

Welcome

Our performance against our commitments to you

It has been a challenging year with impacts on our operations from continued Covid-19 restrictions, significant numbers of energy suppliers failing in response to high energy prices, rising inflation and supply chain disruption. Weather presented a significant challenge to the business this year, with an unprecedented seven named storms. The extreme winds during Storm Arwen caused significant damage to the overhead network and we know that the impact for our customers of extended periods without electricity was enormously difficult.

These challenging periods serve to highlight the vital role that we play in delivering essential energy supplies to our communities. In this report we provide an update against each of the Business Plan Commitments we made to our customers for the current regulatory period (April 2015 to March 2023).

Our performance

Performance against our Business Plan Commitments remains at a high level. Of our 48 commitments, one has missed its annual target and three targets are currently reporting behind schedule but are forecast to be complete by 2023. All other commitments have either been completed, are on track to complete or are performing significantly better than target.

Customer service

We are proud that our Company is the only network operator group in the country to have achieved green ratings from Ofgem in all categories for each of the last five consecutive years. We continue to strive to improve our performance and provide the best possible service to our customers in the North West.

Our customer satisfaction has remained at a high level, with overall customer satisfaction at 88.7%. Performance is slightly reduced from our best ever performance last year, with an adverse impact from storm Arwen where we experienced very high call volumes. We are pleased that performance has recovered since this period and are working hard to deliver improved communication to our customers, reflecting learnings from Storm Arwen.

We hear clearly from our customers that they want us to do even more to help alleviate fuel poverty and to make sure that customers who are already economically and socially disadvantaged are not left even further behind as we move to a Net Zero economy. Our two-year pilot project with Citizens Advice Manchester is providing the insight to help shape our strategy in this area.

This year we have increased support to consumers with higher vulnerability, supported by rolling out company-wide training and the introduction of an app to allow colleagues to refer customers for additional welfare support.

Safety

The Company operates in a high hazard industry and the safety of our people and customers and protection of the environment will always remain a priority. We continue to see a sustained low level of lost time incidents, but we are never complacent when it comes to safety. Sadly, this year we experienced the tragic death in service of a colleague, who died after being hit by a car driven by a member of the public whilst doing his job as a jointer. It is a reminder to us all of the risks our colleagues take whilst serving the public.

We also continue our focus on public safety with investment programmes for rising lateral mains and blast mitigation bags for link boxes.

Connections

This year we have seen a dramatic increase in connections and service alterations for Low Carbon Technologies (LCTs) particularly reflecting an increased take up in electric vehicle ownership. We have responded by re-organising and recruiting to be able to handle the increased activity and the projected growth to ensure that we do not slow down the transition to LCTs. We measure our performance by two measures; time to quote and time to connect. In both these areas our commitments continue to meet or exceed Ofgem targets.

Network reliability and resilience

Our customers and stakeholders make it very clear that our fundamental role is to keep power flowing to customers and network users. Moving to Net Zero will only increase our dependency on electricity in all aspects of our lives.

This year we continued to improve network reliability, achieving our lowest ever level of customer interruptions (representing the number of interruptions our customers'

experience), which reduced from 30.8 per 100 customers to 25.8. Customer Minutes Lost (representing the length of time customers are without power in the event of an interruption) were their second lowest ever at 27.4.

This year the seven named storms have tested the resilience of our network. We have worked hard to minimise the risk of such events and prepare ourselves to react quickly and effectively when severe events do happen, particularly in providing support to those more vulnerable customers. However, we continue to learn from these events and later in the report we explore what improvements we have put in place following Storm Arwen and outline our proactive investment to prevent customers from ever becoming 'worst-served'.

Affordability

Affordability and cost efficiency remains a key focus area, particularly against the backdrop of significant rises in energy bills, high inflation and the impact of failing energy suppliers. We continue to work hard to deliver our obligations efficiently, including a particular focus on the use of innovation, to keep customer bills as low as possible. We have developed two leading technologies – CLASS and Smart Street, which go a long way to solving the difficulty of providing more capacity at a reduced cost, and reduced carbon impact, compared to traditional methods.

We explore later in the report all the work we are doing to help customers during the current cost of living challenge and we are proud that our element of customer bills remains below the average GB domestic bill with the average domestic customer bill at $\mathfrak{L}79$ compared to the $\mathfrak{L}95$ national average.

Sustainability

Our vision is to 'Lead the North West to Net Zero' and this year we have made a number of important steps to support delivery of this vision. This includes bringing forward more than £20m of investment for projects which will drive a green recovery from Covid-19, all geared to helping the region hit its Net Zero carbon targets.

