

Electricity  
Distribution

# Connections Webinar

6<sup>th</sup> November 2024

nationalgrid

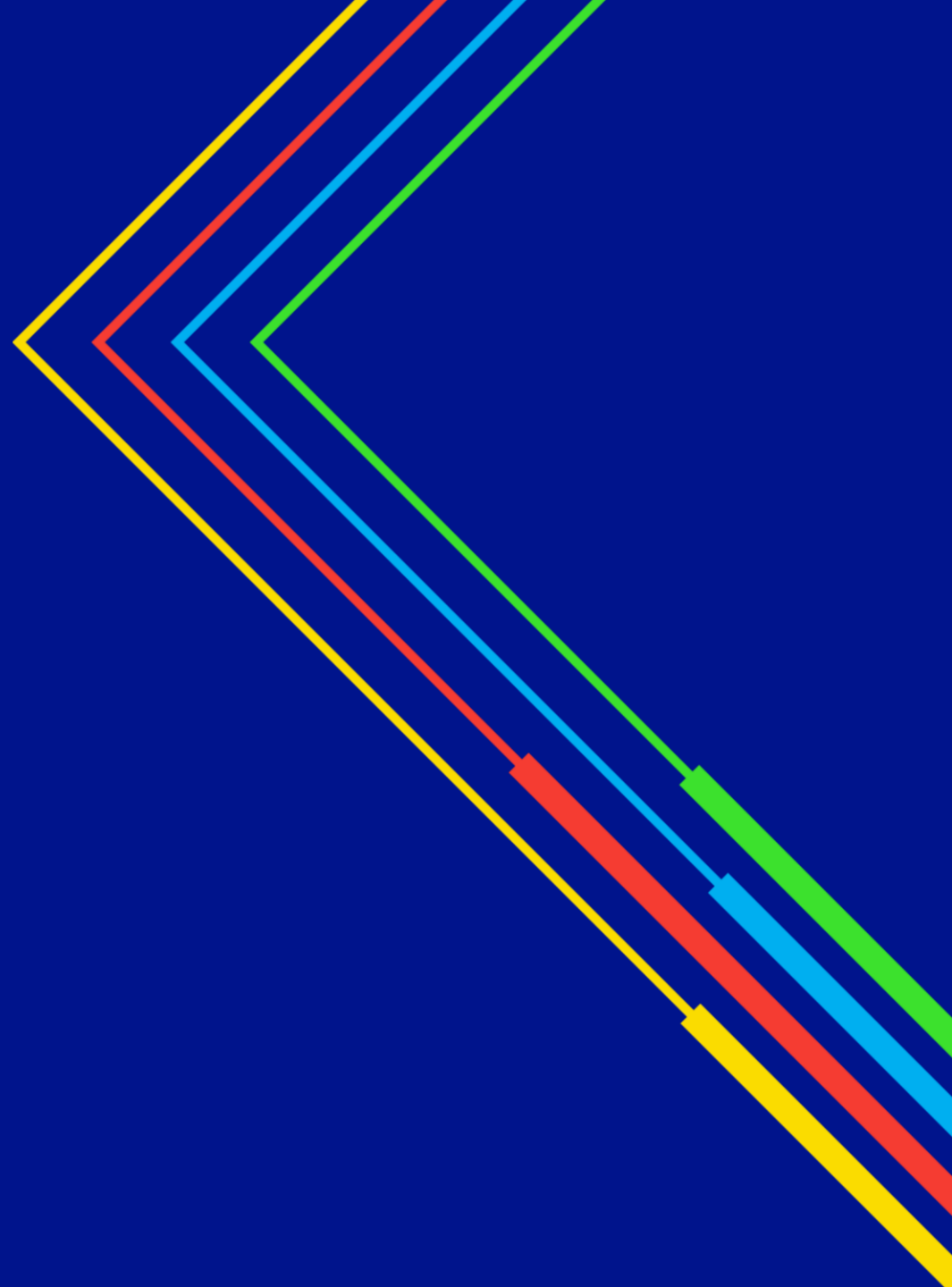


