

Mark Shaw

ED Transformation Lead

September 2022

national**grid**



Agenda

INTRO AND WELCOME	10.00 - 10.15
SESSION 1: A SMART AND FLEXIBLE NETWORK, COMMUNITY ENERGY, CONNECTIONS & INNOVATION	10.15 - 11.05
SESSION 2: ENVIRONMENT AND SUSTAINABILITY	11.05 - 11.45
BREAK	11.45 - 12.05
SESSION 3: CUSTOMERS IN VULNERABLE SITUATIONS, SOCIAL CONTRACT, CUSTOMER SERVICE	12.05 - 12.45
SESSION 4: NETWORK RESILIENCE, SAFETY, IT & CYBER, WORKFORCE RESILIENCE	12.45 - 13.25
WRAP UP	13.25 - 13.30
CLOSE	13.30

Who we are

National Grid – the new name for Western Power Distribution

- We are part of the largest electricity transmission and distribution business in the UK
- We distribute power to 8 million homes & businesses, covering the East and West Midlands, South Wales and South West England
- Our vision is to enable net zero, while continuing to safely operate a reliable network, whilst ensuring that this is affordable for our customers
- We will do this by delivering excellent customer service, by keeping the lights on and ensuring customers can have a connection when they want it.



What we do

We are responsible for performing five core tasks. These are to:



Keep the power flowing

by operating and protecting our assets



Maintain equipment

so that the network remains reliable



Fix the network

if the equipment gets damaged or is faulty



Connect customers

by utilising existing capacity or upgrading our network



Operate a smart system

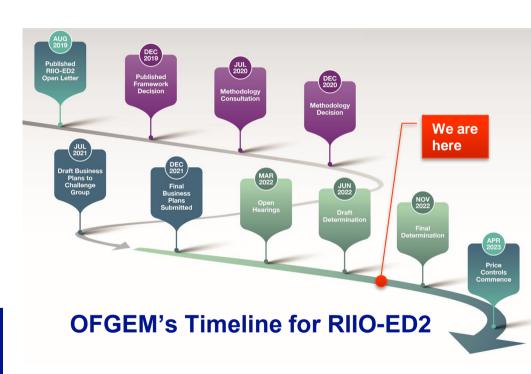
by managing two way power flows and flexibility services

What is RIIO-ED2?

- Ofgem regulates how much revenue we can earn and what we must deliver in 'price control periods'
- "RIIO-ED2" will cover the 5 years 2023-2028
- We have submitted a Business Plan shaped by our stakeholders - setting out, in detail, what we propose to deliver in our commitments, how this benefits our customers and stakeholders and how much it will cost.

"RIIO-ED2":

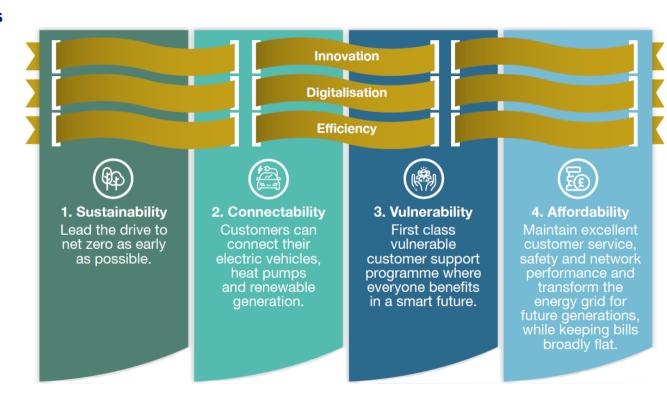
Revenue = Incentives + Innovation + Outputs (Electricity Distribution 2)



An ambitious plan for the future

A transformed energy network to drive net zero by as early as 2028 across our region

- Four overarching outcomes for our customers
- 42 core commitments cocreated with 25,000 stakeholders
- £6.7 billion investment for our customers required to deliver net zero
- £1.4 billion expenditure increase, but keeping bills broadly flat
 - Thanks to huge efficiencies, innovation & digitalisation



Draft Determination outcomes

How Ofgem's proposals impact the investment and ambition of our Business Plan



We asked for £6.7 billion (difference = ~£1.3 billion). Ofgem's determination equates to approximately £11 savings per annum for the domestic customer

- For RIIO-ED2 we have currently have £1.06 billion to spend each year which is still slightly higher than in RIIO-ED1
- Some of the £1.3 billion has moved to uncertainty mechanisms (Around £300 million for load related expenditure & cyber security).
- We were the only company rewarded in the Business Plan Incentive

Draft Determination impacts

Overall the Draft Determinations, while very tough, are a platform to work closely with Ofgem to achieve the very best outcomes for our customers



However if there is no movement we seemingly face two options:

1) Deliver all 42 commitments but at a reduced level: reduce the scale of our delivery and ambitions across all commitments by ~20%

2) Deliver a smaller number of commitments overall and drop some stakeholder priority areas: Prioritise the top commitments only (e.g. network reliability and safety) do not deliver 5 to 10 commitments in their entirety

What a reduction in investment could mean

Ofgem's proposed ~20% reduction in total expenditure could result in reduced customer outputs which our stakeholders strongly supported

SUSTAINABILITY

Our stakeholders are crystal clear that they want us to become a net zero business by 2028, encouraging others to follow our lead.

