# Electricity Futures Series

Governance for Net Zero
31 January 2024

 $\widetilde{\mu}$ Distribution System **O**perator 

DSO national grid electricity distribution

## Welcome and housekeeping

## **In-person**



No planned fire drills



There will be two breakout discussions hosted at your tables



There will be a panel discussion session at the end which will give 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

### **Online**



Please mute yourselves during the presentations



If you have any questions, please use the chat function



You will be moved automatically into your breakout rooms



## Agenda

10:30	Welcome and introduction, Cordi O'Hara OBE, President, National Grid Electricity Distribution		
10:50	External governance landscape and outlook, Kayte O'Neill, Chief Operating Officer, ESO and Janine Michae Deputy Chief Executive, Centre for Sustainable Energy		
11:45	Coffee break		
12:00	NGED's internal governance story so far, Ben Godfrey, Director of DSO and Phillipa Slater, Director of Asset Management and Ops Support, National Grid Electricity Distribution		
12:50	Panel discussion: Introducing the role and Chair of NGED's DSO Panel, Chaired by Steve Jennings Advisor and Non-Executive Director		
13:25	Wrap up, Cordi O'Hara OBE, President, National Grid Electricity Distribution		
13:30	Lunch and networking		

# Welcome and introduction



## Cordi O'Hara OBE

President, National Grid Electricity Distribution

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## Welcome to Electricity Futures – Governance for Net Zero



Shaping the Future Together

**19**<sup>th</sup> **September**OEII Westminster



Supporting Regional Ambitions

16<sup>th</sup> November
Virtual



31st January
IET London

Zero



28<sup>th</sup> March
Battersea Power Station

Continued programme of events, stakeholder engagement and updates

## **Our DSO Vision**

To enable and coordinate a smart, flexible energy system that facilitates local decarbonisation for all customers and communities, at the right time and lowest cost

## Our DSO year in review - 2023



**10 GW** additional capacity for renewable energy projects





**213** net zero surgeries held, resulting in 168 local authority engagements

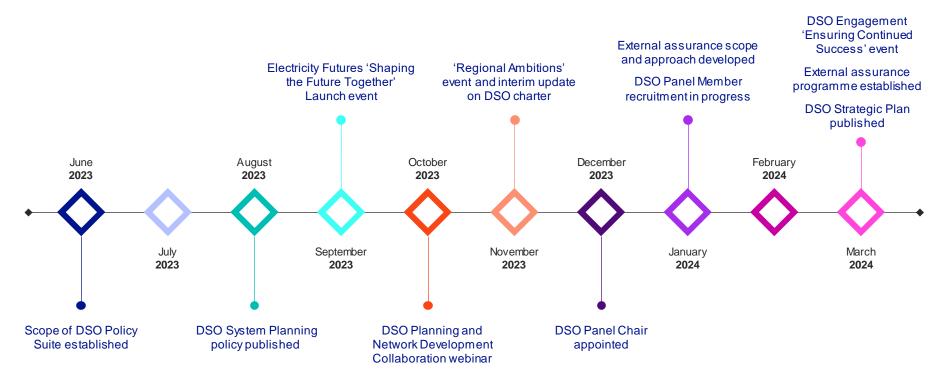


**19.9 GWh** of flexibility availability procured with 19,506 dispatch events

**Opportunity to defer £80 million** investment in conventional reinforcement through our flexibility programme to deliver consumer savings

