

# ESO Connections Agora

## 19<sup>th</sup> July 2023



# Introduction

The Customer Connection Agora Sessions are aiming to:

- ✓ Provide an opportunity to learn about a variety of subjects such as Connection Processes, Codes and Policy Changes, Network Operability, Operational Compliance, Security and Liabilities, Cancellation Charges and more;
- ✓ Increase the visibility of the Electricity Connections Team to our customers, stakeholders and the wider electricity market;
- ✓ Facilitate updates on our key workstreams and initiatives, as well as enable engagement and interaction via the Questions and Answers segment.

Agora presented by

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Connections Policy and Change  
Manager

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Senior Connections Design Lead

# Agenda

- Connections Process
- 5 Point Plan
- GB Connections Reform
- Customer Portal update
- Questions and Answers

Please ask all questions in the chat. We aim to get through as many questions as possible.

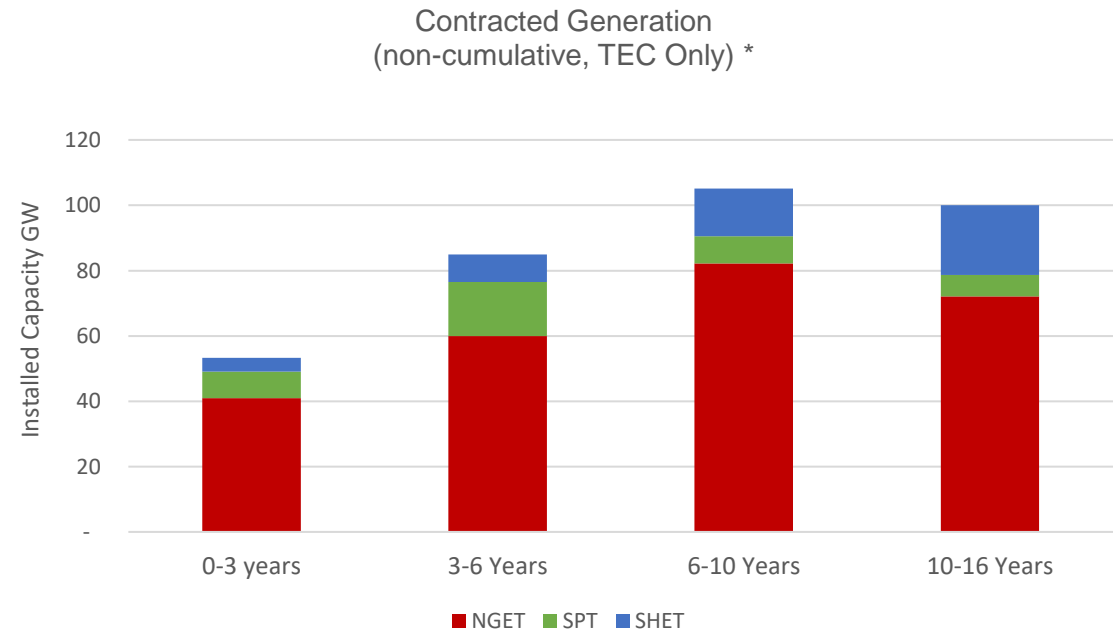
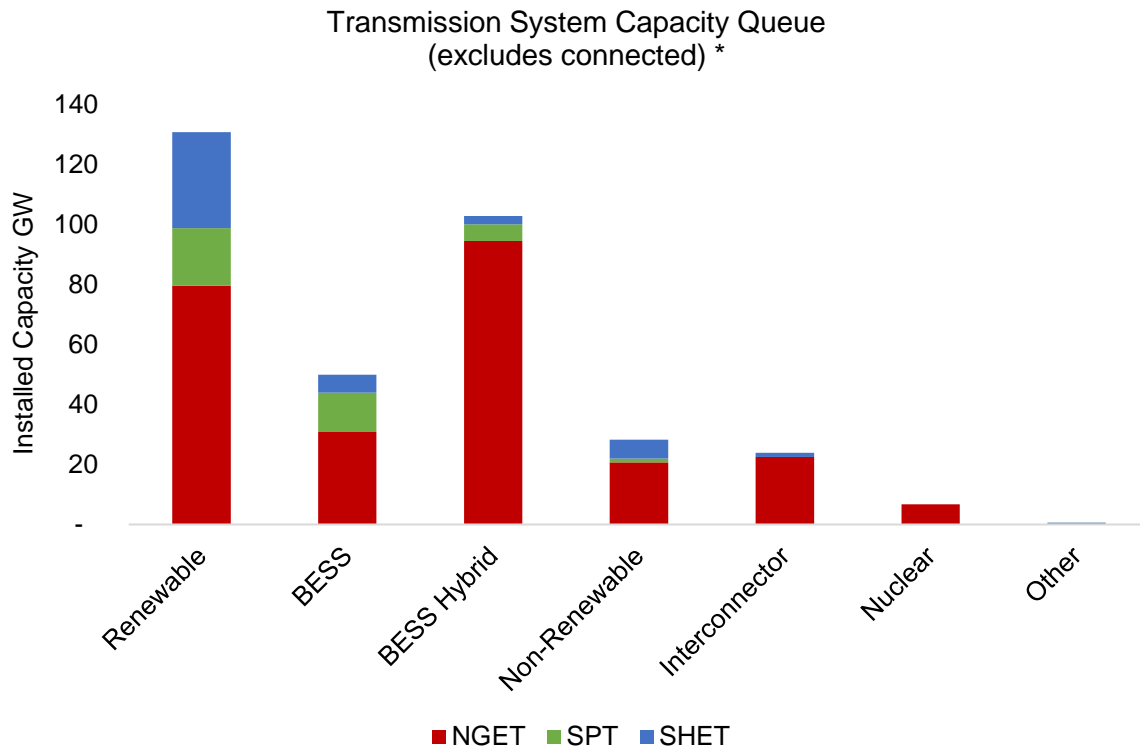
# ESO Connections Update