# Agenda

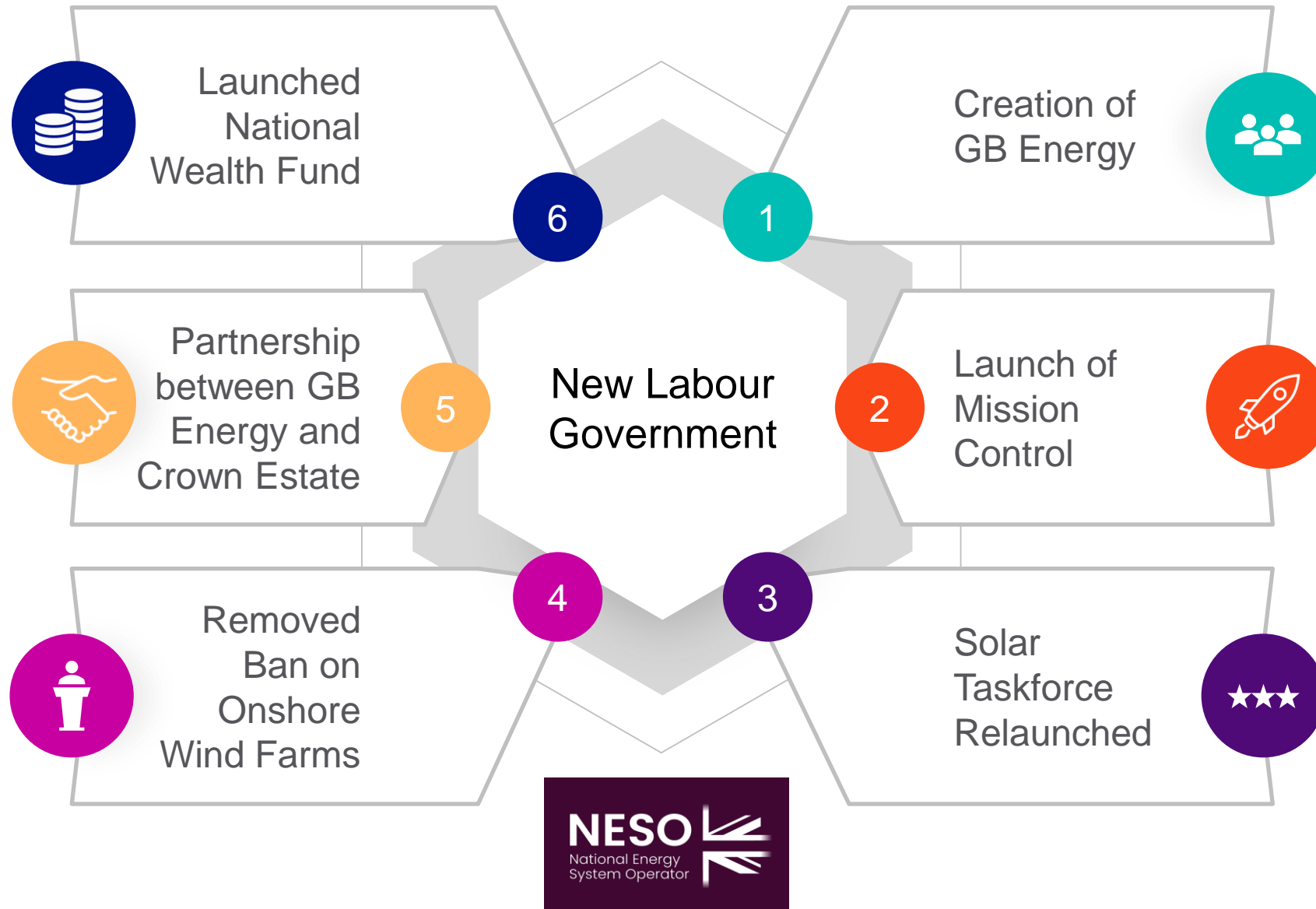
- 1. Welcome**
- 2. Reform Update**
- 3. Clean Power 2030**
- 4. Customer Engagement**
- 5. Q&A**