**115** DSO stakeholder organisations engaged through our Electricity Futures event series

# We are establishing DSO governance measures needed to facilitate local decarbonisation for customers and communities



The external governance landscape and outlook

Kayte O'Neill

Chief Operating Officer, ESO

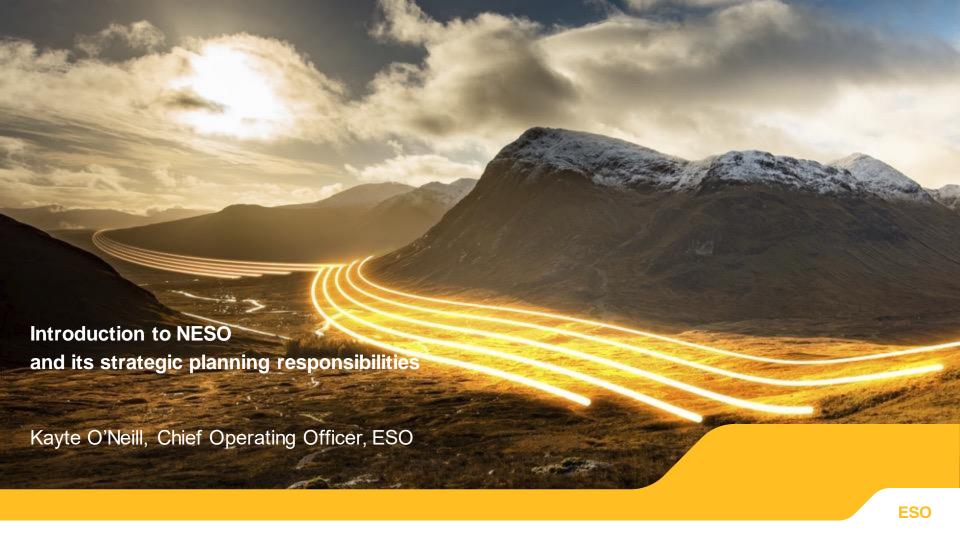
**Janine Michael** 

Deputy Chief Executive, Centre for Sustainable Energy

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## Introduction



Kayte O'Neill
Chief Operating Officer

## What we are going to cover today

How we are setting up the FSO: governance and responsibilities

Overview of our future strategic planning responsibilities

Focus on regional energy strategic planning

# NESO to be established as a public corporation, independent from industry and Government



1,800 people on day 1

## NESO will deliver significant additional value across the whole system from Day 1

	Day 1	Full ambition	
STRATEGIC PLANNING	Plan gas and electricity networks	Provide whole system view of the energy sector	
MARKET DEVELOPMENT	Support DESNZ with market development across gas and electricity	Advise on whole energy market strategy	
RESILIENCE & SECURITY	Identify resilience risks and opportunities across the whole system	Coordinate emergency response Enable security of supply	
ENERGY INSIGHTS	Deliver energy insights and advice to Government	Advisory grows into new vectors	

# As the Strategic Energy Planner, NESO will act as a body independent of asset owners to coordinate system design and planning efforts across the energy system

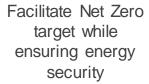


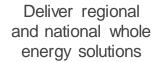
For the first time in industry, we will **coordinate system design and planning efforts across the whole energy industry** so planning and investment decisions can be optimised to deliver GB's net zero objectives at the most equitable cost to consumers.

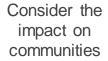
Our three overarching roles are the following:

- Strategic Spatial Energy Planning
- Centralised Strategic Network Planning
- Regional Energy Strategic Planning











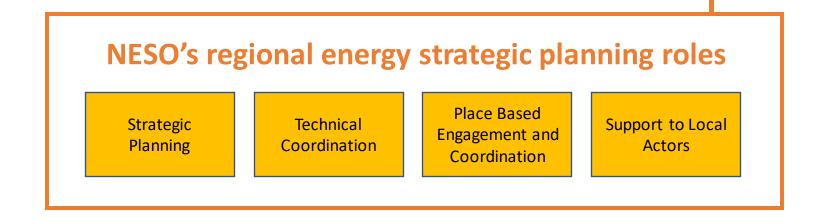
Consider the impact on the environment



Consider costs to consumers and deliver economic strategies

# It's still early days for regional energy planning... Ofgem published their <u>decision</u> relating to local energy institution and governance on 15 November 2023

- 10-13 Regional Energy System Planners across GB
- NESO appointed as the delivery body for Regional Energy Strategic Planning
- Target to set RESP up by late 2025/26
- Detailed design led by Ofgem in 2024



Regional Energy System Planners are being set up to "Ensure energy distribution networks support and enable the efficient delivery of net zero at a local level"

We will do this by

- · Driving consistency of approach for regional energy planning
- Aligning national and local energy plans
- Ensuring cross-vector consistency.
- Having local legitimacy
- Providing support to local actors

Our focus now: working with Ofgem and stakeholders to design the right governance for regional energy strategic planning



## Let's continue the conversation!



Your ESO Contacts



FSO Webinars starting next week



FSO Website and email inquiries

# A PLACE-BASED PERSPECTIVE ON REGIONAL ENERGY STRATEGIC PLANNERS (RESP)



Janine Michael, Deputy Chief Executive Centre for Sustainable Energy



## **ABOUT CSE**



## **Objectives & activities**

CSE's vision is a world where sustainability is second nature, carbon emissions have been cut to safe levels, and fuel poverty has been replaced by energy justice

Our work focuses on societal change – we support people and organisations across the UK to tackle the climate emergency and end the suffering caused by cold homes – sharing our knowledge, practical experience and policy insights.