# Connections Queue

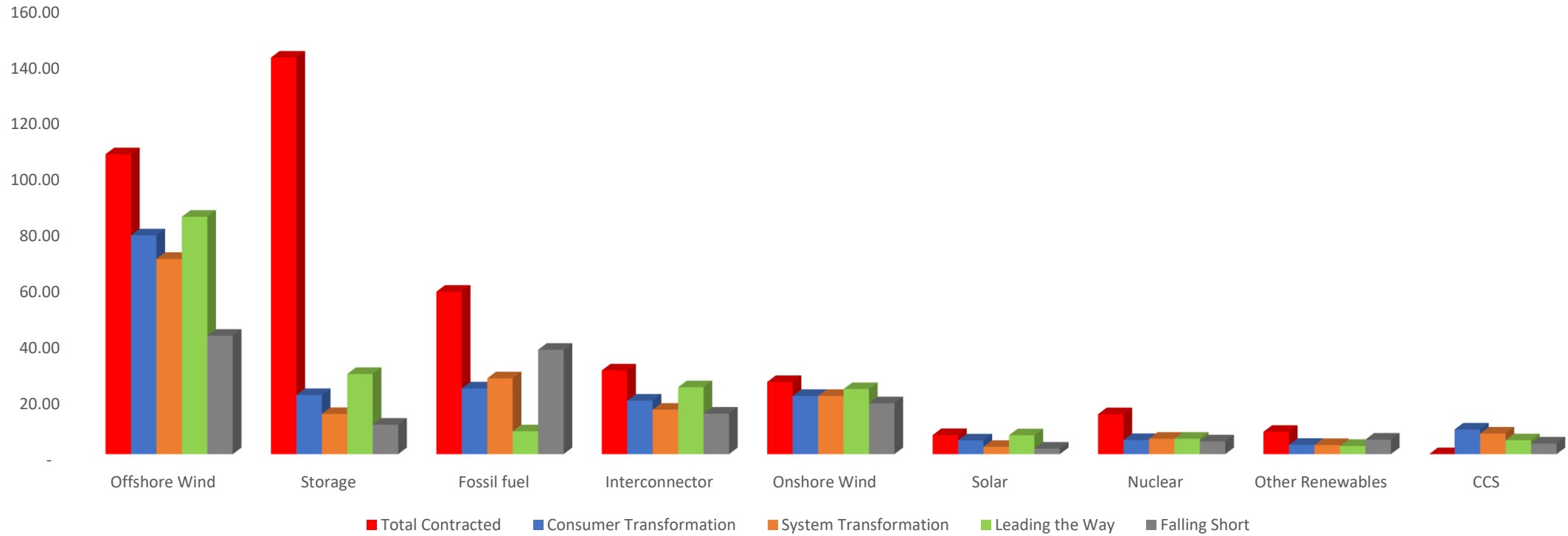
The contracted background is still growing, with more applications offsetting a falling acceptance rate to result in a process with more wasted effort.