# Welcome

**Amanda Le Brocq**  
**Director of Connections**



# Since we last met...



# Connections Directorate



**Amanda Le Brocq**  
Director of Connections



**Laura Henry**  
Senior Manager Connections  
Strategy & Reform



**Sarah Kenny-Levick**  
Senior Manager Connections  
Strategy & Reform



**Cuan Rowlands**  
Connections Strategy / Policy  
Manager



**Greg Hunt**  
Head of Digital Strategy



**Mark Baker**  
Head of Strategic Customer  
Engagement



**Sarah Jeffery**  
Head of Strategic Customer  
Engagement



**Ben Cattermole**  
Head of Transport  
Decarbonisation



**Kester Jones**  
Head of Connections  
Operations Optimisation



**Vyoma Shah**  
Head of Pricing & Analytics



# Reform Update

Laura Henry  
Senior Connections Strategy & Reform Manager



# G99 Changes- Proposed from 1<sup>st</sup> January- Applies to all projects above 1MW



**Proposed changes currently out for consultation through the ENA**

**Open until 11<sup>th</sup> November**

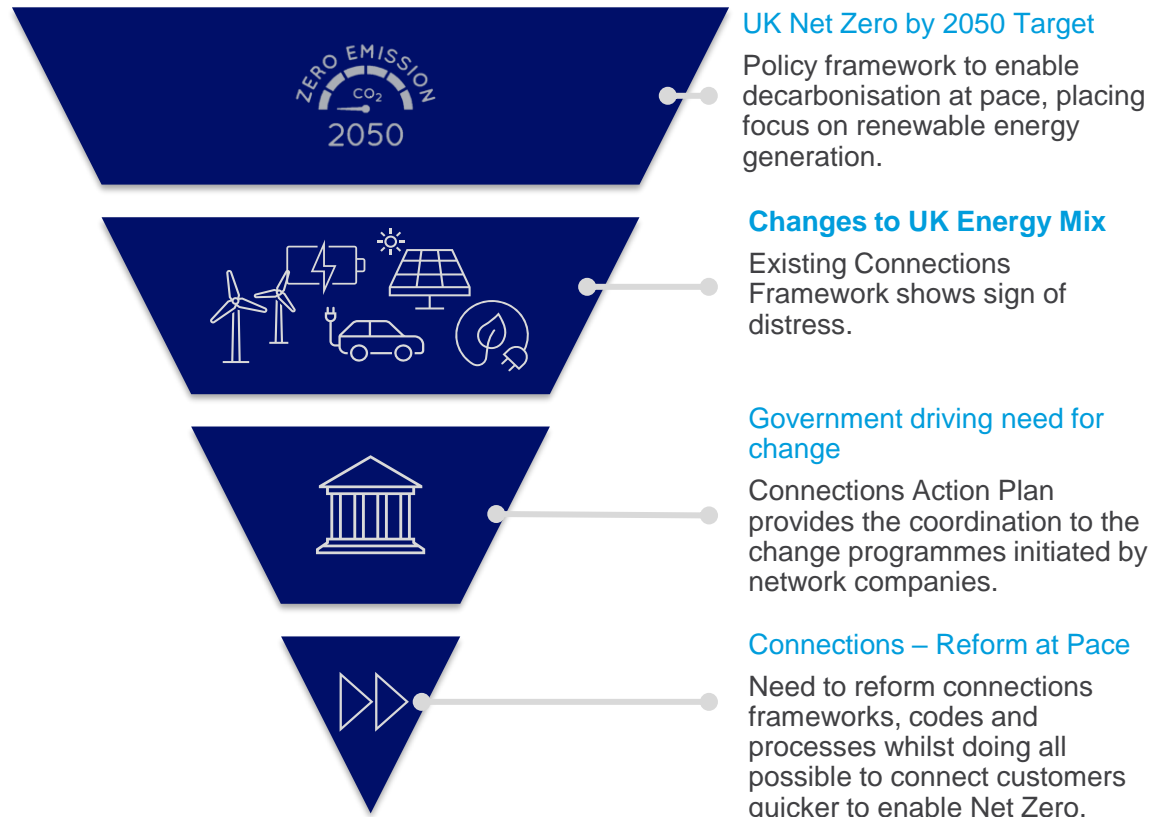
[ENA-consultation.png \(1532 × 747\)](#)