The draft determination will potentially:

- Delay our ability to be a net zero business from 2028 to 2035
- Add 2 to 5 years to local stakeholder net zero goals

RELIABILITY

Stakeholders tell us reliance on electricity is more important than ever – with major increases in the volumes of people working from home. Therefore investment in the grid is essential.

- Result in lower volumes of resilience tree cutting which is counter to the push for more resilient networks and is likely to lead to more outages.
- For overall network reliability, reducing fault spend will result in longer interruptions for customers

VULNERABILITY

Our plan proposed to help 113,000 fuel poor customers to directly save more than £60 million as a result of our support schemes.

 Result in a potential £11 million reduction in savings and 21,000 fewer customers supported

What we need from you today

Our customers face very challenging times, we need your insights to help us make tough decisions around the impacts of the Draft Determination

Today we will:

- Provide you with an opportunity to help shape decisions on changes to our Business Plan Commitments
- Seek your help to re-assess the ambition of our 42 Business Plan Commitments in light of the Draft Determination and the current wider landscape in which we will be delivering
- Discuss potential changes with a wide cross-section of stakeholders
- Provide an opportunity to flag new areas for us to consider for our ongoing strategies and action plans

How we have presented the impact on our commitments

Ofgem's proposed reduction in total Business Plan expenditure is spread across our entire plan

- While Ofgem's proposed ~20% reduction is across all expenditure it will impact our Business Plan Commitments in different ways and to different extents
- For today's exercise we have illustrated a straightforward reduction for each commitment, to enable you to understand potential impacts and assess the importance of each commitment against others
- However, it should be noted:
 - Some commitments are linked to obligations and cannot be removed
 - Some commitments are also Consumer Value Propositions and will need to be delivered
 - Some commitments may be simply 'do or don't do'

We will use your insights and feedback from today in our discussions with Ofgem and to shape the decisions we make.

The format of this workshop

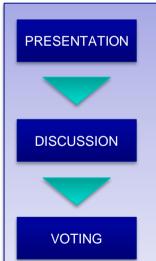
We have grouped our 42 commitments into key topic areas which we will cover in 4 sessions:

A SMART AND FLEXIBLE NETWORK COMMUNITY ENERGY, INNOVATION & CONNECTIONS

ENVIRONMENT AND SUSTAINABILITY

CUSTOMERS IN
VULNERABLE SITUATIONS,
SOCIAL CONTRACT,
CUSTOMER SERVICE

NETWORK RESILIENCE, SAFETY, IT & CYBER, WORKFORCE RESILIENCE



- For each topic group of commitments we will deliver:
 - A brief summary of the what the Business Plan sets out to deliver for the topic
 - A summary of each Business Plan Commitment and the outcome it will achieve
 - The impact of a potential ~20% reduction for the commitments
- We will break out into discussion and ask you to consider for each commitment whether we should:
 - Maintain the ambition
- Reduce by 20%

Reduce further

- Remove altogether
- If you feel the commitment is too important to change, tell us!
- If you think the commitment is no longer important in light of current conditions, tell us!
- We will then ask you to review the priorities of another group
- After each session, we'll ask you to vote on the actions you think we should take on the commitments

When you hear **this sound**, you will begin reviewing another group's priorities

The format of this workshop

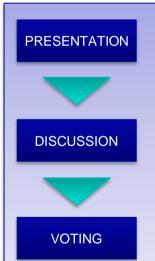
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Session 1 – A smart and flexible network, Community Energy, Innovation and Connections

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A smart and flexible network

Our RIIO-ED2 Business Plan will:

- Rapidly accelerate the connection of a greater volume of demand, generation and storage, with smarter and more active networks
- Drive ambitious Local Area Energy Plans to help communities reach net zero
- Enable wider deployment of flexibility where it is a lower cost alternative to reinforcement
- Provide independence of decision making between Distribution Network Operator (DNO) and Distribution Systems Operator (DSO)
- Embed whole energy system approaches when developing our network to deliver better customer outcomes

Stakeholder top priorities for RIIO-ED2: A smart and flexible network

Flexibility is key to providing network capacity

Information should be clear and simple for customers to participate in flexibility service provision