In October, we saw our new Network Management System (NMS) go live. This significant investment in the next generation NMS and further ongoing investment in Active Network Management (ANM) will enable granular real time control of the network at all voltage levels and position the business for the next stage of the transition to provision of Distribution System Operator (DSO) activities. In December, we established a new DSO Directorate, giving us plenty of time to establish it fully in time to deliver our commitments for the next price review, RIIO-ED2.

Customer and stakeholder priorities

The fundamental challenge that the country faces is delivering Net Zero at a price people can afford. That means the whole energy system, transport system and other

interlinked systems and processes as well as domestic and business policy needs to be joined up, with each playing its part as a cohesive whole. These systems do not operate in isolation. There is very evident support in the North West for Net Zero, with Cumbria, Lancashire and Greater Manchester all committing to Net Zero before the UK's 2050 target and supporting our own plan to reach Net Zero by 2038.

To this end, during the year we submitted our ambitious stakeholder led plans for the next regulatory period, ED2. The plan was the result of the most extensive customer engagement we have ever carried out and it sets out a clear vision around Net Zero with three headline commitments in the areas of Net Zero, Network Reliability and Customer Service. We are working closely with Ofgem to achieve this balance of an affordable plan but one that remains sufficiently attractive to investors and we are currently awaiting our Final Determination.

Ensuring our business commitments continue to reflect stakeholder needs

We are committed to ongoing stakeholder engagement and recognise the proven value and insight that stakeholder relationships bring to our decision making, risk management and reputation. This year we continued to develop our ongoing discussion and challenge with our stakeholders and advisory panels around our current activities, performance and delivery of our business plan commitments, along with continued engagement around refinement of our ED2 business plan and associated strategies.

Our ED2 Business Plan includes 37 benefits and 10 outputs that we will deliver for stakeholders. These 47 commitments have been shaped by the extensive stakeholder engagement carried out as part of our ED2 planning process. We will refine these commitments through the Draft and Final determination process, working with our stakeholders to ensure that our commitments continue to reflect their priorities.

We welcome feedback on our current commitments and shaping our future priorities. Contact details can be found on the back page.



Peter Emery
Chief Executive Officer

Ensuring our Business Plan Commitments continue to reflect stakeholders' needs

There are 48 commitments to report on for 2021/22

- We have now completed the delivery of ten of these commitments
- There are no new or amended commitments in the current year
- We report our commitments across seven key areas:





















The changes that we have made to our Business Plan Commitments have been a way of ensuring that we are accountable for our performance through:

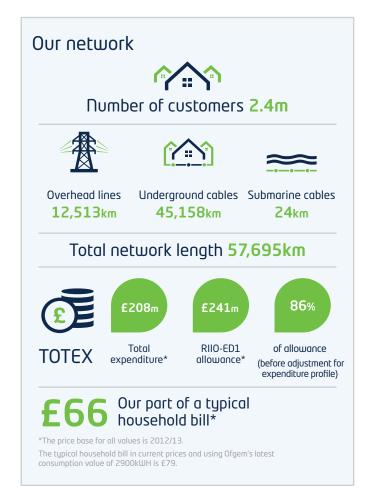
- Demonstrating public commitment of our critical role in enabling a Net Zero economy
- Demonstrating public commitment for investment targeted at high-profile public safety concerns and supporting those customers who are most vulnerable
- Amending/adding to our commitments to ensure they still reflect our understanding of the priorities of our stakeholders obtained from our stakeholder engagement programme
- Enhancing targets for commitments where additional investment has been made (the outcome of prior stakeholder engagement)
- Updating existing commitments to reflect industry evolution (licence obligation, regulation or legislation) and the resultant changes in company strategy
- Updating existing commitments to reflect the underlying investment programme being more developed (the related outcome being unchanged)

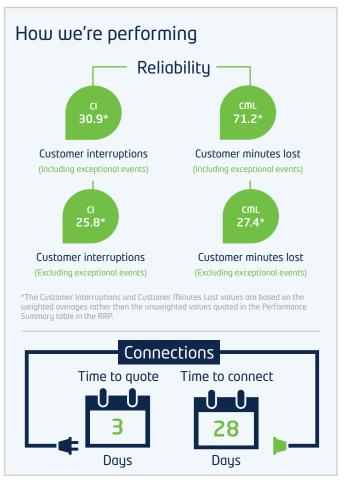
Focusing on developing our future plans and Business Plan Commitments for ED2

