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Speeding up the transmission connections process: two step offer process

Dear Sir/Madam,

I wanted to write to you to provide an update with regards to a new interim connections process for customers in England and Wales, as referred to previously in customer connections communications. We have been working in collaboration with GB Transmission Owners to identify areas for improving the Connections Process.

Over recent months and years, the positive, rapid progress being made in the electricity system to support Great Britain's decarbonisation ambitions and to deliver cleaner energy for all, has translated into an unprecedented growth in applications to connect to the transmission system.

In a relatively short time, we've seen the electricity system transform from a smaller number of large fossil fuel generators to a diverse range of supplies, including renewable generation and storage, as well as new needs for electricity demand. Yet, the process for connecting to the electricity transmission system was designed for fewer, larger power plants connecting to the system, and has remained largely unchanged.

To keep up with this pace of change, we need to reform how projects connect to the electricity transmission system to deliver benefits to consumers as soon as possible by enabling ways of connecting more generation to the grid quicker and ensuring a more strategic review and prioritisation of transmission reinforcement works. There are currently over 250GW of projects contracted to connect to the transmission system, compared to circa 80GW of connected generation currently, we have seen an 84% increase in applications in just this financial year to date. Ensuring the physical electricity system can quickly adapt to meet these demands has become a key priority.

Taking action to speed up electricity transmission connections now:

We are currently undertaking fundamental reform of the process for connecting to GBs transmission network, designing new processes that speed up connections and enable proactive management of the queue. The ESO will soon be publishing recommendations on how to reform the connections process, so it's fit the future.

However, we know that we cannot sit back and implement the reforms of the future without fixing the problems of today. That is why we are implementing a five-point plan to optimise the Transmission Connections Queue and ultimately speed up connections to the grid.

1. **Operating a Transmission Entry Capacity Amnesty:** When terminating a connection contract, developers currently incur a charge to recover the cost of design work undertaken by the TOs and ESO. The TEC Amnesty enables developers to terminate their connection contracts at little or no cost, this is running up until at least April 2023. This should remove some capacity from the queue.
2. **Making sure our background assumptions are reflective of current connection rates:** when making a connection offer, we currently assume that most projects in the queue are capable of delivery

– in reality only 30 – 40% of projects deliver. By updating our construction planning assumptions, we can free up capacity in the queue.

3. **Learning from roll out of new technology:** We are updating our modelling of storage, including batteries (BESS projects), reflecting what we have learnt from the recent acceleration in battery deployment. We have observed that batteries are acting in a way that increases network capacity at peak times, as a result we can treat them differently, giving them earlier connection dates and freeing up the capacity they hold, which in turn accelerates other projects.
4. **Proposing changes to better manage the queue of projects looking to connect:** working with industry, we are proposing to update industry codes so that we can actively manage the queue of projects. If projects are not progressing against agreed milestones, we will be able to terminate their contracts, freeing up that capacity for projects that can make progress. The ESO would like to see this applied to all agreements for projects already within the queue, requiring Ofgem approval.
5. **Non-firm connections roll out for all connections sitting behind constraints:** And finally, the changes we are making to our background assumptions may not provide earlier connection dates for all those already in the TEC queue. Therefore, we are currently developing an interim non-firm connection stage option, initially, for battery projects to gain access to the Transmission network and generate earlier than if they were to have to wait for a Firm connection. This will mean they may have to be curtailed at points of system stress without being paid to do so (they will be paid when they have a Firm agreement).

In order to begin initiating this plan, from the 1st March for all applications received in England and Wales we will be implementing a new two-step process, this will reduce uncertainty for developers in the longer term as we apply our new background modelling and storage assumptions. In Scotland, these changes will be applied without the need to implement a new two-stage offer process.

GB Transmission Reinforcement Works Review

In order to apply the new construction planning assumptions (CPAs) and new approach to modelling of battery energy storage system (BESS) ¹, a complete system review of the GB Transmission Reinforcement Works (TRW) for all contracted offers with a connection date post 1st January 2026 is urgently needed (the TRW review). This review will aim to rationalise the TRW required for the contracted parties and also identify any options for BESS parties to connect earlier but with interim restrictions.

All three Transmission Owners have agreed to use the revised methodologies for both existing contracted background and subsequently for new connection applications, thereby ensuring consistency across GB.

Two-Step Process

In Scotland, the Scottish Transmission Owners will carry out the above review whilst issuing new connection offers as normal. In England and Wales, National Grid Electricity Transmission (NGET) will put into a place a two-step process, to enable them to carry on issuing light touch connections offers whilst carrying out the TRW review.

This two-step process being implemented in England and Wales only, reflects the levels of urgency, expected volume of resources required with the review of the contracted background and the characteristics of the contracted technologies in that area that need to be studied.