## **KEY PERSPECTIVES ON RESP**



- Significance of RESP for Local Stakeholders and Communities
- Considerations for accountability and local engagement
- RESP design considerations for NESO and Ofgem



# SIGNIFICANCE OF RESP FOR LOCAL STAKEHOLDERS & COMMUNITIES



- Governance structures that own the planning for a Net Zero energy system nationally and regionally are welcome
- Whole system is vital if potentially messy in the near term
- Challenge will be to ensure next steps and progress can continue and increase in pace
- RESP could fill the governance gap that many LAs and LAEPs have not yet developed
- RESP should enable geographic gaps to be filled and more consistency in approaches
- Could RESP support via data ownership and capacity building support for LA?

# CONSIDERATIONS FOR ACCOUNTABILITY AND LOCAL ENGAGEMENT



- Impartiality from government and political interests is good but conflicts (and perceptions of conflicts) need to be managed through transparency of decision making
- Boundary setting following political and LA boundaries is welcome
- Capacity and skills issues associated with net zero vary enormously between different size and types of LA.
   This will affect the capacity of LAs to engage
- The planning system is an important level and RESP could help feed into regional spatial plans currently absent in England
- Planning is also devolved down to districts by county councils need to recognise that these are smaller bodies with less resource to engage with RESP
- Local authorities are not the only stakeholders or catalyst for net zero community groups, businesses, LEPs need a voice
- Synergise with what DNOs/GNOs/DSOs are already doing on stakeholder engagement

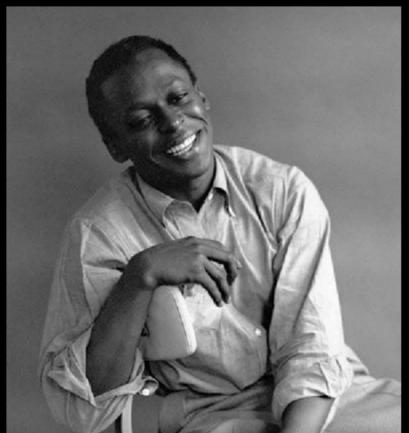
# RESP DESIGN CONSIDERATIONS FOR NESO AND OFGEM



- Powers and role of the RESP need to be clear so expectations can be managed. Just strategic planning? Or coordinator and catalyser of action? Presumably not a delivery agent
- Relationship to NESO, the transmission grid and large local infrastructure developments
- Top-down vs bottom-up planning LAs and DSOs need reliable and detailed local plans
- LAEPs are good but variable, geographically patchy and expensive
- Planning for net zero needs to become a continuously refreshed process
- Recognise what knowledge and progress already exists existing bodies/structures (e.g. LEPs, combined authority programmes, regional net zero hubs, best practice within DSOs already for working with LAs, local exemplar net zero stakeholder engagement processes)

# It's going to be more jazz than Mozart...







The external governance landscape and outlook

**Group discussion** 

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The external governance landscape and outlook

**Electronic voting** 

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## Coffee break



15 minutes

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NGED's governance story and outlook



Ben Godfrey
Director of DSO

Phillipa Slater

Director of Asset Management and Ops Support

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## Our DSO activity has the potential to deliver a wide range of positive outcomes for the customers and communities we serve



Our vision as DSO is to create a smart, flexible energy system that facilitates local decarbonisation for all customers and communities, at the right time and lowest cost



Facilitate ambitious local decarbonisation efforts by partnering with and providing data and tailored support to over 130 local authorities delivering LAEPs. We are also providing tailored support to connect 150 community energy schemes



Accelerate development of flexibility markets and significantly expand access to maximise the benefits of demand side solutions. We will offer easier access to extensive data and ensure this can be tailored to customer requests



Defer conventional reinforcement delivering at least £94 million in savings to customers. We will keep costs low by only reinforcing the network where there is no alternative



Provide additional capacity for customers to connect LCTs easily and without delays. We will enable at least an additional 1.5 million electric vehicles and 600,000 heat pumps



# Clear and effective governance is central to enabling NGED DSO to deliver our core functions and drive positive outcomes for consumers and the energy system



## Flexibility Market Development

- Collaborate w ith industry stakeholders to simplify and standardise how we procure our flexibility services
- Coordinate across the w hole system to deliver new market opportunities and reduce barriers to entry for all customers



#### Network Operation

- Facilitate w hole system coordination that improves efficiency and transparency of decisionmaking
- Continuously improve our data, technology, and processes to operate a responsive and dynamic network



## Planning and Network Development

- Maximise 'hidden' capacity
- Ensure network investment is delivered when it's needed at the low est cost to consumers
- Collaborate and coordinate across the w hole system to help stakeholder achieve their decarbonisation plans

Clear and effective DSO governance means...



