be required, such proposals being based on the value certain projects bring to the overall network system to boost investor confidence and ensure the right technology mix was utilised, rather than inefficiently allocating scarce network capacity to projects based on the speed at which they can reach gate 2;

— others expressed the requirement for increased transparency around the interaction with wider connection reform including the Strategic Spatial Energy Plan ("**SSEP**"), the Centralised Strategic Network Plan ("**CSNP**"), REMA, as well as reforms to planning and network charging, with suggestions for Ofgem to develop a principles based approach to provide guidance and bridge the development of the SSEP, CSNP and planning reforms;

— some stakeholders emphasised the risk of delay or additional complexity faced by projects at distribution level in having to demonstrate gate 2 criteria to NGESO, with the DNOs acting as intermediaries, and suggestions for Ofgem to set additional obligations and incentives for DNOs to carry out these tasks accurately and in a timely fashion.

What happens next:

– As set out in the tables above, NGESO are aiming for implementation of the changes on 1 January 2025.

– The key industry code modifications (CMP 434 and 435) are projected to go to industry consultation during the summer, with the relevant final form modification proposal reports being published in September, for a decision by Ofgem in early November 2024.

– NGESO issued modification proposals to the System Operator Transmission Code (CM095 and CM096) which will follow the same timeline as for CMP 434 and 435.

– We expect further details to be announced regarding changes to: (i) the transmission licence to facilitate the reforms to the connection process; and (ii) the DCUSA to facilitate the DFTC mechanism and processes around the transmission-distribution interface in due course.

– Should you have any queries on any of the points raised in this Law-Now or would like to understand what the TMO4+ proposals mean for your business please do not hesitate to get in touch.

Updates on other initiatives in connection reform

In our separate Law-Now article on key reforms and initiatives, we considered some of the key regulatory measures and industry initiatives proposed by and laid out in NGESO's five-point plan on transmission connection reform and the ENA, through its 3-step plan (updated to a 6-step plan in December 2023) on improving and accelerating customer connection. We now provide an update on some of those initiatives.

Transmission queue management regime – CMP367

On 13 November 2023, Ofgem approved the adoption of a new queue management regime at transmission level via the WACM7 modification, which captures relevant new and existing connections. The implementation date for this change was 27 November 2023. Further details of the transmission queue management regime have been discussed in our previous Law-Now article – see here.

Two step offers and background modelling

As part of NGESO's five-point plan, a temporary 12-month "two-step" connection offer process was introduced for all new connection applications from 1 March 2023 to allow new connection applicants to benefit from the Transmission Reinforcement Works ("**TRW**") review in anticipation that the TRW review would enable connection timescales for certain existing customers to be brought forwards. Step 1 offers would provide a connecting party with an interim offer, with Step 2 offers providing the firm details it would normally receive as part of a connection offer (with an expectation that it would include an earlier connection date).

Ofgem's support for the initiative was originally provided on the basis that all second-step offers would be issued by 1 March 2024. However in February 2024, NGESO announced that as the second stage offers progressed to an advanced stage of network assessment, the anticipated benefits of accelerating connection times could not be delivered with 60% of customers due to receive a later connection date than originally envisaged (and 40% receiving the same date as was in their first step offer). Whilst Ofgem expressed disappointment that the original timelines and objectives had not been met, Ofgem approved NGESO's request for a three-month extension to the timeline, such that all final Step 2 offers are to be issued by 1 June 2024.

Transmission-distribution co-ordination

In a recent announcement by National Grid, it was confirmed that 7.8GW of clean energy projects have had their connection offer dates brought forward through the Technical Limits programme, with an average connection acceleration of 6.5 years.

The DNOs together with NGESO, have implemented 'Active Network Management' schemes to manage power flow at the Grid Supply Point ("**GSP**") boundaries through the application of specific 'Technical Limits' set at each GSP which require the power flow through each specific GSP to be kept within a certain MW level. This is intended to accelerate connection dates by reducing the lead-times for inter-grid connections due to required transmission reinforcement.

An applicant connecting under Technical Limits will have non-firm access to the network until the transmission reinforcement works identified for their connection have been

completed. During the non-firm access, the network operator will have the right to curtail the output to maintain the Technical Limit threshold according to a “Last-In-First-Out” stack (to put customers in a commercial queue with respect to curtailment). Technical Limits for identified GSPs are being rolled out in a phased approach by the DNOs.

Early non-firm offers for energy storage

Following NGESO’s policy update on 2 June 2023, National Grid confirmed that it had accelerated the connection of Tranche 1 customers representing up to 20GW of clean energy projects to its transmission and distribution networks, with 19 BESS projects (totalling 10GW of capacity) being offered earlier connection dates to the transmission network under the early non-firm offer scheme. This removes the need for non-critical enabling works to be complete before storage projects connect under an interim non-firm connection.

Key contacts

Matthew Brown
Partner
T +44 20 7367 3643
E Matthew.Brown@cms-cmno.com

Thomas Forman
Partner
T +44 20 7367 2219
E Thomas.Forman@cms-cmno.com

Munir Hassan
Partner, Head of Energy & Climate Change Group
T +44 20 7367 2046
E Munir.Hassan@cms-cmno.com

Yasmin Kasri
Associate
T +44 20 7067 3477
E Yasmin.Kasri@cms-cmno.com

CMS Law-Now™
Your free online legal information service.
A subscription service for legal articles on a variety
of topics delivered by email.
cms-lawnow.com

The information held in this publication is for general purposes and guidance only and does not purport to constitute legal or professional advice. It was prepared in co-operation with local attorneys.
CMS Legal Services EEIG (CMS EEIG) is a European Economic Interest Grouping that coordinates an organisation of independent law firms. CMS EEIG provides no client services. Such services are solely provided by CMS EEIG's member firms in their respective jurisdictions. CMS EEIG and each of its member firms are separate and legally distinct entities, and no such entity has any authority to bind any other. CMS EEIG and each member firm are liable only for their own acts or omissions and not those of each other. The brand name "CMS" and the term "firm" are used to refer to some or all of the member firms or their offices; details can be found under "legal information" in the footer of cms.law.
CMS Locations: Aberdeen, Abu Dhabi, Amsterdam, Antwerp, Barcelona, Beijing, Belgrade, Bergen, Berlin, Bogotá, Bratislava, Brisbane, Bristol, Brussels, Bucharest, Budapest, Casablanca, Cologne, Cúcuta, Dubai, Dublin, Duesseldorf, Edinburgh, Frankfurt, Funchal, Geneva, Glasgow, Gothenburg, Hamburg, Hong Kong, Istanbul, Johannesburg, Kyiv, Leipzig, Lima, Lisbon, Liverpool, Ljubljana, London, Luanda, Luxembourg, Lyon, Madrid, Manchester, Maputo, Mexico City, Milan, Mombasa, Monaco, Munich, Muscat, Nairobi, Oslo, Paris, Podgorica, Poznan, Prague, Reading, Rio de Janeiro, Riyadh, Rome, Santiago de Chile, São Paulo, Sarajevo, Shanghai, Sheffield, Singapore, Skopje, Sofia, Stavanger, Stockholm, Strasbourg, Stuttgart, Tel Aviv, Tirana, Vienna, Warsaw, Zagreb and Zurich.

cms.law