Over **343GW** of generation projects are currently seeking to connect to the electricity transmission system, yet our data shows that up to **70%** of those projects may never be built.



\*Data from TEC Register on 31/05/23

# FES 2035 VS Contracted Generation



	Offshore Wind	Storage	Fossil fuel	Interconnector	Onshore Wind	Solar	Nuclear	Other Renewables	CCS
<b>Consumer Transformation</b>	78.27	21.15	23.54	19.15	20.83	4.93	5.04	3.33	8.82
<b>System Transformation</b>	69.84	14.35	27.12	15.90	20.83	2.61	5.51	3.27	7.37
<b>Leading the Way</b>	84.91	28.69	8.19	23.95	23.28	6.75	5.51	2.95	4.96
<b>Falling Short</b>	42.36	10.55	37.35	14.50	18.20	1.98	4.57	5.20	3.81
<b>Total Contracted</b>	107.21	141.69	58.10	29.95	25.81	6.82	14.28	8.00	-

\*Data from TEC Register on 30/06/23

# 5 Point Plan





# Our 5 Point Plan

Our 5-Point Plan is helping to manage some of these immediate challenges

## 1. TEC Amnesty

This was the first TEC Amnesty since 2013. We received a total of 8.1GW of applications and are currently working with Ofgem to allow the termination/reduction of TEC process from connection agreements.

## 2. Construction Planning Assumptions Review

We are reducing the assumptions around how many projects in the queue will connect. We expect this will allow some connection dates to be brought forward and reduce works in existing agreements.

## 3. Treatment of Storage

We are revising the way storage connections are modelled using insight resulting of a better understating of its behaviour. These changes will allow storage to connect quicker and support unlocking more capacity to connect others.

## 4. Queue Management

There is currently no mechanism in the CUSC to terminate projects that are not progressing. If changes are approved, it would allow us to terminate projects that are not progressing against their contracted milestones and agreed timescales.

## 5. Non-firm Offer Development

The policy aims to accelerate the connection of energy storage projects by removing the need for non-critical enabling works to be complete before they connect. We continue to look at the opportunity to roll out this approach to other connections.