**Executive-level accountability** and board-level visibility of key DSO decisions



**Clear and separate decision-making frameworks** for DSO including articulation of DNO:DSO interfaces



**Transparent processes** for seeking and responding to input from stakeholders



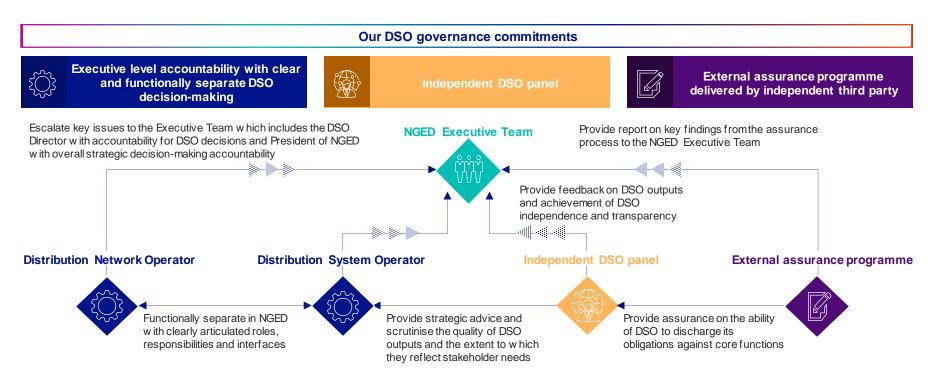
**Independent oversight and scrutiny** of decision-making processes and outcomes



# We continue to stride forward in delivering our core DSO functions, whilst achieving key DSO governance milestones

		2022	2023	2024
	Governance	✓ DSO and DNO functional separation completed	<ul> <li>✓ DSO Charter published</li> <li>✓ DSO system planning policypublished</li> <li>✓ Independent DSO Panel Chair appointed</li> </ul>	<ul> <li>✓ Establish full DSO Panel</li> <li>✓ Publish full suite of DSO Policies</li> <li>✓ Establish external assurance process</li> <li>✓ Publish DSO Strategic Plan</li> </ul>
£ <i>]</i> ]	Flexibility Market development	✓ Named largest flexibility procurer	<ul> <li>✓ Ceiling prices introduced</li> <li>✓ Sustain Product launched</li> <li>✓ LV Zones launched</li> <li>✓ Market Gateway launched</li> </ul>	
	Network operation		<ul><li>✓ Flex trades implemented</li><li>✓ MW Dispatch Go Live</li></ul>	
×	Planning and network development	✓ Network development plan published	<ul> <li>✓ 10GW technical limits management</li> <li>✓ LV Network Visibility portal</li> </ul>	<ul> <li>✓ Publish Network Development Plan in Q1 2024</li> <li>✓ Updated DFES issued</li> </ul>

# We have made substantial progress against our commitments to enable efficient, transparent and functionally-separate DSO governance and decision-making



# There is a need to strike a balance between both DSO and DNO objectives to deliver optimum outcomes for consumers and operate a safe and secure network

Across NGED, we are balancing DSO and DNO objectives to support development of a smarter system that enables decarbonisation for customers and communities, whilst maintaining a safe, reliable network and minimising costs to consumers

### Key Ofgem objectives

#### **Distribution System Operator (DSO)**

- Plan efficiently taking account of whole system outcomes, and promote planning data availability
- ✓ Facilitate efficient dispatch of distribution flexibility services
- Provide accurate, user-friendly and comprehensive market information
- Embed simple, fair and transparent rules and processes for procuring distribution flexibility services

#### **Distribution Network Operator (DNO)**



- ✓ Meet the needs of consumers and network users
- ✓ Maintain a safe and resilient network
- ✓ Deliver an environmentally sustainable network

