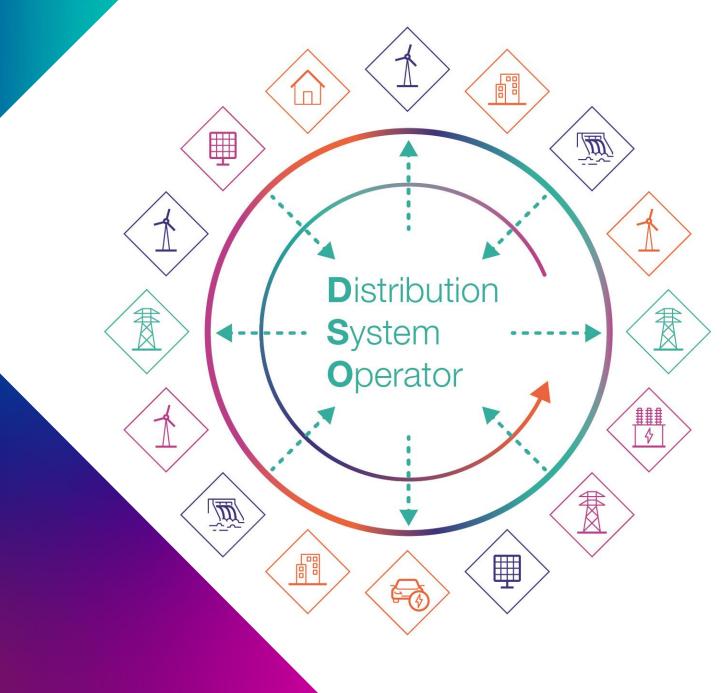


Electricity Futures Series

Shaping the future together

19th September 2023



Welcome and housekeeping



No planned fire drills.



There will be three 'sprint' sessions with breakout discussions at your tables afterwards.



There is a plenary session at the end which will give you an opportunity to ask questions.



We will be taking some photos. If you are not comfortable, please make yourself known to the team.



Please ensure that all mobile phones are on silent.

Agenda

- 10:00 Welcome and introduction, Cordi O'Hara OBE, President, National Grid Electricity Distribution
- 10:10 Fireside Chat with Akshay Kaul, Director General Infrastructure, Ofgem
- 10:30 Introducing National Grid DSO, Ben Godfrey, Director of DSO, National Grid Electricity Distribution
- **10:45 Sprint 1:** Flexibility Market Development
- 11:20 Sprint 2: Network Operation
- 11:50 Coffee break
- **12:05 Sprint 3:** Planning and Network Development
- 12:35 Expert panel with Ofgem, EV. Energy, West Midlands Combined Authority, and National Grid DSO
- **13:05** Wrap Up
- 13:10 Lunch and networking







President, National Grid Electricity Distribution



Welcome to **Electricity Futures**



Shaping the Future Together

19th SeptemberQEII Westminster



Supporting Regional Ambitions

16th November Virtual



Governance for Net Zero

31st January
IET London



Ensuring Continued Success

28th March

Battersea Power Station





Introducing National Grid DSO

Ben Godfrey

Director of Distribution System Operator



Introducing National Grid DSO

Director of Distribution System Operator

Head of DSO Strategy and Stakeholder Engagement

Centralised stakeholder engagement and DSO strategic direction **DSO Policy**

Internal policy
managing
DNO-DSO interface
and industry code
development

Head of Commercial and Operability

Flexibility Market development, procurement and operations

Head of Modelling and Analysis

Primary and
Secondary system
modelling tools, and
T-D boundary
interface

Head of System Planning

Network
Development Plan,
Network Options
Assessment and
forecasting

Strong DSO, Strong Outcomes

Flexibility Market Development

- 1. Provide accurate, user friendly and comprehensive market information.
- 2. Embed simple, fair and transparent rules and processes for procuring distribution flexibility services.
- Unlocking latent network capacity
- Using commercial signals

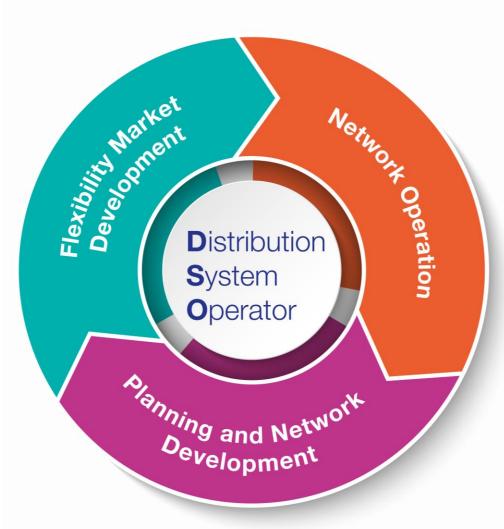
Network Operation

- Promote operational network visibility and data visibility.
- 2. Facilitate efficient dispatch of flexibility services.