- Now we are approaching the end of ED1 we have been focusing our efforts into understanding and balancing our stakeholder needs for ED2
- Within our ED2 Business Plan we include 47 provisional ED2 commitments comprising 37 benefits and 10 outputs. These commitments were based on our most extensive ever stakeholder engagement programme. This engagement has shown us that reliability continues to be a top priority as well as a focus on providing additional support to electricity users in vulnerable circumstances and helping the region deliver a Net Zero future for everyone. These priority areas form the basis for the headline commitments in our ED2 Business Plan
- Our 47 Draft commitments will be reviewed in light of our Final Determination and associated feedback from Ofgem. We will also continue our comprehensive programme of stakeholder engagement to ensure that our final set of ED2 Business Plan Commitments is still reflective of their priorities

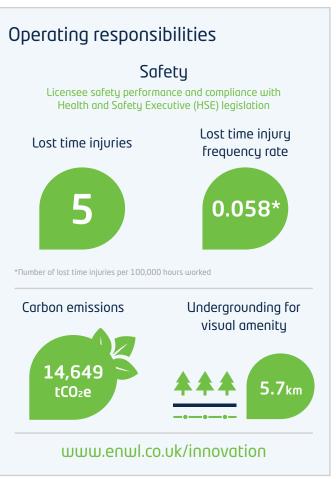
Performance snapshot to 31 March 2022







Our customer commitments Customer satisfaction Social obligations Stakeholder Engagement Scored 4.31 Pass Incentive on connections engagement (ICE) Penalties incurred under the ICE scheme NONE



Our performance in 2021/22

#1	Site security	*	Complete
#2	Safe climbing		P11
#3	Asbestos management	•	P11
#41	Management of the risk of link box failures	•	P12
#42	Rising and lateral mains	•	P12
#4	Enhanced Priority Service Register service	•	P13
#5	Improve services for vulnerable and Priority Service Register customers – services	*	P13
#6	Improve services for vulnerable and Priority Service Register customers – staff training	✓	P14
#7	Improve services for vulnerable and Priority Service Register customers – support	•	P14
#8	Responsible organisation		Complet
#9	Resilient supplies to vulnerable locations		Complet
#10		*	P15
#48		*	P15
#11	Improve overall reliability	*	Complete
#12	Improve overall availability	*	Complete
#13	Complete flood protection programme to all major sites	•	P17
#14	Network health – overall risk index	•	P17
#15	Network health – fault rate	*	P18
#16	Strategic site security		Complet
#17	Ensure all major substations have appropriate backup battery capacity	•	P18
#18			Complet
#19		•	P19
#20		*	P19
#21	Ensure that the loading risk of the network is appropriately managed – larger transformers		P20
#22		•	P20
#46		*	P21
#47	Improve overall availability	_	P21
#23	Customer survey – composite score		P23
			P24
#24			P24
#25		×	
#26	3 3		P25 P25
#28			P26
#29		<u></u> ★	P27
#30			P27
#31	Connection quotation – all other connections	*	P28
#32		*	P28
#33		*	P29
#34	Connection completion – all other connections below Extra High Voltage	*	P29
#35	Engagement – Incentive on connections engagement	<u> </u>	P30 P30
#36	Guaranteed Standards of performance		F30
#37	Reduce carbon footprint		Complete
#38	Reduce losses	✓	Complet
#39	Reduce oil lost from cables	*	P31
#40	Undergrounding overhead lines	•	P31
#43	Driving transition to DSO	•	P32
шлл	Facilitating expansion of electric vehicles	•	P32
#44			

The ten commitments that were completed in prior years have been excluded from the detailed sections that follow in this report.



Learning from Storm Arwen

Storm Arwen caused some of the worst damage to our network we have ever seen. There were almost 900 individual faults which impacted 90,000 customers across our region. While our recent investment in network automation allowed us to restore power to over 18,000 of the 90,000 customers affected within 3 minutes, the extent of the damage and difficult conditions meant a significant number of our customers were without supply for a prolonged period. Indeed, for the first 42 hours after the storm hit the region, the continuing wind meant that it was unsafe to climb. In these circumstances, there was a real focus on supporting our most vulnerable customers and the response demonstrated how we can pull together as a business to support our customers when faced with extreme events. This support included serving over 14,000 hot meals and making 17,000 welfare calls.

