

ESO Connections Agora

16th August 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

Folashadé Popoola

Senior Connections Policy and
Change Officer

Yichen Liu

Power System Engineer

Paul Mullen

Senior Connections Design Lead

Agenda

- Connections Process
- 5 Point Plan
- GB Connections Reform
- Dynamic System Monitoring Project
- Questions and Answers

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



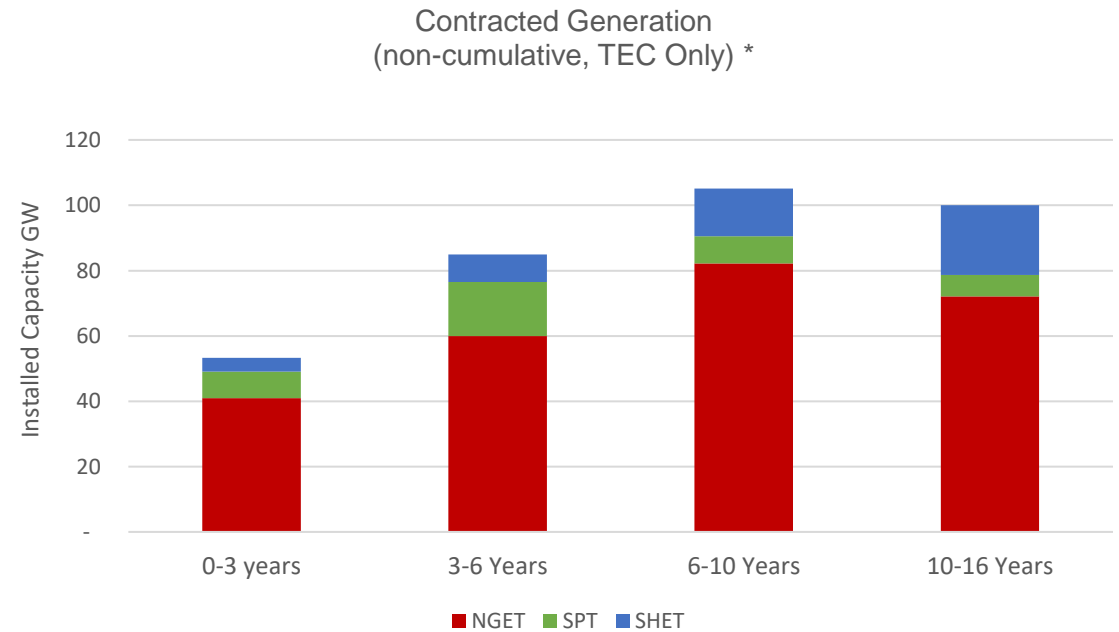
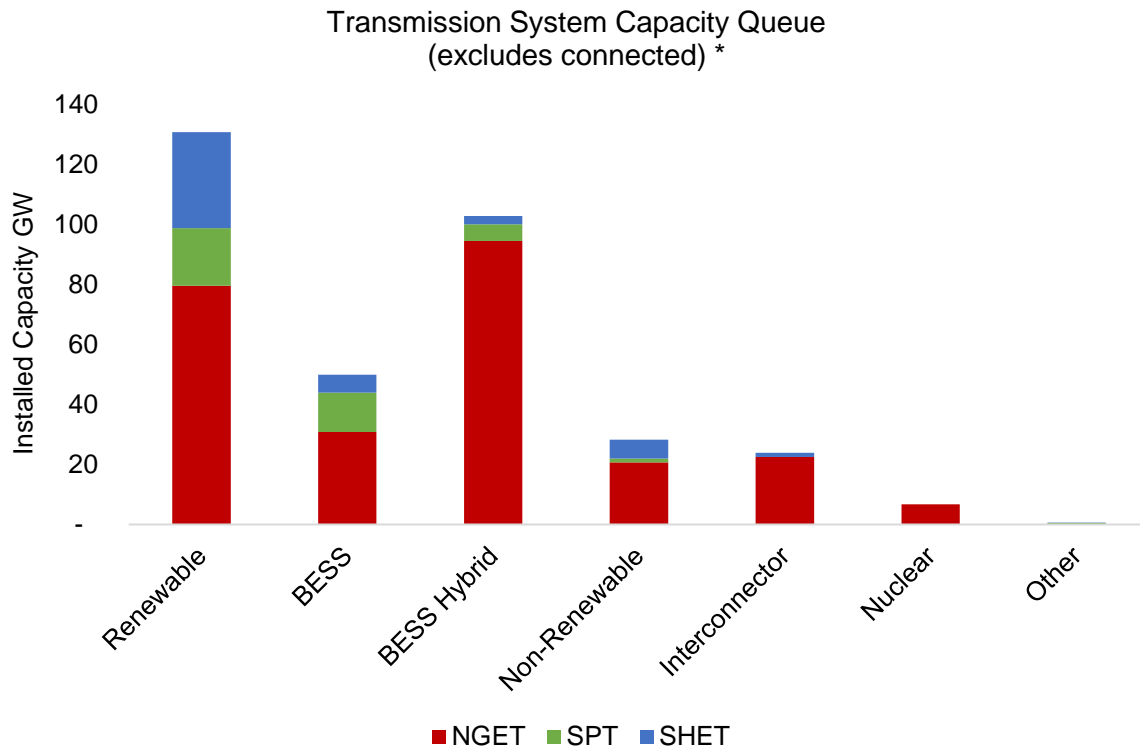
ESO Connections Update