Provide clear, accessible, high quality data

Share data to facilitate and encourage collaboration

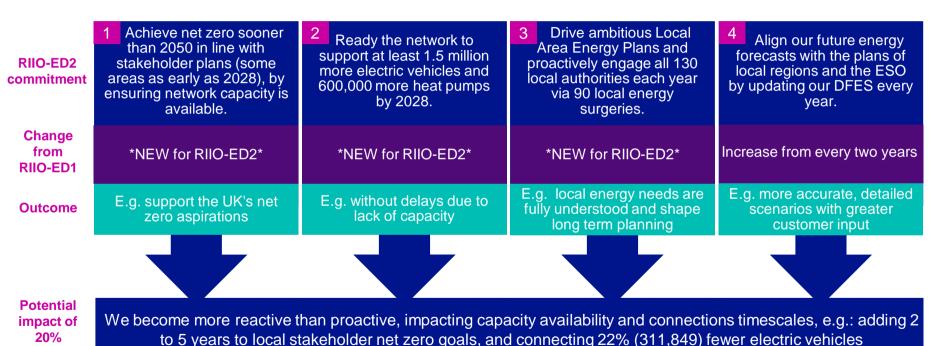
Work with other utilities and companies to provide the most effective and efficient solutions for customers.

June 2022 workshops:

"Network information must be available to tell you where the opportunities are how to be smarter"

Priority: 8.56/10

Objective: A smart and flexible electricity network with industry leading DSO capabilities and a 'Flexibility first' approach.



reduction

Objective: A smart and flexible electricity network with industry leading DSO capabilities and a 'Flexibility first' approach.

6 Utilise a whole system Keep bills as low as possible Unlock capacity from the approach for major reinforcement: and minimise the requirement for (3 regional collaboration trial existing grid, avoiding the need for RIIO-FD2 load related reinforcement by reinforcement, by stimulating the development of flexibility markets schemes by 2025 involving gas, commitment adopting a 'flexibility first' electricity, water, waste, transport approach and heating sectors) Change Increase from annual flexibility *NEW for RIIO-ED2* *NEW for RIIO-ED2* from tenders RIIO-ED1 Advanced sight and greater Provide capacity for the future Choosing the most effective option certainty of our flexibility needs of our customers in the most Outcome to minimise costs for all customers requirements efficient way **Potential** Challenging to realise whole Reduced deployment of flexibility, increasing the need for network impact of system benefits that bring down 20% reinforcement. Fewer opportunities for customers to be prosumers. customer bills in other areas reduction

Community Energy

Our RIIO-ED2 Business Plan will:

- Go significantly further with direct support for community energy, to help new schemes connect to our network
- Ensure the network can accommodate new community owned generation at scale
- Build community energy groups' capabilities to participate in, and benefit from, flexibility markets to help unlock additional capacity
- Drive innovation projects and access to funding for community energy groups

Stakeholder top priorities for RIIO-ED2: Community Energy

Support innovative approaches and new services in community energy

Support groups to access flexibility opportunities

Provide education and support

Help community energy schemes benefit from Ofgem's innovation funding mechanisms.

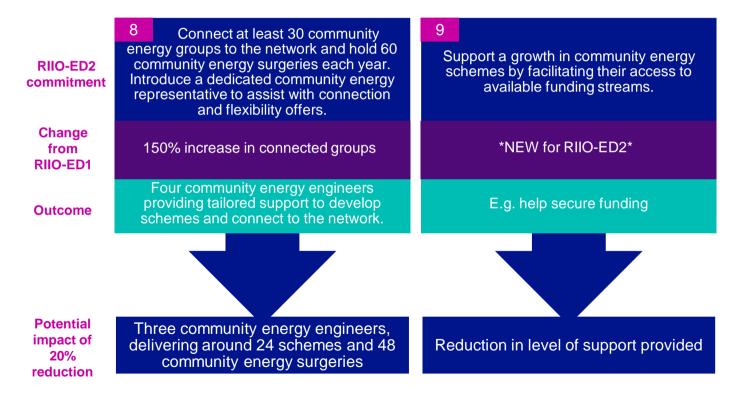
Work with community energy schemes to tackle fuel poverty

June 2022:

"There is a role for DNOs to help community energy groups to find their feet and carve out a role for themselves in this space."