We recognise the disruption and anxiety that the storms caused our customers and the importance of network reliability to our stakeholders. It is therefore important we engage with our customers, listen to their feedback and take learnings where we can. Since the winter storms we have been working hard to put in place improvements to limit the impact of future storms, improve communication to customers and make our network as resilient as possible, as outlined below;



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Automation

Fitting sensors to diagnose faults remotely so we can respond sooner.

Fitting low voltage overhead line reclosers to automatically restore supplies at 250 sites by the end of 2023.

Customer information

Upgrading our Network Management System (NMS) to allow more targeted information to customers on Estimated Time of Resoration (ETR).

New app allowing customers to report damage and NMS to automatically link this to live faults.

Support to customers

Community resilience fund created to help customers during and after major incidents.

New dedicated incident roles for our leaders.

Network improvements

Working with Government to upgrade existing resilience standards to harden networks against storms through a mix of undergrounding and enhanced tree clearance

Community resilience fund

- Following Storm Arwen, many rural communities became isolated due to the level of damage affecting communication sources and access.
- We committed £500,000 to support local community centres and parish councils through a framework of offerings to allow them to support each other.
- The framework was created through stakeholder feedback and experiences from the Vulnerability Advisory Panels. Example of offerings include creating kitchen facilities, funds for food and water provision, purchase of generators for community sites etc.
- The fund was open for applications over the Summer and the funds are due to be released in the Autumn.

Our Worst-Served Customer Strategy

What is a Worst-Served Customer (WSC)?

In RIIO-ED1, Ofgem defined a WSC as being one who has experienced 12 or more high-voltage unplanned interruptions over a three-year period, with no less than three interruptions in any one year.

Our Business Plan Commitment

As part of our RIIO-ED1 Business Plan Commitments, we set out our promise on WSCs; to reduce and eventually eliminate worst-served customers, with a target completion date of the end of 2023.

Developing a proactive approach to WSC

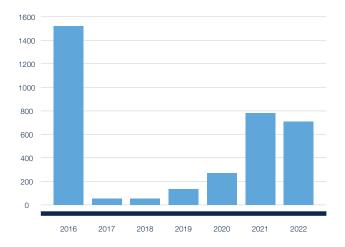
Traditionally investment in WSC has occurred at the point that a customer becomes worst-served and this approach is reinforced by the Worst-Served customer funding mechanism, which allows us to access funding where we deliver performance improvements for customers categorised under the Ofgem definition as worst-served.

During the latter half of RIIO-ED1, we have adopted a proactive approach to WSCs. This proactive programme operates alongside the traditional Ofgem WSC programme and is intended to avoid customers having to qualify as worst-served before they can benefit from the investment. Our proactive approach tracks, routinely throughout the year, customers that appear to be 'at risk' of becoming worst-served should recent performance continue – we refer to these customers as 'potential worst-served'. Where possible, using cost-effective, easy to deploy network interventions such as tree cutting or network automation, we intervene quickly, before they become WSCs. In each of the last two years, we set aside £250,000 to plan and deliver proactive programmes of work and so far, we have established 21 schemes targeting nearly 3,000 potential worst-served customers.

Our performance and current numbers of WSC

We started the current regulatory period with 1,523 customers qualifying as worst-served. At the start of ED1 we were able to achieve a marked reduction in the number of WSC's through targeted investment in WSC projects, improvements in our automation systems and a reduction in the number of relevant faults compared with past years. Once we had reduced to very low WSC numbers, we saw that performance was still quite volatile, so we implemented the proactive approach to investment in the latter part of ED1. We expect this proactive investment will bring the numbers down to a sustainably low level. As of the end of March 2022 the number of WSC's on our network was 711 and we have established 11 schemes targeting 768 WSC's including schemes that target the 711 WSC's that qualified in 2022. We are continuing to work hard to deliver our commitment of no worst-served customers by March 2023, supported by our proactive strategy.

FD1: Worst-Served Customer Dumbers





Cost of Living Crisis

As we face political and economic uncertainty during the period of Covid recovery and other world events, the energy market is being squeezed by rocketing gas prices and we are ever mindful of the impact of our operations on customer bills. We hear clearly from our customers that they want us to do even more to help alleviate fuel poverty and to make sure that customers who are already economically and socially disadvantaged are not left even further behind as we move to a Net Zero economy.

There are a number of ways that we are supporting our customers during this cost of living crisis:

Keeping bills low

- We have focused on cost efficiency during the seven years of ED1 and have delivered cost efficiency of £132m (12/13 prices) up to March 2022. This efficiency is shared by customers who benefit by £55m.
- Our focus on cost efficiency has meant our bills are below the GB average at £79 compared to the average of £95 for 2021/22.