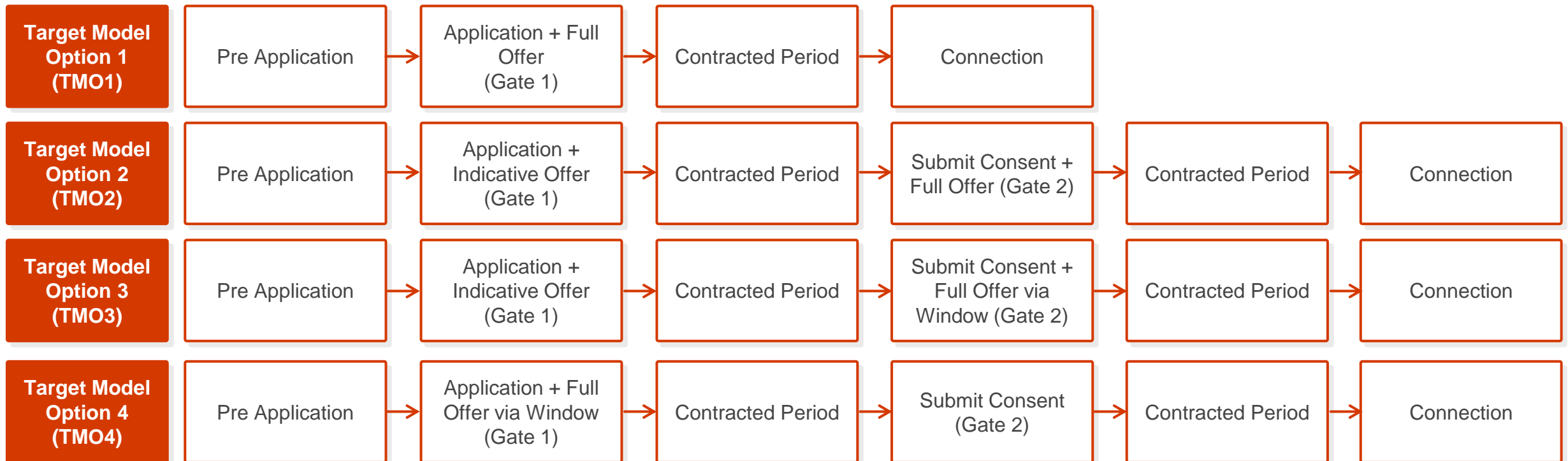
# Connections Reform



# The Target Model Options

Feedback and evolution led to 4 Target Model Options (TMOs) being developed

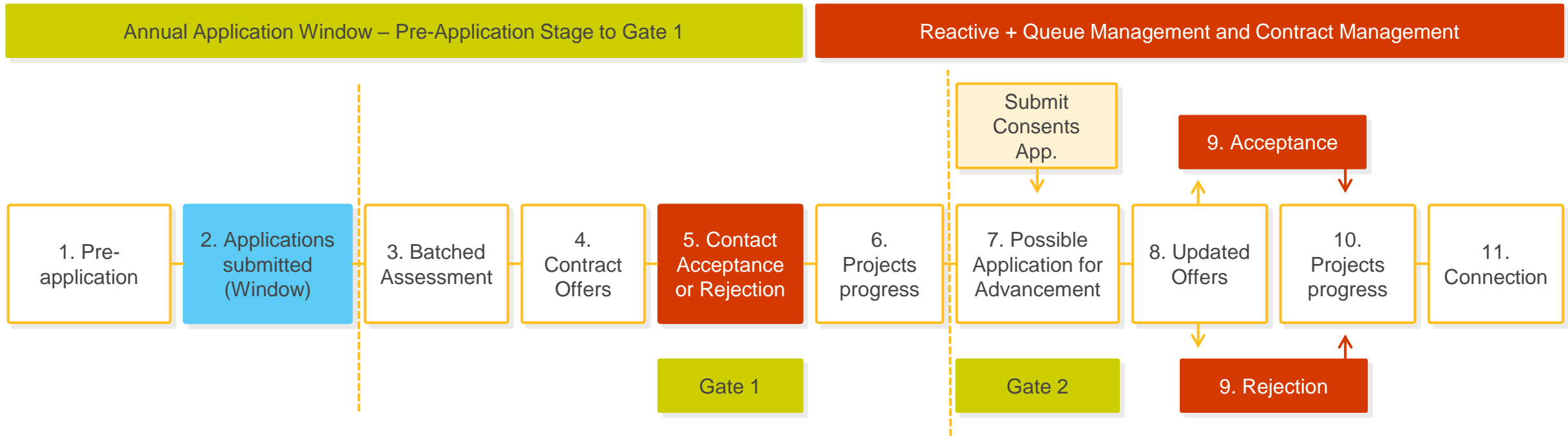
- Each TMO consists of a core process and a selection of changes from **18** add-on categories.
- Other core processes were considered but not progressed (e.g. more / later gates and multiple window processes).