**We welcome NGED customer views on these changes**

**Further alignment to Connections Reform Gate 2 criteria required**

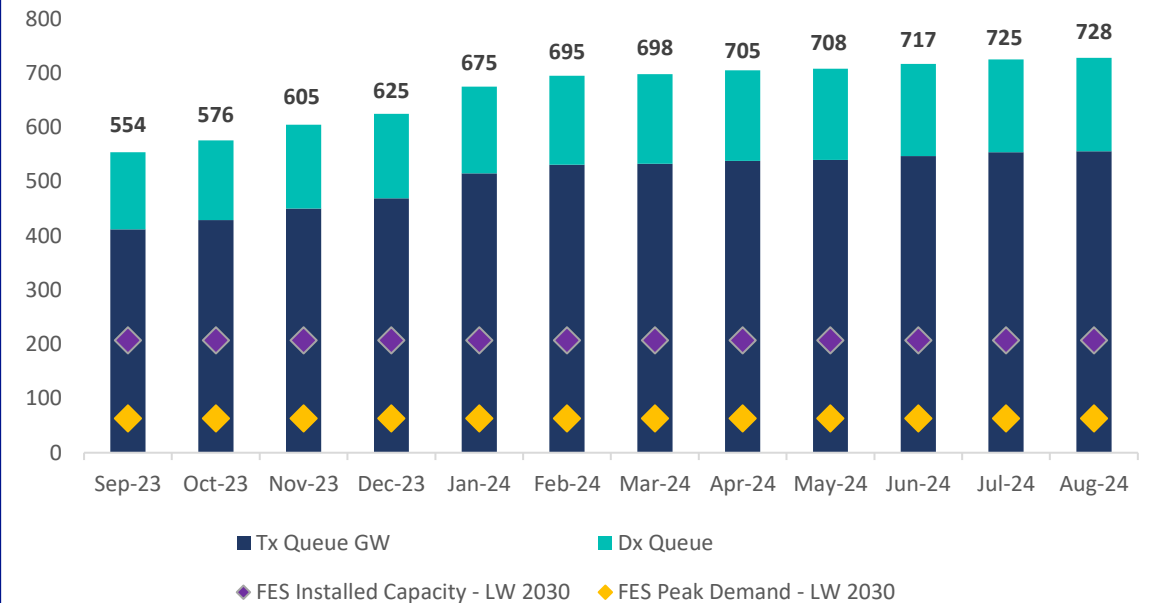
# Current Landscape

## What is driving the criticality of connections?



## What is the size of the challenge?

Combined Transmission and Distribution Queue\*



\*Queue *background* excludes connected installed capacity of 122GW as well as transmission demand projects