Innovation

- We have implemented our Customer Load Active System Services (CLASS), helping to manage peak consumption periods without the need for traditional generation.
- Smart Street manages voltage to an optimum level so that customers appliances work more efficiently leading to a reduction in annual bills.

Increased support for our electricity users in vulnerable circumstances

- Our Board and Executive Leadership team have made it a priority to champion our consumer vulnerability strategy.
 During 2021, we appointed our non-executive board member Anne Baldock as a Vulnerability Champion to work alongside our senior managers in the business.
- We have created a forward-looking electricity users in vulnerable circumstances strategy, including stretch levels of ambition on fuel poverty support.
- During the year we have rolled out company-wide vulnerability training and introduced an app to allow colleagues to refer customers for additional welfare support.
- Our newest Business Plan Commitment which is to deliver on our two-year pilot project with Citizens Advice Manchester is currently outperforming the original targets and is helping focus our support in this area.

Some examples of the type of support we provide our shown below

Emergency credit vouchers to prevent self disconnection

Food vouchers when customers are off supply

Energy efficiency guidance Education and engaging our youth on energy efficiency

Supported access to grant funding

Working with foodbanks to link food poverty with fuel poverty





Our performance in 2021/22



#2. Safe climbing

We'll improve operational safety for climbing and working at height on our steel towers (pylons)

Background

Steel towers support our 132kV overhead lines and stand around 27m tall – the equivalent of six double decker buses stacked one on top of the other. Our employees work on these towers all year round in all weather conditions.

We are installing 'latchway' systems on all of our steel towers. These are permanently fixed to the structure and enable safer climbing through the provision of additional fall arrest protection.

Measurement

Number of towers with latchway installed

Target 1.600

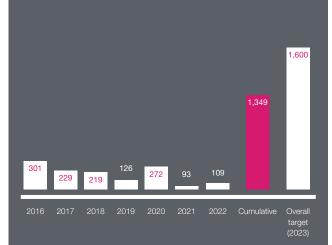
Completion date

Performance O

In 2021/22 we installed 109 latchway systems, taking the total current price control period (2015-23) progress to 1,349.

The programme is 84% complete after seven years of the eight-year period.

We have plans in place to install the remaining systems to meet our ED1 target.



#3. Asbestos management

We'll make sure asbestos in our substations is safely managed

Background

The majority or our network assets were installed in the 1950s and 1960s. At that time, the dangers of asbestos in construction and insulation, including use in our substations.

Measurement

Inspect and remediate, to make safe all of our substations

Target

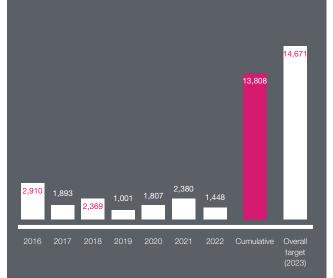
14.671 and sites made safe where required

Completion date

Performance •

In 2021/22 we completed 1,448 inspections. This takes the total current price control period (2015-23) progress to 13,808 inspections. The total number of remediations is 1,590.

The programme is 94% complete after seven years of the eight-year period and is ahead of the run rate required to meet the target.





#41. Management of the risk of link box failures

We'll put in place additional measures to mitigate the potential risk of link box failures

Background

Disruptive failures of underground link boxes, which are where we connect underground cables, are rare, but their location in public areas could pose a public safety risk if not appropriately managed.

Measurement

Inspect and intervene, to make safe all our link boxes

Target

Over 18,000 inspections and interventions where required

Completion date

2020

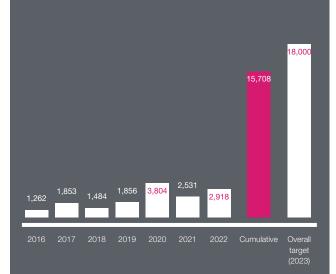
Performance •

In 2021/22 we completed 2,918 inspections. This takes the total current price control period (2015-23) progress to 15,708 inspections. The total number of resulting interventions is 10,811.

Inspections assess the risk. Depending on the risk, an intervention may be required which could include blast mitigation protection, replacement or removal of the link box.

The type of intervention depends on the magnitude of the risk. From 2018/19 the blast mitigation protection changed to a new innovation of a blast bag rather than a traditional fire blanket.

The programme is 87% complete after seven years of the eight-year period and we expect to complete the remaining work by 2023.