# Initial Recommendation Summary

Our initial recommendation is for Target Model Option 4.

- It has an early window for coordinated network design and a later gate for potential acceleration of progressing projects.
- Various other improvements throughout the process based on feedback.



## Next Steps

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The Connections Reform Consultation can be found on our website [here](#) and will be open until **Friday 28 July** for formal feedback.

Get in touch to share your views!



### Email us

[Box.connectionsreform@nationalgrideso.com](mailto:Box.connectionsreform@nationalgrideso.com)

After the Connections Reform Consultation has closed, we will review responses, refine our proposals and confirm our final recommendations. We will develop a detailed design and implementation plan, including consideration of transitional arrangements from the live connections process to the reformed process. We expect to publish our final recommendations and an implementation plan by November 2023.

# Connections Portal update



## Connections Portal update

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### Upcoming release (28/07/2023)

- Multiple Mod/SOW/PP applications submission by DNOs
- Invoice automation
- Portal Feedback

### Working on

- DNO modification letter
- Queue Management
- Consultant access

### Stakeholder Engagements

- Sessions from September onwards

Q&A



Please ask any questions in the meeting chat



# Questions and Answers

No.	Questions	Answers
1	The Offshore Wind contracted value is significantly higher than FES2035 because of all the Celtic Sea applications. Won't this sort itself out after the leasing round is complete?	ESO and TCE working closely together etc and for Celtic Sea 1 what will be leased is what ultimately appears on TEC register but FES has to consider various scenarios for their models
2	How do we know the customers expression of interest are serious to connect or just to get an early connection date to increase the value of their connection offer/project?	We would hope that only projects that are progressing have come forward for an expression of interest, If they have not then if Queue Management milestones come in then there may be a risk of Termination for any projects which can no longer meet their new date
3	What are the likely timelines in the CPA and non-firm offer development review in the 5 point plan? When are developers who completed the EoI actually likely to hear the output of the process?	<p>The new CPAs involving new assumptions on attrition rates and revised battery storage modelling are currently being used by NGET as part of the TRW exercise to identify whether connection dates can be brought forward. This assessment is currently under way and customers will start to be notified of the outcome in Q4 of 23/24. Scottish TOs will also be using the new CPAs shortly.</p> <p>We are currently working with the TOs to agree the detail that underpins the storage policy paper published in June. We aim to release further information in August once the detail has been agreed. We are focusing our initial efforts on progressing the developers who completed the EoI, but our policy update is open to all developers if they wish.</p>
4	When will we hear whether our battery storage projects are impacted by the way the treatment of storage is modelled i.e. allows us to bring adding batteries to our connections forward?	The new CPAs involving new assumptions on attrition rates and revised battery storage modelling are currently being used by NGET as part of the TRW exercise to identify whether connection dates can be brought forward. This assessment is currently under way and customers will start to be notified of the outcome in Q4 of 23/24. Scottish TOs will also be using the new CPAs shortly.
5	Could you provide more detail on what you mean by accelerating Priority Projects in in the Connection Reform Consultation? In particular does official designation by government refer to NSIP projects, ASTI projects.....	What is classed as a priority project will need to be tightly defined and we initially propose it would be projects which have submitted planning consents, or projects which have a designation from Government or another competent body as being a priority project. Different requirements for priority projects may be identified in the future but these requirements would be made clear to all customers before an application window is opened and the initial expectation is that any different requirements would only apply to Gate 2. Acceleration of those projects relates to their potential advancement when the Gate 2 criteria have been achieved for them for such potential advancement.