- Managing electricity energy flows
- Responding to generation and demand
- Maximising agility and capacity

Planning and Network Development

- 1. Plan efficiently in the context of uncertainty, taking account of whole system outcomes, and promote data availability.
- Integrating renewables
- Enabling net zero for customer
- and communities







DSO Delivery Timeline – What we've done

Ceiling prices introduced Sustain Product Launched **Flexibility Market** 'Flexibility First' LV zones Launched First UK Distribution Named Largest **Equinox Heat Pump Development** approach adopted Flexibility Trials Flexibility Trial Flex Procurer Market Gateway Launched as BAU 2016 2017 2018 2019 2020 2021 2022 2023 Flex Trades Implemented Flexible Power **Network Operation** MW Dispatch Go Live Collaboration started 2016 2017 2018 2019 2020 2021 2022 2023 **Planning and Network Development** 10GW technical limits management **Annual DFES** First DFES report published, then published LV Network Visibility Portal every 6 months per licence area Published suite of Network customer behaviour Development First Shaping Subtransmission report published, assumptions for Plan **DSO System Planning** then published every 6 months per licence area strategic planning policy published 2016 2017 2018 2019 2020 2021 2022 2023



DSO Delivery Timeline – What's next

Flexibility Market Development

Stackability Report Oct/Nov 23

ON Commitments – pre-qualification standardisation

Enhanced Market Data

Demand Turn Up products in 2024

Network Operations

ON Commitments - dispatch API standardisation, Primacy

Enhanced curtailment modelling

Operational forecasting

DSO Operational Policy Published

Planning and Network Development

Continual Network Development Plan publications

Network Visibility Data

Local Authority Portal Tool

Enhanced network capacity data

Publish DNO:DSO interface

Open data sharing in Common Information Model format



NGED DSO Electricity Future Series

September 2023



November 2023

January 2024

March 2024

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Continued programme of events and updates

Continued engagement with Local Authorities

DSO Stakeholder Satisfaction Surveys

Flexibility Surgeries

Annual Flexibility
Consultation

Flexibility Surgeries

Network Development Plan Consultation



Our Vision

to create a decarbonised energy system for our communities that is open, accessible, reliable and affordable.



Our DSO Charter

Pillar One: Flexibility Market Development



Pillar Two: Network Operation



Pillar Three: Planning and Network Development



- 1. We will simplify interactions with our flexibility services.
- 2. We will improve the value of our flexibility services.

- 1. We will dispatch Flexibility Services in a transparent and efficient manner.
- 2. We will minimise the curtailment faced by customers on our network.
- 1. We will invest strategically across our network and always adopt a flexibility first approach.
- 2. We will align our long-term plans with customer decarbonisation ambitions.

We will lead the industry in sharing open and transparent data and engaging with stakeholders. Above all, we will be easy to do business with.

Shaping the Future Together

Three sprints, each focused one of the DSO roles. We'll kick them off with a brief presentation providing more detail on the actions we've identified for delivery within each role.

Then we'll hand over to you and our table facilitators;

- Your views on our DSO Charter
- Does it reflect your priorities?
- Does it achieve what you expect from the DSO?

- Ensure the DSO achieves its vision
- Increase visibility of our commitments to you
- Delivery prioritised to your timescales
- Meeting regional and local energy ambitions



Sprint 1
Flexibility Market
Development

Matt Watson

Head of Commercial and Operability



Flexibility Market Developments

Objectives



Simplify interactions with our flexibility services.



Improve the value of our flexibility services.



Actions



Digitise the Flexibility Procurement Process: Continue to develop our Market Gateway to digitise the full process, with APIs available for asset registration and trades.



Deliver Standardisation: Deploy the standardised Open Networks Pre-Qualification Parameters, Standard Agreement, Products and Settlement as soon as possible.



New Market Opportunities: Develop a Demand Turn Up/Generation Turn Down service.



Increase Value: Review the Delivery Periods and Baselines for our Sustain Product, as well as LV and HV stacking.