#42. Rising and lateral mains

We'll fit innovative vacuum circuit breakers (Weezaps) at our higher risk sites to reduce the safety risks

Background

Rising and lateral mains (RLM) refers to the electrical system in multi-occupancy properties which, if not properly maintained, could present a public safety risk. We have a proactive programme of replacing the highest risk RLM installations, in conjunction with the building owners; however this will take many years to complete.

To reduce the risk, we are installing newly developed electrical monitoring equipment, Weezaps, at the highest risk premises. This allows us to monitor network performance and identify abnormalities. Weezaps have the capability to detect early stage electrical faults and allow an operator to remotely shutdown the electrical supply to minimise the likelihood of fire.

Measurement

Deployment of Weezap protection

Target

All sites deemed to have a high risk due to age, height or condition

Completion date

2023

Performance •

The highest risk sites are those that are more than 15 stories high, contain more than 50 Meter Point Administration Numbers (MPANs) and where the RLM are more than 20 years old.

There are now 51 of these high rise blocks that are more than 15 stories high, with older cables in our area. Weezaps have now been installed in all 51 of these sites. All identified work is now complete and additional work is only required if any further sites fall into this highest risk category through the remaining surveys.

Surveys have been completed at 258 sites that have been identified as 'at risk'. The outstanding surveys are planned for completion by 2023.

#4. Enhanced Priority Services Register (PSR) service

We'll keep an up-to-date and accurate PSR

Background

We maintain a PSR to identify those customers who are most dependent on our services. We contact customers on our register to ensure the details we are holding are correct. This helps us to develop tailored support to assist customers, for example those who are medically dependent on electricity, to ensure we are offering the right level of support at the right time.

Measurement

Up-to-date and accurate information

Target

To contact 100% of our high priority PSR customers every year and contact one third of medium/ low priority PSR two years

Completion date

On-going

Performance •

At the start of the 2021/22 year, PSR registrations were at 1,016,321 customers. This has increased over the year by 130,976 to 1,147,297 customers with over 2,148,795 vulnerabilities registered.

The PSR registrations are split by 338,277 high priority customers and 809,020 medium/low priority customers.

We've proactively contacted 527,119 customers this year, which meets our target. This was split to ensure that 100% of high priority customers and 33% of med/low priority customers were contacted as planned.

A benefit of these contacts is that we can check the information we hold is still relevant and appropriate, and that customers are still comfortable with us holding this information about them. This allows us to remove individuals where there is no longer a need to be on the register. We have removed 129,472 customers from our priority services register at their request following communications in the event of storms or general faults. This has been completed via various means of communications dependant on the customers preferred communication channels

Our industry leading data sharing partnership with United Utilities is fully embedded and continues to reduce customer effort and increase the support given to customers through a single registration. This process is leading edge and being used as a best practice model as the water industry develops its approach to the single PSR with all energy distributors and suppliers.

#5. Improve services for vulnerable and Priority Service Register customers –services provided

We'll improve our services to provide better support to PSR customers

Background

The services we can provide are only as good as the data we hold. Our data analysis allows us to determine how many PSR customers we have, what their circumstances are and where they reside. We combine this with feedback from stakeholders to ensure that what we do reflects genuine need.

Measurement

Better targeted services using data that will become available over the course of RIIO-ED1

Target

identified by stakeholder engagement

Completion date

On-going

Performance 🚖

Following a data led review of our customer needs we have refreshed our partnerships to focus on key areas identified by our stakeholders. We have also invested in an improved social data mapping tool, built on over 1,150 datasets. This Community Insight tool increases our data sets significantly (47 to 1,150) and gives us a deeper understanding of our local communities. As well as delivering our business plan communications to properties not on the register to raise awareness of this service.

Our fuel poverty referral programmes are provided by specialists local to the area to maximise on local knowledge and available grants. We also provide debt management with our partners which our stakeholders advise is an increasing concern for many vulnerable customers. In 21/22 85% of our funding was focused in providing energy efficiency support in our top 10 $\,$ areas of poverty in the region. We are enhancing our strategy in partnership with Citizens Advice Manchester to provide a voice to the fuel poverty referral programme and adapting our services to meet increasing demands.

We continue to support customers at risk of self-disconnection from electricity because they cannot afford to top up their prepayment meter and are unable to make alternative arrangements with their supplier. We have expanded direct access to emergency credit vouchers to selected partners through an on-line portal increasing the reach of our support.