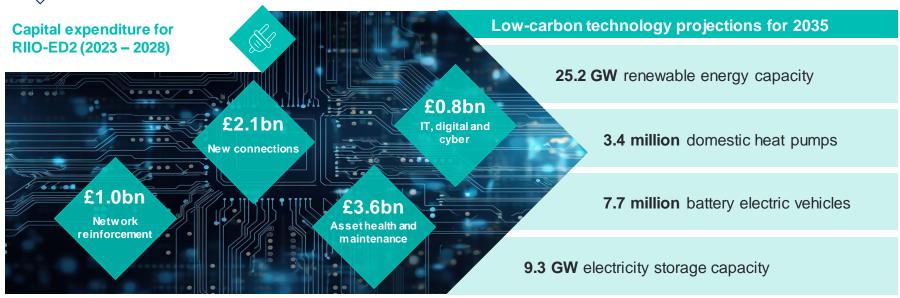




# Effective operation of the DSO:DNO interface will be key to optimising delivery of £7.5 billion of capital investment, where and when it is needed in RIIO-ED2



Projected spend on network reinforcement is expected to rise by over 100% from the RIIO-ED1 period alongside rising connections and non load network investment in order to build out the infrastructure needed enable the UK's drive to net zero



Low -carbon technology projections are totals across NGED's distribution areas in the Leading the Way scenario fromour latest 2024 Distribution Future Energy Scenarios (DFES)



# Our governance approach aims to enable efficient and transparent decision-making and outcomes

#### Our approach will drive key organisational changes...

Sufficient focus on DSO and building the relevant capabilities

A cultural transition for NGED as we move towards a smart, flexible energy system

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#### **DSO** function

#### **Network modelling**

Provision of network models, derived datasets, and network analysis tools

#### Forecasting and capacity

Responsible for forecasting customer load and strategic planning of the distribution system

#### **Flexibility**

Responsible for the commercial and operational aspects of using Flexibility Services to alleviate distribution system constraints

Our governance approach is focused on delivering optimal interventions as one organisation whilst balancing both DNO and DSO function objectives, requiring us to consider key strategic trade-offs such as...

- Traditional reinforcement vs flexibility
- Network needs vs wider system needs
- Asset utilisation vs system optimisation



#### **DNO** function

#### Detailed network design

Detailed network design including estimated costs to permit costbenefit analysis by the DSO

#### Asset planning and delivery

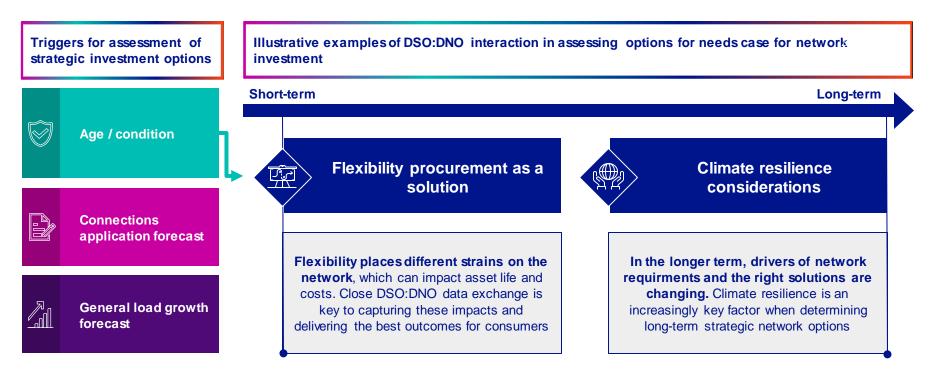
Sole-use assets, asset replacement, network rationalisation, diversions, non-urgent fault repairs and works

#### System integrity and reliability

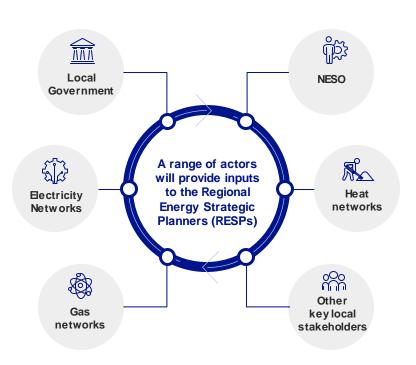
Ensuring the network is safe and reliable via assessment of asset health



A close relationship between DNO and DSO is key to working through the objectives and challenges of both functions to achieve the best outcomes for consumers



# As wider governance arrangements evolve, RESPs will play a critical role alongside DSOs and key local stakeholders in driving the transition to net zero



#### Key questions on the RESP detailed design remain



Governance model and operational structures  How to ensure the governance model and operational structures drive coherence across regional and national decarbonisation objectives?