Priority: **7.72/10**

Objective: Huge uplifts in community energy support



Innovation

Our RIIO-ED2 Business Plan will:

- Embed a culture of innovation across every part of our business, empowering our teams to think differently
- Roll out proven innovation projects across the organisation to enable more cost effective operations and deliver enhanced services to customers
- Deliver new projects to deliver a smart, low carbon energy transition

Stakeholder top priorities for RIIO-ED2: Innovation

Lead the way with innovation, helping to facilitate change across the industry

Lobby for change to avoid the issues that have occurred in previous national projects e.g. smart meters

Strive to collaborate with both the wider energy industry and other industries

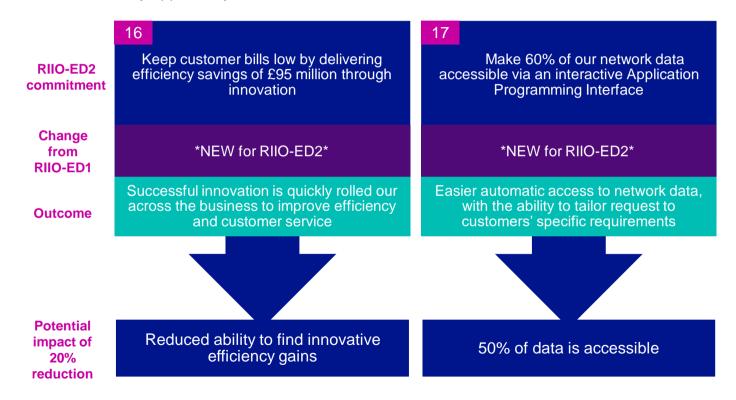
Support companies and individuals to develop projects, and work with major energy users to develop solutions to reduce current demand

June 2022 workshops:

"innovation is key and this has been very successful for [the company] so they should continue to focus on this"

Priority: 8.02/10

Objective: Innovate at every opportunity to enhance our service for customers



Connections

Our RIIO-ED2 Business Plan will:

- Use innovation and digitalisation to enable customers to easily connect their electric vehicles, heat pumps and renewable generation at huge scale, and as soon as they want
- Deliver fast and simple digital pathways for customers to notify us of Low Carbon Technologies, request connection offers and order network upgrades
- Provide quicker and cheaper connections options for customers by increasing flexible connection offers

Stakeholder top priorities for RIIO-ED2: Connections

Invest ahead of need and undertake forecasting for electric vehicle charging connections to ensure capacity

Increase the speed of the connections process

Offer more flexible connections (particularly at 11kV)

Provide clear and simple connections information for customers without technical backgrounds

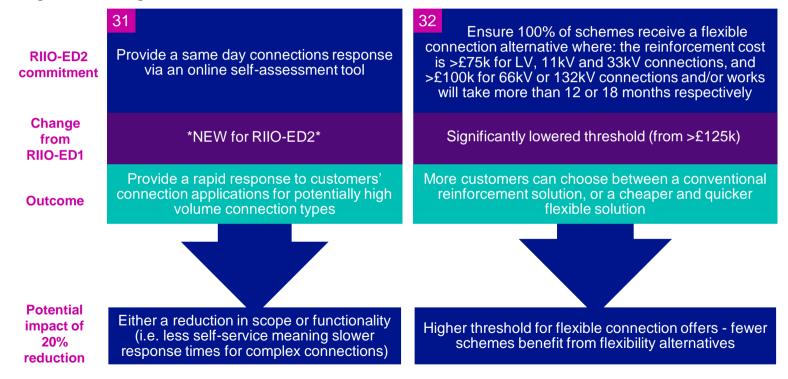
Hold local connections workshops

June 2022 workshops:

"It comes back to the timely connections and making sure that once things have been approved and set in motion, the connection goes in with agreed timescales."

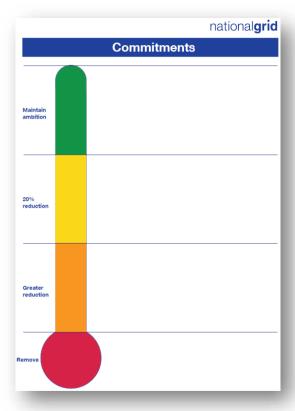
Priority: 8.29/10

Objective: Customers can easily connect their electric vehicles, heat pumps and renewable generation, to achieve the UK's net zero goals, ensuring no customer is left behind.



Feedback - questions for breakout discussion

- How should the outcome of Ofgem's Draft Determinations impact each commitment?
 - Maintain the current ambition
 - Reduce the ambition by 20%
 - Reduce the ambition further than 20%
 - Remove the commitment altogether
- Which areas / commitments are the most important for us to focus on?
- Is there anything missing we should now be considering?



Discussion Session 1

Discussion Session 2



Environment and sustainability

Our RIIO-ED2 Business Plan will:

- Put into action our social responsibility to respect and protect the environment, inspiring others to follow our example
- Lead the way in the pursuit of net zero, enabling us to become a zero carbon emissions organisation
- Embed sustainability and environmental responsibility
 within all areas of the business. Engage with business
 leaders, staff, suppliers and contractors to ultimately move
 beyond sustainability to become a regenerative business
- Enable us to reduce waste, enhance biodiversity, reduce leaks from network equipment, share best practice and work collaboratively with other DNOs and organisations.