We continue to grow our collaboration with Cadent, NGN and United Utilities to provide a joined-up approach in water and energy in the home. Initiatives in the current year include developing and implementing the Utilities Together 'Energy Round Table' hosted by Citizens Advice and we have also led the way with the development of a combined energy and water saving booklet providing joined-up advice to be promoted by all utility companies. Our pharmacy bag campaign which promotes awareness of the PSR service of all utilities has been expanded from 200 to 350 pharmacies this year, with a significant increase in the number of bags and leaflets provided.



#6. Improve services for vulnerable and Priority Services Register customers — staff training

We'll improve our colleagues' capabilities to provide better support to PSR customers

Background

Our customer-facing colleagues are our primary means of contact with our priority service customers. It is important that they are fully trained to both recognise potential PSR customers and, where this is the case, provide a proactive registration and service.

Measurement	Target	Completion date
Enhanced training for all customer- facing frontline	Improved identification of and advice to vulnerable	On-going
colleagues	customers	

Performance •

Our PSR and social data is embedded in our core planning processes and used by Network Referrals, Planned Supply Interruptions and Innovation teams. The roll out of Smart Street has been heavily influenced by PSR data and areas of poor reliability have been prioritised.

This year we rolled-out a company-wide 'switched on to vulnerability' training programme. The first in a series of linked 60-minute modules contrasted vulnerable circumstances typically seen by society (e.g. age, disability) with characteristics frequently unseen (e.g. bereavement, no internet access). The training was aimed at embedding a switched-on vulnerability culture, equipping everyone to better recognise all forms of vulnerability, know what support and services there are to respond to these and how to sign post others to help if required. This mandatory training was completed by all colleagues in just three months, an enhancement on previous years where it was just targeted at those in customer facing roles.

To embed a switched-on culture, we expanded partner-led training and internal knowledge sharing, providing monthly case studies of learning being successfully applied through team briefings.

We've further embedded our 'We're Switched On' approach to call handling in our customer contact centre. This means that as part of every call we tell customers about the PSR and we ask whether anyone in their household, or anyone they know, would benefit from this service. Ten training sessions have been delivered into our business from expert partners, like Cumbria Deaf Association, National Autistic Society, Citizens Advice and British Heart foundation, to compliment the training already in place from NSPCC, Age Concern and Dementia Friends provided to all customer contact centre (CCC) agents. The training gives them the skills and confidence to conduct what can sometimes feel like a difficult conversation. All training modules have been incorporated into our CCC induction programme.

#7. Improve services for vulnerable and Priority Services Register customers — support provided

We'll improve our support services during interruptions for PSR customers

Background

Some of our customers are more dependent on electricity than others and are therefore more severely affected by planned or unplanned interruptions. These customers receive enhanced support during power cuts whether planned or unplanned.

Measurement	Target	Completion date
Welfare package support and temporary power supplies	Deliver services during planned or unplanned power interruptions	On-going

Performance •

We continuously measure PSR customers' overall satisfaction with our tailored services across all contact types; planned and unplanned supply interruptions and general enquiries. This year, the 1,550 customers who responded have scored us 89.5% on average.

This year we sent 200,894 SMS weather alerts to high priority customers on our PSR as part of our embedded approach to preparing for storms such as Arwen, Dudley, Eunice and Franklin. Working with our advisory panels, expert care partners and our customers, we co-create and update messages to help customers understand the services available through our PSR to support them in a power cut.

We have delivered Cadent's Blue Flame Accredited programme of carbon monoxide training for our frontline operatives as part of our 'switched on to vulnerability' programme to ensure that call handlers and field engineers are better equipped to protect our customers from any negative impacts of carbon monoxide during and after a power cut. Additionally, to give greater reassurance to customers when we need to access their properties, we have adopted NGN's 'Project Door Stop' innovation which allows customers to instantly verify the identity of a doorstep visit from one of our colleagues through a link to our website.

To make it easier and faster for colleagues to refer a customer for welfare support we developed and implemented a bespoke PSR referral app which has been rolled out to over 900 field-based colleagues. The app helps our field-based colleagues act on vulnerability they spot in our communities to better manage conversations with electricity users in vulnerable circumstances. The app makes it easier than ever before to get help for our customers to support them. It also facilitates a simple and quick registration to the PSR (initiating a call-back from our Customer Team to finalise the application) and provides direct dial access to our specialist Welfare Team if urgent support is required.

#10. Mitigate fuel poverty

We'll reduce our prices

Background

Fuel poverty is affecting an increasing percentage of the population. We aim to keep current price control period review (2010-2015) to help work against this growing issue. share the benefits of our improved performance. The cost efficiencies that we generate result in lower prices in the current price control period.