Regulation

How should RESP performance be monitored and assessed?



Democratic representation

- How to ensure RESPs embed democratic representation?
- What should the RESPs' role in supporting local stakeholders be? How should this interface with support offered by electricity networks?



- How should RESP plans and decision-making interact with electricity and gas network price controls?
- How should RESP plans interact with other strategic plans at local and national levels?

NGED's governance story and outlook

**Group discussion** 

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NGED's governance story and outlook

**Electronic voting** 

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Introducing the role and Chair of NGED's DSO Panel

Panel discussion chaired by Steve Jennings

Advisor and Non-Executive Director

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# The role of our DSO Panel will be to strategically advise on the activities and outputs of NGED DSO



Our DSO Panel will be responsible for providing strategic advice to NGED DSO on the quality of its outputs and the extent to which they reflect the needs of DSO stakeholders, helping to deliver a positive impact on the GB energy system



Provide independent view on governance



Challenge activities and progress



Provide trusted feedback



Guide DSO Panel priorities



Facilitate effective communication

#### **Incoming NGED DSO Panel Chair**



Regina Finn

Director, Lucerna Partners and Chair of the LCCC and the Electricity Settlement Company

# Our expert panellists here with you today to discuss DSO governance and our incoming NGED DSO Panel



Steve Jennings
Advisor and NonExecutive Director



Regina Finn

Director, Lucerna Partners and Chair of the LCCC and the Electricity Settlement Company

Incoming NGED DSO Panel Chair



Ben Godfrey
Director of DSO, National Grid
Electricity Distribution



Marzia Zafar

Deputy Director, Energy System Digitalisation and Decentralisation, Ofgem



Bridget Hartley

Head of Regional Energy Strategic Planning,
National Grid Electricity System Operator



# **Next steps**



President,

National Grid Electricity Distribution



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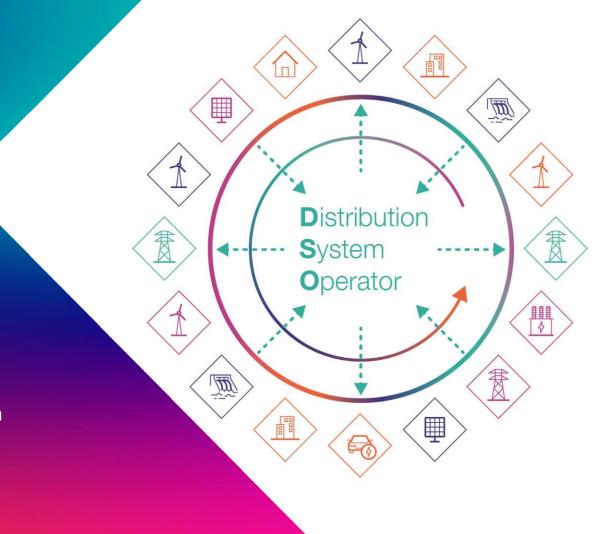


Register your interest for the final event in our Electricity Futures Series



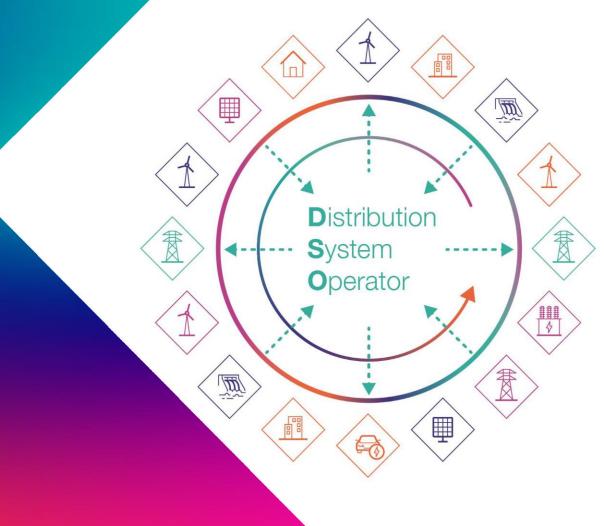
Ensuring Continued Success
28 March, Battersea Power Station

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# Electricity Futures Series

Thank you



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