This two-step process is an interim measure, that will run for 12 months whilst the review is being carried out. It is anticipated that running the review and the two step offer process concurrently should result in improved completion dates (reflecting less reinforcement works being required) making investments more viable and allowing net zero targets to be met.

The success of the NGET TRW review is dependent on the ability to confirm the scope of the contracted background to be studied under this review as well as freeing up NGESO and NGET resource for this study work to be completed. Applying the two-step offer process enables this, with the updated TRW background then

¹ As discussed further at the Customer Connections Seminar in October 2022, <https://www.nationalgrideso.com/industry-information/connections/customer-connection-events>

being applied to provide the second step customer offers. The updated offers will be produced in regional batches to make the process as efficient as possible.

The interim Two Step Offer process will be as follows-

Step One Initial Offer - The customer is provided with an Offer in standard terms which identifies a Connection Site/Point² reflecting the requested connection point in the application and a Completion Date based on the existing TEC queue and current TRW reflecting the general scale of works to enable connection for projects applying now against the current contracted background. It will not however include the detailed works, programme or indicative costs and charges that would usually populate the appendices. No transmission works will be identified in or undertaken for the purposes of the connection at this stage, securities will be set at £0. Clauses will be inserted in the Bilateral and Construction Agreement to reflect that this is an initial Offer and that it, if accepted, it will be updated, to identify the Transmission Works, programme, charges and Connection site/point and any updated terms as per Step Two.

Step Two Follow up Offer – Where the Step One offer is accepted, this offer will then be issued a maximum of 9 months after counter signature of the Step One offer. A meeting with each customer who has accepted the Step One Offer will be held, to give an update on the wider results following the completion of the TRW review. The meeting will also discuss when the customer can expect the follow up Step Two Offer to be issued and likely results. The follow up offer will update the Step One offer based upon the updated TRW review study results and contracted background and identify the Transmission works needed for each project. This offer will therefore include the complete populated suite of Appendices for the agreement including securities and programme based on the identified transmission reinforcement works. These offers will be progressed in regional batches so that they can be processed efficiently as possible.

NGESO and NGET will engage on a monthly basis via a regular webinar to keep industry up to date with how the whole process is progressing.

The interim Two Step Offer Process will apply to all clock started applications from 1st March 2023 and therefore any new connection or use of system offer that is due out to the customer from this date by reference to the England and Wales transmission system will be part of the two-step offer process. This will also apply to any new connection or use of system application to NGESO (whether transmission or distribution) which is offered by reference to the England and Wales transmission system from that date until further notice.

This interim two step offer process will also likely apply to any new Modification Applications that clock start on or after the 1st March. The decision whether the modification application will be treated as a Two Step Offer or given a standard offer will depend on the status of the project and it meeting a number of key criteria. Therefore, each Modification Application will be assessed on a case by case basis and NGET will advise pre clock start of what solution will be taken.

This interim two step offer process is a solution to manage the Connections process in this interim period whilst the benefits of the TRW can be updated into connection agreements, a level of pragmatism will be taken by NGESO and NGET in applying the above approach, taking into account specific circumstances and or requirements,

We would like to reinforce that we have listened to feedback from our customers and industry that the current process is no longer fit for purpose and so we need to do something differently and through the interim Two Step process:

- Will allow the contracted background to be restudied using new CPA and storage modelling methodologies to optimise the transmission reinforcement background and the programmes for these
- It is anticipated that the new CPA and storage modelling methodologies will realise extra transmission capacity and make it available to the market with earlier connection dates across GB. The two-step process will enable this to take place in England and Wales.

² for the purposes of the initial offer but could change in Step Two offer

- Although a delay in the short term, Customers with a Two Step Offer will benefit from the more realistic contracted background and a more coordinated approach to network studies with the potential as a result for earlier connection dates

We recognise that this introduces uncertainty for Customers but by applying it to post 2026 connections we consider that any impact should be mitigated against the overall aim to offer better connection dates than would otherwise be the case on the current approach. We therefore believe that this is the best and most immediate solution that we have available to us ahead of wider ranging changes that will likely come as part of the Connections Reform project.

In the coming weeks we will release a plan showing how we will be reporting on the progress of the TWR review and two step offer process with the Regulator and industry (including through the monthly webinars referred to above) and will keep the two-step offer process under review. We also will be holding a webinar on this topic on the 23 February 2023, to sign up please subscribe to the Connections mailing list to get an invite.³

If you have any further question or queries on the two-step offer process, please do not hesitate to contact myself or in the first instance your NGESO Connections Contract Manager.

Yours Sincerely



SUSANA NEVES E BROOKS

Head of Connections

³ <https://www.nationalgrideso.com/industry-information/connections/connecting-electricity-grid-process>