# Key headlines

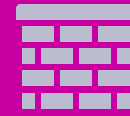
## Changes to existing process

 Window and gated process

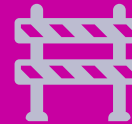
 Evidencing progress

 Request for accelerated connection date

## Benefits Realised



Raises barriers to entry



Queue Management



First ready, first connected

# TMO4+ | This is a significant piece of industry reform and NGED has an opportunity to take a leading role



## NGED's Positioning

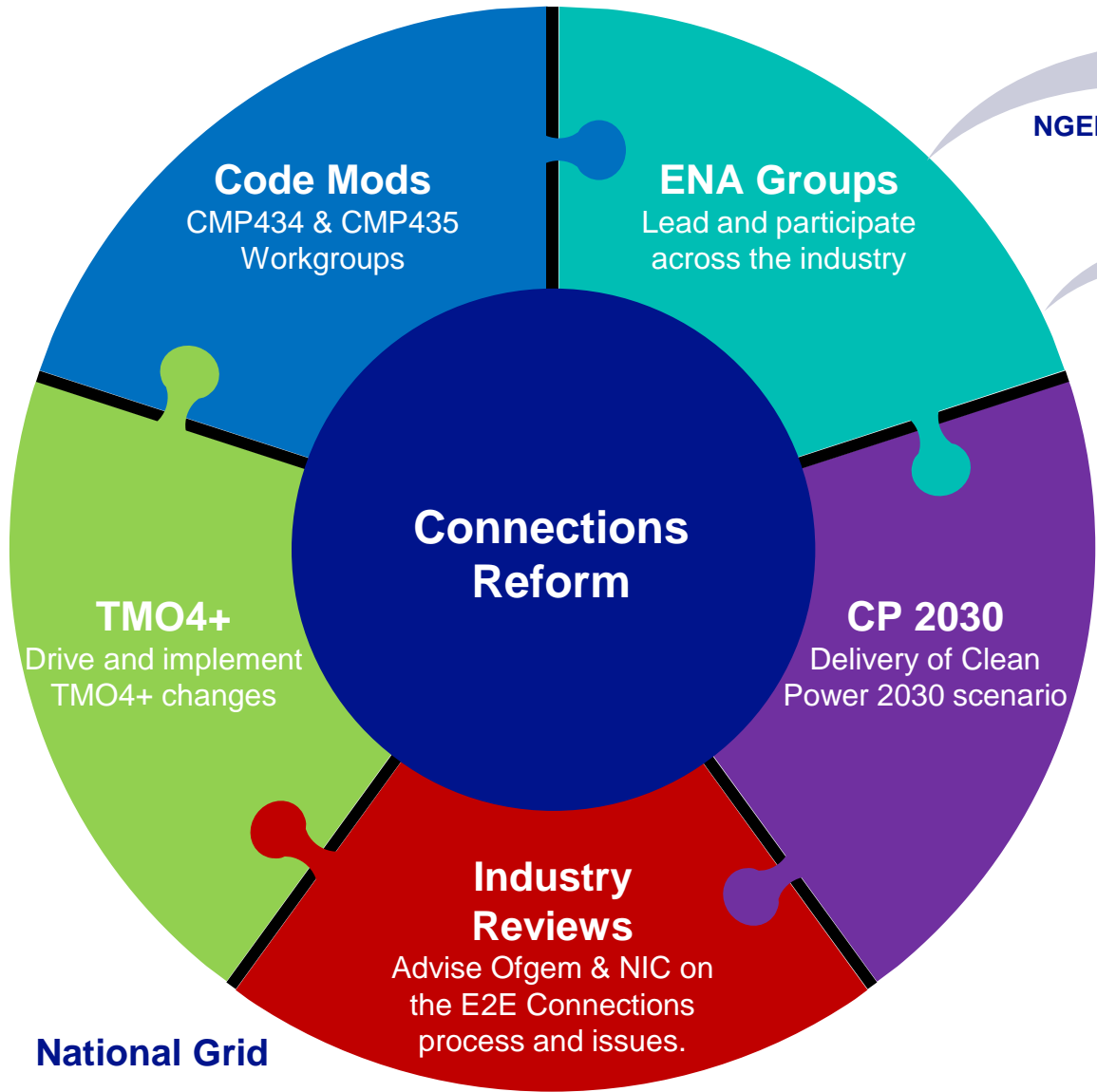
- Raised a Workgroup Alternative Code Modification (WACM) to give Distribution Network Operator (DNO) more time to provide evidence
- Negotiated with NESO to incorporate NGED's WACM into the original proposal
- Leading Energy Network Association (ENA) SCG workstreams on reform to drive change at DNO level: **Opportunity to lead on reform for the DNO community**

## Next steps

- Communication with our customers on the new process and what it means for them
- Implementation of the new process within NGED
- Continue to work with the ENA to ensure that the voice of the DNOs is heard throughout
- Ensuring alignment between transmission and distribution processes

# Working across industry to improve Connections

## What are we doing...?



## How are we doing it...?

<b>Data</b> Bringing together industry Connections data	<b>TMO4+</b> Impact and implementation of TMO4+	<b>DFTC</b> Forecasting future capacity requirements	
<b>TCR</b> New charging arrangements for Transmission assets	<b>IQM</b> Barriers to entry and queue management	<b>Tech Limits</b> Accelerating network access for distribution customers	<b>Storage</b> Treatment of storage for network studies