# Questions and Answers

No.	Questions	Answers
6	Is there any detail on how storage will be treated? - will all new storage applications be offered non-firm connections?	The policy update allows storage to opt for an earlier connection with non-firm access rights if they think it is suitable and meets their needs. The alternative is a firm connection, but potentially with later connection dates.
7	How is "Storage" defined in relation to the development of non-firm offers in the 5 point plan.	The definition of storage for licencing and hence framework purposes is defined outlined in the Ofgem consultation <a href="#">here</a> . However it is worth the developer contacting the ESO if they need further clarification.
8	Is there a communication channel established between DNO and ESO to monitor the progress of CPA and EoI? When inquired with the various DNO about updates on specific GSPs or projects, it seems they don't have any information on hand. And impact on NGESO/NGET TOCO process?	The EoI data has been shared through the ENA with all DNOs. The ENA represents the UK and Ireland's energy network operators. The new CPAs are currently being used to identify any spare capacity available on the network to accommodate customers. Once the assessment is complete, we will start working on projects that can be accelerated at which stage the engagement with DNOs will ramp up.
9	Can competition models such as CATO be integrated into this process?	Yes – the reformed connections process has been designed such that the competition models can be integrated into it and we will explore this further in detailed process design.
10	On the 5-pt plan, what impact will a non-firm connection have on an owner's ability to provide grid services/procure longer contracts e.g. FFR? Also Capacity Market - would non-firm agreements be included in list of Relevant Balancing Services?	We are currently working with the TOs to agree the detail that underpins the storage policy paper published in June. We aim to release further information in August once the detail has been agreed. We understand the need for clarity on the point of storage providers stacking services and are working to give clarity on this point.
11	Would Project Progression applications from DNOs go into the same window?	Our proposal is that DNOs would be able to reserve additional developer capacity (Reserved Developer Capacity or "RDC") within an application window so that they can continue to make offers to relevant Embedded Generators (up to the level of the RDC) in the period between windows. Changes would be required at the Transmission/Distribution interface in respect of the most efficient processes and mechanisms to manage application windows and RDC. For example, if taken forward, there would be a need to replace the existing 'Statement of Works' and 'Project Progression' processes.

# Questions and Answers

No.	Questions	Answers
12	Do modification applications for BCA projects also go through the windows?	To be further considered in the detailed process design and implementation phase.
13	Have you thought any more about how projects in different windows interact with each other? Can long lead-time projects in window 1 impact on connection dates for projects in window 2?	Our current thinking is that the only circumstance where a project in a later window could come into an earlier window is if there is a capacity gap created through Reactive Queue Management and there is not another project in the earlier window that was able to use this capacity. The reason we have proposed this is that if you allow customers to jump forward through Application Windows, if they meet milestones quicker than people in earlier windows, that effectively takes you to unconstrained (proactive) queue management, which we do not believe performs as well against the design objectives and criteria as it would likely be a significant challenge for investors if there were no certainty on backstop connection date.
14	How does national window - applicable to all technologies - work in practice? How is it decided which project interact with each other?	The exact details of how network design studies will be undertaken for all projects within an application window are to be further considered in the detailed process design and implementation phase.
15	Will existing contracted connections have their contracts updated to the new gate model process?	Transitional arrangements are currently being explored including how this process will impact on projects which already have signed connection agreements and have requested planning permission. Our initial thinking is that we would not apply the Application Window process to a site that currently has a connection contract. However, there could be potential to consider the introduction of a Gate to sites that have a connection contract, so their queue position is in line with the ability to progress their project. We will need to consider whether there should be a pause in receiving and providing new Connection Offers to projects in order to facilitate efficient introduction of the new process and will share our thinking on this later this year.
16	Is there a link to the storage policy launched in June? I think it might have been launched at the Glasgow event - but not sure any slides or documents were shared?	<a href="https://www.nationalgrideso.com/document/281171/download">https://www.nationalgrideso.com/document/281171/download</a>
17	What about DNO connected customers who submitted EOIs, will you be engaging with them first as well? (to bring the battery connections forward).	We are currently working with the TOs to agree the detail that underpins the storage policy paper published in June. We aim to release further information in August once the detail has been agreed.