Stakeholder top priorities for RIIO-ED2: Environment and sustainability

Set a target for zero carbon emissions from our fleet

Replace smaller vehicles with electric vehicles and larger vehicles with biogas or hydrogen

Monitor all transport associated with our business, using telematics, to reduce miles travelled

Eliminate the use of SF6 and carry out research to find alternatives

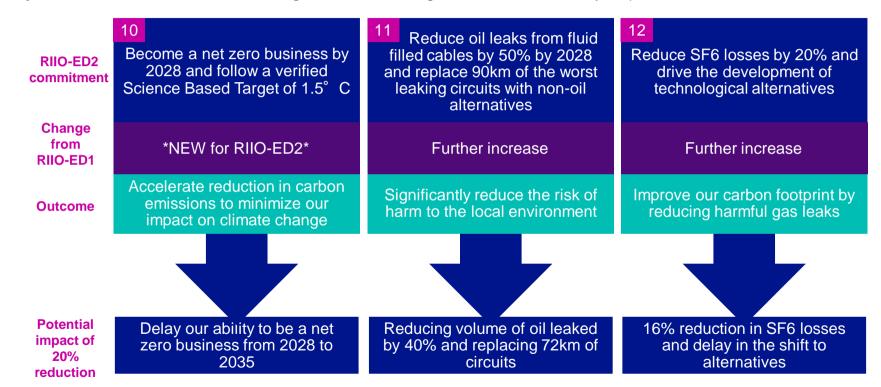
Improve biodiversity, aiming for a net gain

June 2022 workshops:

"Lead by example... [learning] needs to be shared with businesses, local authorities and other stakeholders like universities"

Priority: 8.94/10

Objective: Become a net zero carbon organisation, ensuring we are environmentally responsible

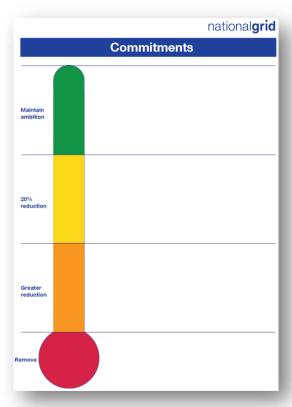


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Discussion Session 1

Discussion Session 2



Customers in vulnerable situations

Our RIIO-ED2 Business Plan will:

- Ensure vulnerable customers benefit from the smart energy transition, by removing barriers to participation
- Employ innovative tools and use data to expand the reach of our Priority Services Register (PSR) and target outreach services more effectively
- Enable us to significantly increase our support for customers in fuel poverty
- Drive new interventions and expanded partner outreach schemes to provide more holistic support, while providing a simple, 'one-stop-shop' service for customers

Stakeholder top priorities for RIIO-ED2: Customers in vulnerable situations

Ensure no one is left behind in the transition to a smart network

Develop and expand local partnerships

Facilitate better data sharing and work towards creating a centralised PSR

Educate customers & raise awareness of the PSR, via a range of methods, to increase number of sign-ups

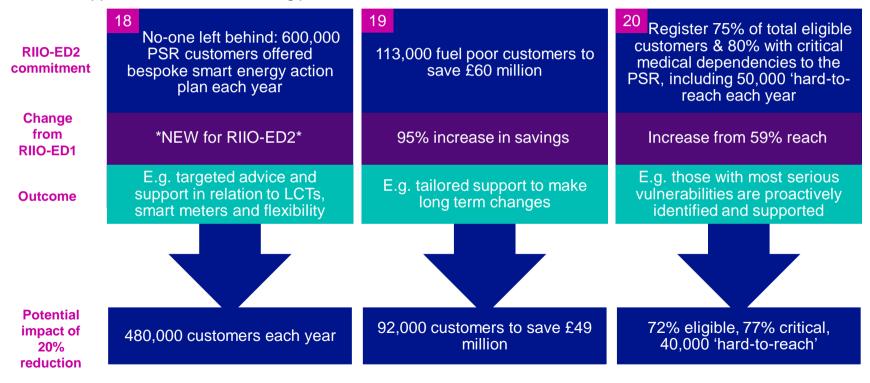
Work with Ofgem to allow data to be safely shared with other utilities

June 2022 workshops:

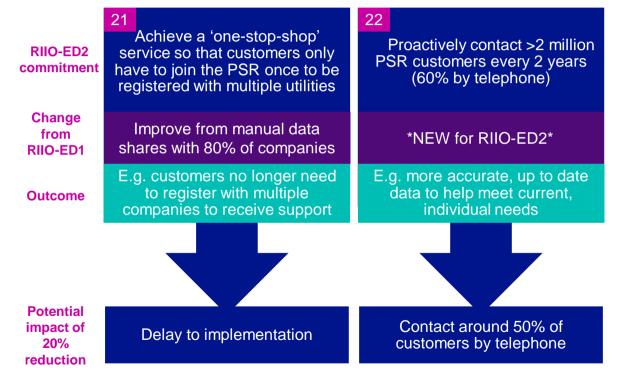
"Vulnerability and fuel poverty is very important, if people can't put lights or heating on...other things pale into insignificance."