**Engaging** – with a wide range of stakeholders and government through multiple industry forums



**Influencing** – by having a leading industry voice and chairing multiple ENA Strategic Connections Groups



**Collaborating** – with other network companies to find a better way to improve the Connections industry for all



**Leading** – the way across multiple streams and setting a new standard for digital, data and transparency for customers



**Innovating** – increasing the efficiency of our processes, data and systems to drive forwards Connections Reform

There are proposed to be three key methodologies which will govern access, order and prioritisation of projects under reform and CP30 – published yesterday for consultation until 2/12/24

1

**Gate 2:** Transmission queue entry requirements:

- Demonstrate the appropriate land rights
- Demonstrate that planning consent will be submitted within a set timeframe
- Once in the formal queue, the project will then be subject to tight queue management milestones to progress or terminate projects based on viability

2

**Project Designation –** priority for system benefit:

- Relieving constraints
- Security of supply
- System operability
- Innovative/emerging technologies
- Long lead time projects

3

**Centralised Network Design Methodology (CNDM) –** methodology for planning & prioritising the network:

- Queue formation after gate 2
- Reallocation of capacity after termination
- Prioritise & order offers when multiple projects meet gate 2 simultaneously
- Assessing how existing projects will be advanced after gate 2
- Determining how enabling infrastructure is assessed

We would encourage our customers and industry members to engage on the consultations of these products to help get to the best outcomes for the industry

**Customers will need to gather evidence to meet the gate 2 land criteria for existing and new projects >1MW, to access the connections queue.**

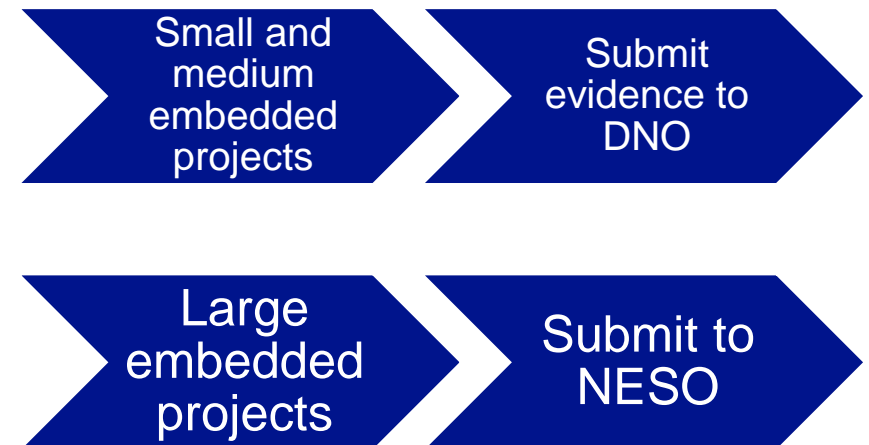
**Evidence of Land Rights or Planning Application Submitted**

Meet one of the Strategic alignment criteria –  
1. Align with the 2030 pathway or 2035 pathway  
2. Identified as a designated project

Ongoing compliance with Land and planning as well as queue management milestones

**Supporting documents**

- ✓ Self Declaration Form
- ✓ Original red line boundary
- ✓ Meets the minimum acreage



# Clean Power 2030

Sarah Kenny-Levick  
Senior Connections Strategy & Reform Manager





# National Energy System Operator (NESO) Criteria - Project Designation Criteria

Projects may be prioritised ahead of others in the queue if designated – gate 2 still applies

- 1 **Critical to Security of Supply – relating to Dx & Tx**
- 2 **Critical to System Operation – significant gen, networks, SCADA, balancing services, cyber security**
- 3 **Materially reduce system and/or network constraints**
- 4 **Technologies and / or highly innovative (not in CP30)**
- 5 **Very long lead times**

# Centralised Network Design Methodology (CNDM)

## Aligning the Queue to the Clean Power 2030 Pathways

**5.7.1** Following the [application of the Gate 2 Readiness Criteria](#), the following process will be used to align the remaining projects to the CP30 Pathways:

**1.** Form a sub-queue for each technology in each zone (e.g. short duration storage queue in Zone 1)



**2.** Remove those with existing connection dates after 2030 that have not requested advancement to 2030 or earlier and add to Phase 2



**3.** Determine planning status of remaining projects



**4.** Reorder queue based on planning status



**5.** Determine point in queue where 2030 pathway reached. Add any projects exceeding the pathway to Phase 2.



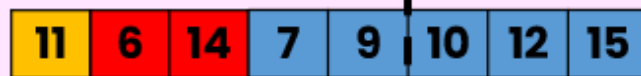
**6.** Relevant TO/DNO identify any network limitations preventing advancement (prior to detailed network study)



**7.** Return Phase 1 projects to original relative queue positions



**8.** Determine point in Phase 2 queue where 2035 pathway reached. Any exceeding the pathway will not receive a Gate 2 offer.



Do not receive Gate 2 offer



Added to Phase 2 (2031-2035)

Phase 2 (2031-2035)

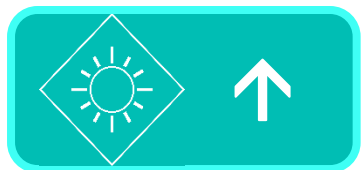


# Yesterday saw the publication of the NESO advice on clean power 2030 with positive statements about the role embedded generation plays

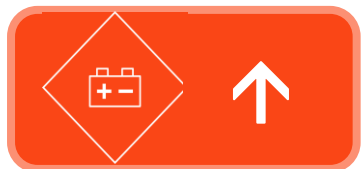
In the CP30 plan – NESO have made the following statements about what is needed to deliver a 95% Net Zero system by 2030



~200% current UK onshore wind



~300% current UK solar

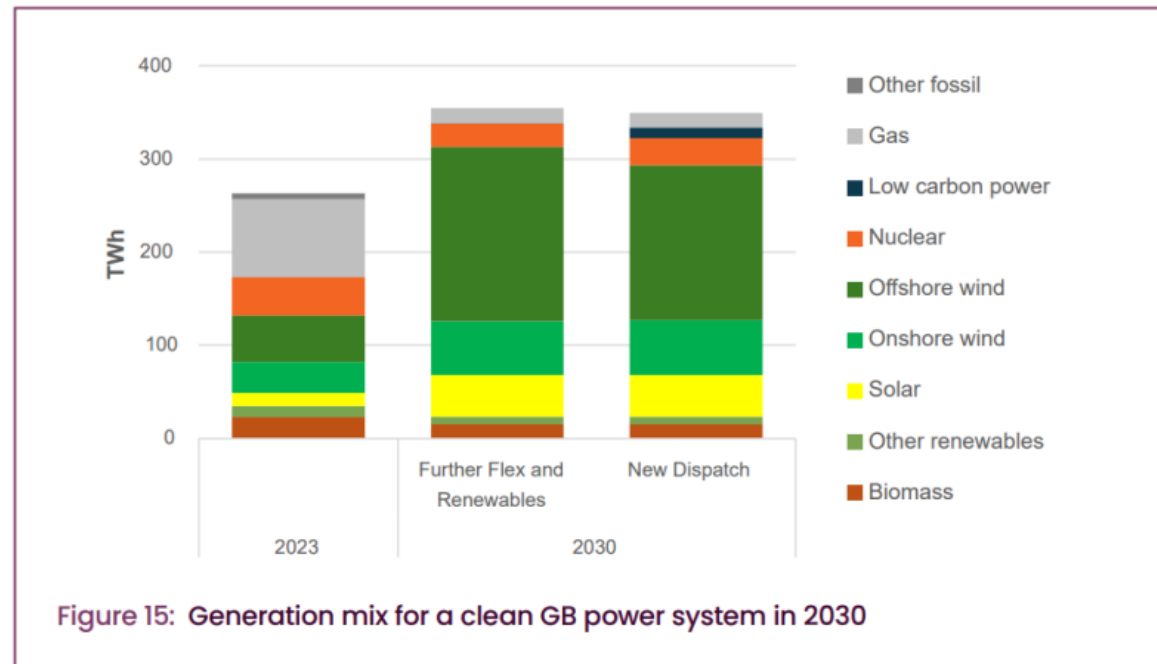


~300% current UK storage

*NESO have stated that in meeting CP30 'Distribution networks are critical.....'*