Connections Queue

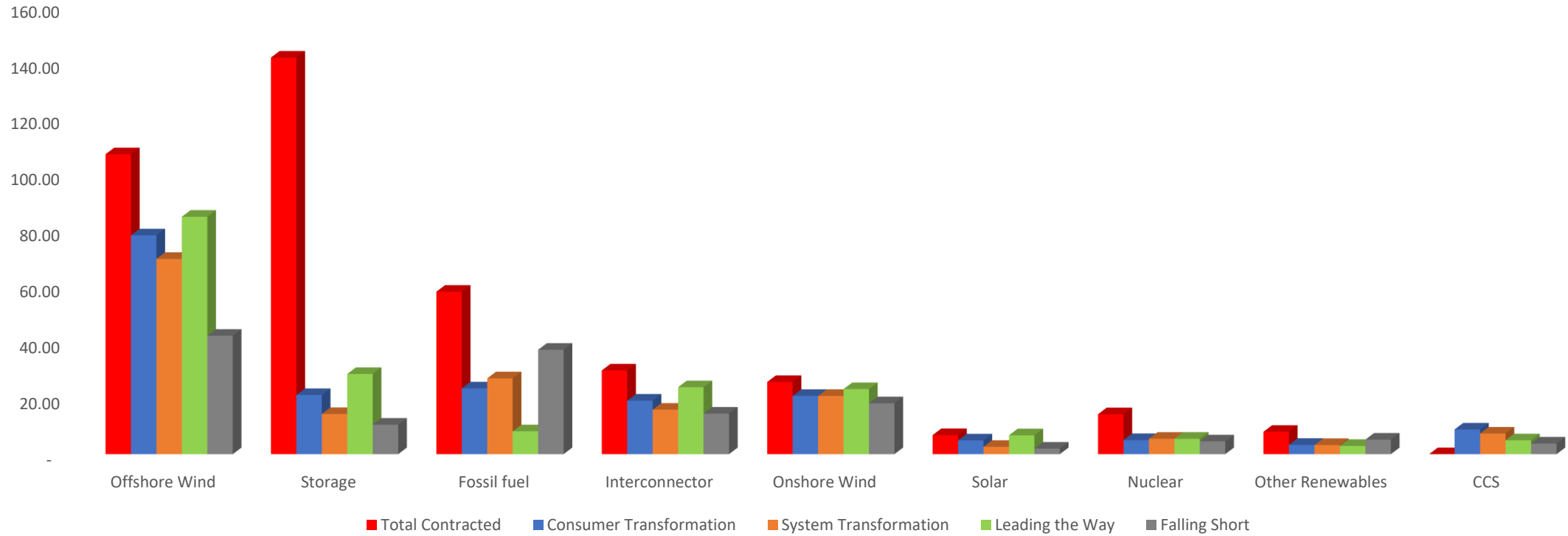
The contracted background is still growing, with more applications offsetting a falling acceptance rate to result in a process with more wasted effort.

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
Consumer Transformation	78.27	21.15	23.54	19.15	20.83	4.93	5.04	3.33	8.82
System Transformation	69.84	14.35	27.12	15.90	20.83	2.61	5.51	3.27	7.37
Leading the Way	84.91	28.69	8.19	23.95	23.28	6.75	5.51	2.95	4.96
Falling Short	42.36	10.55	37.35	14.50	18.20	1.98	4.57	5.20	3.81
Total Contracted	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. ESO and Ofgem published a letter on 15th August confirming next steps.

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 – verbal update



A landscape photograph featuring snow-capped mountains in the background and a valley in the foreground. Several bright, glowing yellow light trails curve across the valley floor, suggesting a long-exposure shot of a road or a path. The sky is filled with dramatic, golden-hued clouds, and the sun is visible, creating a warm, atmospheric glow.

Dynamic System Monitoring (DSM) Project

August 2023

Dynamic System Monitoring (DSM) Project

Background

- ESO needs to monitor the performance of service providers (e.g. generators) on the grid in order to carry out **post fault analysis, manage network risk** and **verify compliance**. There is an increasing need to evaluate the providers' dynamic behaviour during system event.
- The difficulties in accessing data creates a risk for ESO to investigate events adequately. Requiring data manually without an established system following a system event or fault, this could result in **delays, and missing data** when investigating system issues.



Future Expectation

- A new system is needed for the ESO to **seamlessly access** DSM data from transmission connected generators and interconnectors **within 24 hours** of identifying a fault event anywhere in England, Wales and Scotland.
- The recommended strategic solution is to securely link **all the known and future DSM devices** for all generator units that are directly connected to the transmission network to a central system that is owned and maintained by ESO.

Next Steps

- ESO would appreciate opinions from the grid code users before establishing the new data collection system
- Questionnaires to be sent out to all the grid code users to collect :
 - a. their installed DSM units' information (e.g. settings, status and accessibilities)
 - b. their preferences of data collection

Current Status

No uniform data collection method through the whole network. Under some circumstance, ESO has to request service providers to provide data manually for post fault analysis.

Potential Future Options

Providers to upload DSM data to file sharing system e.g. sharepoint or data portal

Replace existing system with supported system and bring under ESO's control – expand network coverage to link all direct connects

➔ Based on the feedback received through questionnaires, ESO will put forward a proposal for the optimum method to access and acquire recorded data from these DSM devices.

Q&A



Please ask any questions in the meeting chat

Thank you

Next Agora –

20th September 2023 10:00 – 10:45

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