Priority: 8.57/10

Objective: Ensure everyone benefits from a smart future, provide industry leading fuel poverty support, deliver extensive reach to support more customers during power cuts.



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Social Contract

Our Social Contract will:

- Go beyond the basic requirements set by legislation and regulation, generating wider social impact for our employees, communities and the environment
- Connect us with the communities we serve, building and maintaining trust in our service and its delivery
- Provide transparency and clarity for customers, with measurable targets and independent accreditation

Stakeholder top priorities for RIIO-ED2: Social Contract

Deliver excellent service (at a fair price).

Get the basics right (with ongoing feedback from customers).

Display excellent corporate behaviours (and governance).

Meet sustainability and climate change challenges.

Build links and a clear understanding of the communities it serves.



Objective: Have and develop an ambitious Social Contract that delivers huge value to customers

23 25 Publish an updated Social £540.000 shareholder Annual £1 million community Contract and performance funded support per year to RIIO-FD2 support fund and 1,000 report every year and maintain install solar panels on schools commitment volunteer days per year for staff our Environmental, Social and in areas of high economic to support local causes Governance rating deprivation Change from *NFW for RIIO-FD2* *NFW for RIIO-FD2* *NFW for RIIO-FD2* RIIO-ED1 E.g. support needs of local E.g. independent scrutiny and E.g. enabling reduction of carbon impact, lowering bills communities, delivering socially transparency of our Outcome responsible initiatives performance and redistribution of savings **Potential** Not impacted by funding Not impacted by funding impact of 800 volunteering days reduction reduction 20% reduction

Customer service

Our RIIO-ED2 Business Plan will:

- Enable us to continually improve customer service and respond to customer calls and enquiries quicker
- Utilise innovation to improve the efficiency and effectiveness of customer service channels and develop entirely new offerings to meet customers' expectations
- Develop digital pathways for every customer facing process, while retaining accessible, in-person contact
- Drive better understanding of customer needs to provide better tailored services

Stakeholder top priorities for RIIO-ED2: Customer service

Excellent customer service during power cuts

Timely, clear communication via a wide range of channels to suit the preferences of different customers

Ensure the same quality of performance regardless of the method of contact a customer chooses.

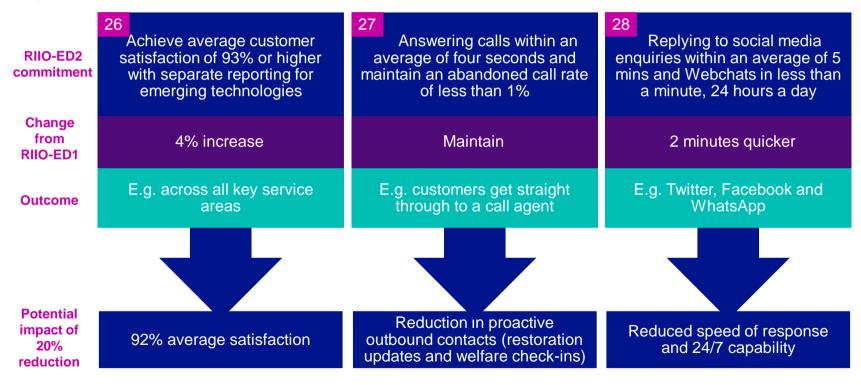
Improve information provided during planned power cuts, as well as unplanned incidents

June 2022 workshops:

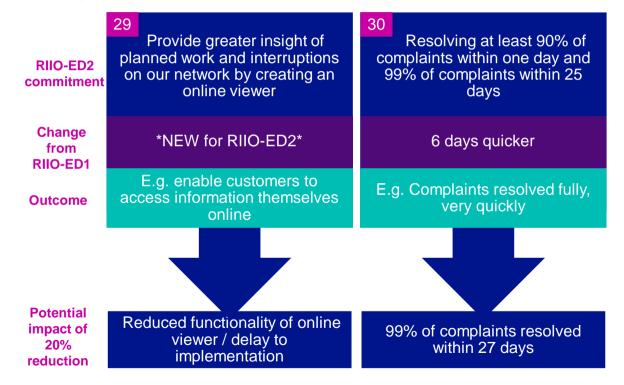
"Effective communication during power cuts is absolutely key, there's not one solution here. It's about getting it out on as many channels as possible"

Priority: 8.30/10

Objective: Deliver exceptional customer service

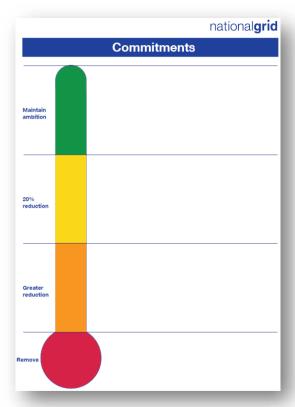


Objective: Deliver exceptional customer service.