# Questions and Answers

No.	Questions	Answers
18	Will NGESO ensure Connections Managers have time to engage/meet customers once output of EOI process begins? I accept they are very busy right now but more engagement will be needed.	There is more to this than just engagement. The process is being changed and resources need to be allocated to the associated points. How does ESO/ET plan to model resource required at each stage in the process. At present the resources are the issue in the process with Account Manager managing over 100 connections. A "Window" process looks to create a wave of work which needs resourcing accordingly.
19	I notice a Backstop date is mentioned to give assurance on the connection date. Is this any different than the current Backstop Date in existing contracts? Is there any additional recourse for NGESO not hitting that Backstop date? Can NGESO just continuously change the Backstop date via Notices. This is an important point as currently a Backstop date is useless, as any connection date delay from the TO is just updated in mod app, AtVs or Notices. I would prefer a Backstop date that actually holds weight.	There is currently a Backstop Date in Construction Agreements (typically set 2 years after the contracted Completion Date), which allows for User construction delays. However, this is not the same as the "backstop connection date" we reference in the consultation. For the avoidance of doubt, connection offers applicants receive under the proposed reformed process would provide the anticipated latest connection date, based on the enabling works required for a connection in a batched design process via an application window. As such, we will consider using a different term to "backstop connection date" in future to avoid confusion with the pre-existing term within Construction Agreements.
20	Please could you reclarify what "window" means - is it the period when applications can be made or the period when projects are scheduled to connect?	It is the period when connection applications can be made and the associated process for those within that window to receive connections offers.
21	Given how far contracted storage is over FES projections, what proportion of contracted storage volume do you expect to eventually go live?	Our Future Energy Scenarios (FES) represent a range of different, credible ways to decarbonise our energy system as we strive towards the 2050 target. However the contracted storage volume is greater than the volumes in the FES. This mismatch is something we are keen to better understand and our recent EoI does provide useful insight.
22	If DNO Reserved Developer Capacity gets developed further, will it be developed (e.g. into industry codes) on the same timeline as the rest of the Connections Reform? Keen to avoid solutions for embedded generation being shunted off into the slow lane.	Yes. We are currently developing a coordinated code strategy which will take into account changes to industry codes and we will be liaising with the impacted code bodies. RDC is an important aspect of these proposals.

# Questions and Answers

No.	Questions	Answers
23	How strict are the milestones be implemented?	The milestones in CMP 376 are split into two categories, Milestones 1-3 are Automatic Termination and therefore if a milestone is missed and an exception is not submitted then the agreement will be automatically terminated. For milestones 5-8 (please note there is no Milestone 4 due as that is for the T/D interface) then the ESO has the right to Terminate. For more information on Milestones please see the CMP 376 website <a href="https://www.nationalgrideso.com/cmp376">CMP376: Inclusion of Queue Management process within the CUSC   ESO (nationalgrideso.com)</a>
24	If the expected attrition rate is 70% how will TMO4 prevent delays due to design variations from parties dropping out as they go through the process? As surely the design then changes.	This will be further considered within the detailed process design and implementation phase but we currently expect the network design will be undertaken with the attrition assumption built in so the termination of projects does not require material redesign.
25	It would be worth deciding early on what contractual terms are proposed to be used in the new process, and being consistent about these terms, to avoid the kind of confusion around "Backstop Date" etc.	We agree with this comment and will ensure this is addressed in the detailed process design and implementation phase.
26	What milestones project progress is proposed to be measured against?	Each Milestone will have a set of evidence that needs to be met to meet it, this is specific to each Milestone, please see the CMP 376 webpage for more information on Milestone evidence <a href="https://www.nationalgrideso.com/cmp376">CMP376: Inclusion of Queue Management process within the CUSC   ESO (nationalgrideso.com)</a>
27	Can ESO resource batched applications - very concentrated activity rather than resource levelled through year if 'free vend'?	There are already a significant amount of connection applications and we are hoping that the future process that has a more efficient pre application stage will help reduce speculative applications. We will resource appropriately to make sure that if and when we do introduce Application Windows, everyone knows how to operate those and we can deal with the volume of projects that come through in that period/process.

Thank you

Next Agora –

16<sup>th</sup> August 2023 10:00 – 10:45

Please take the time to give  
us some feedback on today's  
Agora