*'.....two to three times more projects awaiting connection in the queue than required in our pathways. However, for some renewables in certain regions, there is currently an undersupply of queued projects.'*

*.....generation that requires minimal or no additional network investment at transmission and can be accelerated, provided they align with government's plan for clean power by 2030.'*



# Responding to consultations to help drive successful reform

Consultation	Description	Consulting from Date	Consultation close date	
Gate 2 criteria methodology	Queue entry requirements	5/11	2/12	Form links in the consultations  Or email <a href="mailto:box.connections.reform@nationalenergyso.com">box.connections.reform@nationalenergyso.com</a>  <a href="#">Form</a> link
Project Designation Methodology	Project prioritisation	5/11	2/12	
CNDM	Project ordering	5/11	2/12	
Financial Instrument	Financial commitment proposal	Not consultation (seeking views) –5/11	2/12	
CMP434 & CMP435	Codes to support reform	Imminent	2 weeks	TBD
E2E Review	Incentives, obligations and requirements on networks that support connections	8/11	Likely ~3 months	
Tx & Dx license	Potential changes needed to support the DNO licenses	TBD – expected this year	TBD	
Threshold change for TIA	Proposal to change Tx assessment to 5Mw (from 1MW)	TBD – needs code change	TBD	



**Electricity  
Distribution**

# **Customer Engagement**

**Sarah Jeffrey**  
**Head of Strategic Customer Engagement**

**nationalgrid**



## Electricity Distribution



### **Connections:virtual**

Our bi-monthly virtual meetings are for customers that want to know about important updates and industry insights.

### **Connections:collective**

This annual in-person all day workshop is for customers that want to know about important updates, industry insights as well as collaborate.

### **Connections:surgery**

These ad hoc meetings are for customers who wish to connect to our network and would like to discuss their project in advance of applying.

## **Engagement Programme**

### **Connections:steering**

Bi-Annual in person workshops for customers to work with us together to find solutions that meet the needs of the industry.

### **Connections:engineering**

### **Connections:commercial**

Ad hoc seminars for customers that want to know about important technical or commercial updates.

### **Connections:community**

These ad hoc in-person meetings are for Community Energy groups, Local Authorities and anyone else with an interest in connecting a Community Energy project.

### **Connections:operators**

This forum will meet three times a year to provide an opportunity to tackle technical challenges, share insights, and find solutions collectively.



# Q&A

Question	
1	Primarily our interest is in Connections Reform but specifically how will the Distribution Network Operator (DNO) manage Embedded Connections that meet National Energy System Operator (NESO) Gate 2 Criteria?
2	When will we be able to have a live network model to do our own analysis in IPSA/Power Factory/etc?
3	How will embedded generator grid applications be treated in connections reform? Will the DNO secure a certain capacity for those projects which previously went through project progression together?
4	Do National Grid Electricity Distribution (NGED) see any issues with availability of their resources to meet the connection demands? if so, what mitigations/actions do NGED see as possible options?

# Q&A

## Question

- |   |   |
|---|---|
| 6 | Is the National Grid open to meeting Councils regarding growth targets and how we can incorporate utility provision for electricity in Local Plans which look to the future form 15 - 20 years  |
| 7 | What thought has been given to ensure decarbonisation projects (i.e. a 1.5MW Roof mounted solar on a Hospital connecting at 11kv) are not impacted by a TIA or will have space reserved in one of the "buckets" put forward by NESO based on Need?        |
| 8 | Assuming the Connection and Use of System Code (CUSC) connection mods get signed off, do you think the Distribution Connection and Use of System Agreement (DSUSA) will then change its process to mirror the CUSC? How long do you think that will take? |
| 9 | How does the creation of GB Energy affect Distribution System Operator (DSO) work?  |

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