Feedback - questions for breakout discussion

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Discussion Session 1

Discussion Session 2



Session 4 – Network resilience, Safety, IT & cyber, Workforce resilience

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Network resilience

Our RIIO-ED2 Business Plan will:

- Enable us to improve network reliability so customers experience shorter, less frequent power cuts
- Allow us to invest in the network, reducing the risk of unplanned power cuts by replacing equipment in the poorest condition
- Improve on our current performance for High Voltage faults and the service we provide to Worst Served Customers
- Use innovation to proactively identify faults before they occur

Stakeholder top priorities for RIIO-ED2: Network resilience

Create accurate forecasting models and ensure that assets can respond to future (higher) demand

Continue maintenance and replacement programme for ageing assets

Maintain Quality of Supply

Invest in the network to make it more resilient for Worst Served Customers

Maintain the health of 'at risk' assets

June 2022 workshops:

"Resilience has become a critical priority after the [2022] storms."

Priority: 8.92/10

Objective: make sure our network is reliable and that faults are resolved quickly

34 33 35 36 Improve network Invest £216 million per Improve the service for at Undertake 102 flood annum in the network to reliability so average power least 8,260 Worst Served RIIO-FD2 defence schemes and cuts are better than one counteract deterioration and Customers by undertaking commitment reduce new assets in flood interruption every two years, keep network risk similar to 70 schemes risk areas lasting less than 22 minutes. current levels Change from 42% increase in schemes Further improvement 46% increase in schemes 22% change in risk RIIO-ED1 Reduced inconvenience and A highly reliable supply of Reduced risk of unplanned Improved network resilience **Outcome** electricity and lowest ever disruption for Worst Served to severe flooding power cuts power cut levels Customers **Potential** 17.6% change in risk 56 schemes, impacting impact of Average duration less Undertake 81 flood 6,600 Worst Served Not changing some poor 20% than 23 minutes defence schemes Customers condition assets reduction

Safety

Our RIIO-ED2 Business Plan will:

- Continue to improve upon our leading safety performance, via inspection programmes, improvement works and staff training
- Take proactive steps to significantly reduce risk around school playing areas to keep young people safe
- Heighten our focus on electrical safety education in primary schools across our region, with an expanded programme of direct learning

Stakeholder top priorities for RIIO-ED2: Safety

Support mental health and promote a healthy work life balance

Ensure that managers lead by example

Reach out to schools to inform children about the safety hazards that surround assets

Share learning and best practice

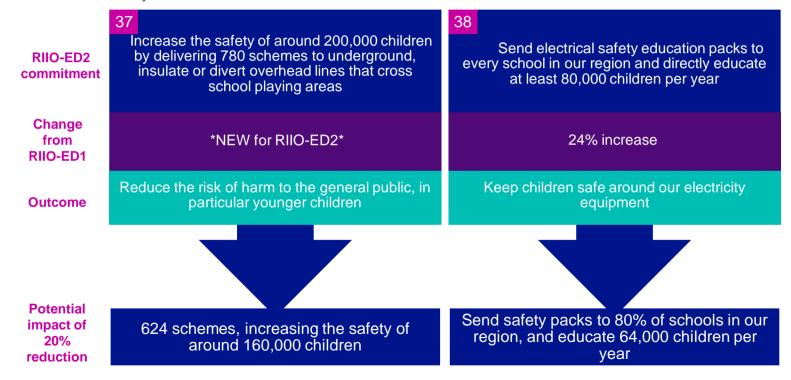
Ensure contractors comply with similar health and safety standards

June 2022 workshops:

"A few [commitments] are your core raison d'être, like safety"

Priority: 8.4/10

Objective: reduce the health and safety risks associated with our activities and inform the public to ensure they remain safe around the electricity network



IT and cyber security

Our RIIO-ED2 Business Plan will:

- Mitigate potential disruption to the network caused by cyber attacks
- Enable us to deliver digital transformation in our business, while protecting our IT systems and data from the threat of cyber attacks
- Ensure stakeholders can interact with us digitally if they choose to, including online and smart phone interaction and data sharing

Stakeholder top priorities for RIIO-ED2: IT and cyber security

Understand where the network may be vulnerable and work to put up barriers to prevent access