Market Alignment: Produce a Stackability Report to improve understanding on how our services can be stacked with the wider market and suggest changes where needed.



Data & Information: Review and improve the service requirement data we publish to ease access.



Sprint 2
Network Operation

Matt Watson

Head of Commercial and Operability



Network Operation

Objectives



Dispatch Flexibility Services in a transparent and efficient manner.



Minimise the curtailment faced by customers on our network where economic.



Actions



Better Decision Making: Recruit a strategic partner to help us develop our service selection capabilities and tooling.



Improved Efficiency: Develop and implement operational forecasting capabilities to better target our dispatches.



Reducing Curtailment: Implement processes to review the requirements for curtailment to support outages.



Deliver Standardisation: Deploy the standardised ON Dispatch API as soon as possible.



Whole System Coordination: Continue to develop and implement ON Primacy rules. Provide wider visibility and control of DER to the ESO to enable faster more efficient connections.



Coffee break

15 Minutes





Sprint 3
Planning and
Network Development

Oli Spink

Head of System Planning



Planning and Network Development

Objectives



Demonstrate evidence of delivery of strategic investment across our network.



Adopt flexibility first approach to all strategic investment decisions.



Ensure the decarbonisation plans of our customers are incorporated into our long term plans.

Actions



Network opportunity mapping: Improved open data for customers to undertake network assessment and curtailment analysis.



Accelerating connections: Reduce the impact of transmission interface on distribution generation connections.



Data & Information: Continue to improve CIM model publication, including secondary networks.



Transparency of strategic plans: Publish suite of documents outlining how we plan to develop our network.



Stakeholder engagement: Ensure that the future needs of our customers are included in our network development plans.



Demonstrate delivery: Deliver reinforcement/conventional build solutions in anticipation of projected need.



Panel Session

Chaired by

Simon Virley

Head of Energy and Natural Resources, KMPG



Expert Panel

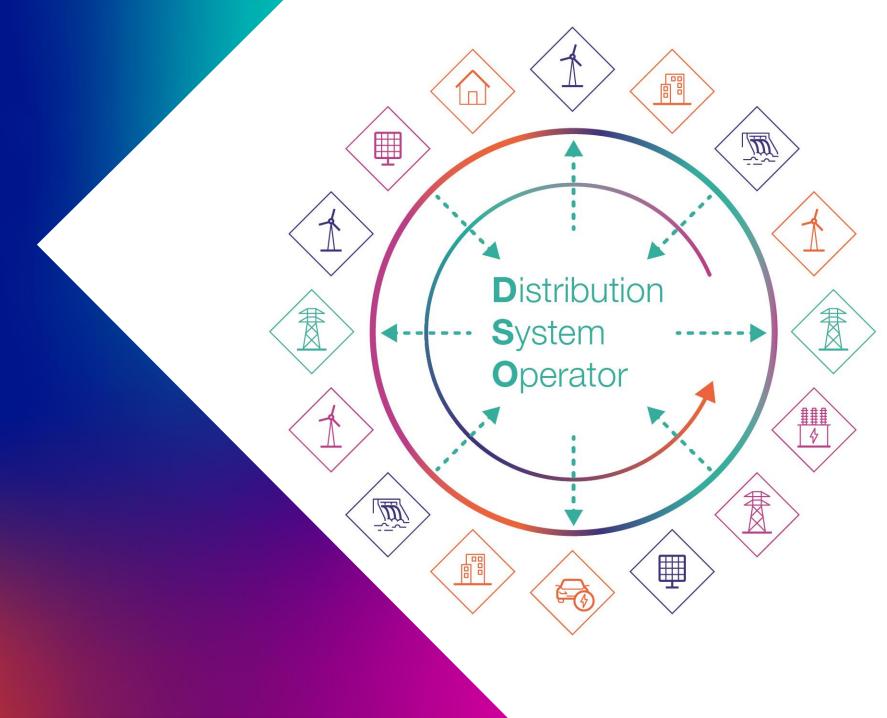
- Fiona Campbell Head of DSO Governance, Ofgem
- \(\hat{\dots}\)
- William Goldsmith Head of Grid and Data Services, EV. energy
- å
- Kate Ashworth Energy Infrastructure Lead, West Midlands Combined Authority
- <u>^</u>

Ben Godfrey Director of DSO, National Grid Electricity Distribution



Electricity Futures Series

Thank you



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