Ensure all systems, procedures and processes are up to date

Keep up to date on emerging threats and hacking techniques

Increase focus on network security to increase resilience

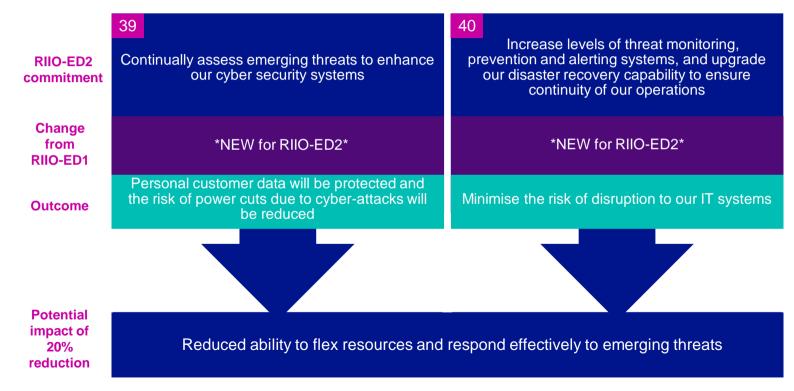
Create, maintain and test incident recovery plans

June 2022 workshops:

"Network resilience and reliability are key priorities for me"

Priority: **7.85/10**

Objective: continue to deliver cyber secure, reliable and resilient business systems



Workforce resilience

Our RIIO-ED2 Business Plan will:

- Enable us to retain and upskill a specialised, highly skilled and productive workforce
- Employ innovative approaches to attract new talent to the electricity sector
- Improve the diversity, inclusion and equity of the workforce.
- Increase the STEM (science, technology, engineering and mathematics) pipeline.

Stakeholder top priorities for RIIO-ED2: workforce resilience

Provide flexible working packages and other incentives that suit the whole working demographic

Create an inclusive environment that accommodates different working practices

Provide emotional support to build trust amongst staff

Provide clear and personalised development pathways

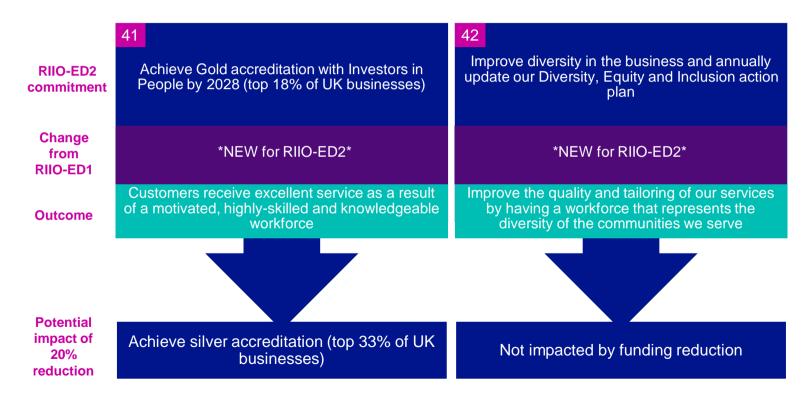
Equip managers with skills to empower other staff

June 2022 workshops:

"A lot of reinforcement is required in the network but it's all going to be required at the same time. Are we going to have the workforce to implement this?"

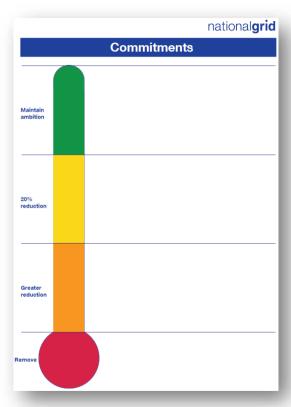
Priority: 8.13/10

Objective: maintain a safe, healthy and motivated workforce and to ensure WPD remains a 'stand out' employer



Feedback - questions for breakout discussion

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Discussion Session 1

Discussion Session 2

Electricity Distribution

Wrap up and next steps



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RIIO-ED2 Final Determinations

Ofgem are publishing their Final Determinations on DNOs' RIIO-ED2 Business Plans in December 2022

The feedback you have provided today will enable us to:

- Influence Ofgem's Final Determination to ensure we can deliver a plan our stakeholders want
- Make key decisions to re-scope the level of ambition of our commitments in light of Ofgem's Final Determination
- Identify any new areas that we should now be considering for future strategies and plans

National Grid 60

Next steps

Sharing your feedback and further opportunities to engage

- From today's events, slides and reports will be posted on: https://yourpowerfuture.nationalgrid.co.uk
- Dates for your diary, upcoming engagement events:
 - Local network investment sessions: 11 events across 5 consecutive weeks, supporting development of local area energy plans
 - Starting on the 18th of October 2022 various locations
 - Net Zero Communities Forums
 - 29th September Exeter, 7th October Birmingham
 - Annual connections workshop
 - 16th November 2022 Villa Park, Birmingham

National Grid 61

Thank you for attending

Please take a moment to fill out a feedback form about today's event

We would appreciate feedback on any of the areas discussed today. Please contact:

Richard Allcock, Stakeholder Engagement Manager Email: rallcock@nationalgrid.co.uk

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