Measurement Reduced RIIO-ED1 prices compared to DPCR5

Target

Completion date

2015-2023

Performance 🥋

As our prices are set fifteen months ahead of the charging year we have now published confirmed prices for the full RIIO-ED1 period, up to the 2022/23 charging year. For a typical standard domestic customer, our average current price control period charges will be 19% lower than those of the previous price control period. This exceeds our business plan commitment to reduce our prices by 16%.

Prices have risen by 3% in 2022/23 compared to 2021/22 once adjusted for inflation and costs associated with Suppliers of Last Resort. This is primarily a result of us under-recovering our costs in 2020/21 due to lower demand linked to the COVID-19 pandemic.



Electricity North West received on average £84 from each home in 2021/22, around 13% of the typical electricity bill. for the impact of inflation, per Ofgem Business Plan Reporting Guidance. The £79 quoted earlier in the report is based on the latest Ofgem typical consumption value of 2900kWH.

#48. Support electricity users in vulnerable circumstance and deliver the commitments of our pilot partnership project with Citizens Advice Manchester

We will provide support to electricity users in vulnerable circumstances and gain a deeper understanding of their needs by working in a strategic partnership.

Background

A 24-month pilot project has been initiated with Citizens in vulnerable circumstances and help develop a deeper understanding of their needs to inform our work in this area in the next regulatory period. We will provide funding of c.£250k p.a. to recruit specialist energy advisers at CAM who will be able to provide help to an estimated 8,000 individual customers p.a. The services provided will include financial assistance, energy efficiency advice, help to switch suppliers, referrals to trusted partners, and encouragement to sign up to the Priority Service Register.

Measurement Monthly review of contract against KPI's

Target Deliver all the key performance targets outlined in the contract

Completion date

30 September

Performance 🥋



An average of 3.3 referral outcomes per individual demonstrates that every interaction has multiple benefits. In addition, 3,044 referrals to other third parties were made, such as the Benefits Enquiry Line and Local Authorities.

Provision of advice:

Outcome	Outputs
Energy behavioral change	9,393
PSR discussion	8,779
Tariff supplier advice	7,603
Debt advice	1,055

CAM now manage and co-ordinate their Energy Round Table where all fuel referral and energy partners share knowledge, best practice and deliver a coordinated approach to customers across the region.



#13. Complete flood protection programme to all major sites

We'll reduce the risk of our major sites to flooding

Background

Our programme aims to protect those of our major substations identified as being at risk against a once in 100-year flooding risk.

To protect our customers and our network, we are spending money on flood defences in excess of the original business plan. In some cases this will improve the level of resilience to a one in 1000-year forecast flood levels. Extensive works are being completed at Lancaster, Carlisle and Rochdale.

Measurement Number of higher voltage substations protected against 1/100 year

flooding

Target

Completion date

Performance •

The programme currently stands at 46 sites, reduced from the original 47 following detailed assessment of the flooding risk. Three sites (Peel BSP, Edgeley BR and Clifton Marsh) were removed from the programme whilst two sites (Hindley and Westgate) supplying more than 10,000 customers each were added following changes to industry standards requiring these to be protected to 1/1000 flood risk instead of 1/100.

In 2021/22, flood mitigation works were completed at seven sites bringing the total of completed sites to 43 for the current price control period (2015-23) so the programme is 93% complete.

The programme is behind its original schedule with three sites due for completion in FY23. This is mainly due to the need to co-ordinate with other work on these sites and where work has not been completed we have implemented interim measures in addition to our temporary redeployable flood defences to protect supplies in event of flooding.



#14. Network health — overall risk index

We'll deliver a reduction in the condition-related risk of our network through a targeted programme of replacement and refurbishment

Background

It is our responsibility to our customers to ensure that we both refurbish and replace our existing assets, to ensure the overall health of the network does not significantly deteriorate.

Our approach is to inspect, on an asset by asset basis, the condition of the asset to estimate the probability of it failing and to assess the consequence should that asset fail, for example, how easy it is to supply from other sites. We are then able to prioritise our investment based on the assets that are more likely to fail and those that will have the greater impact on customers.

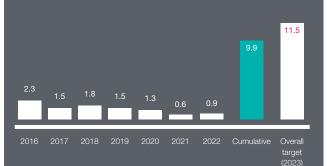
Measurement Risk points

Target 11.5m Completion date

Performance •

In 2021/22 we have delivered 0.9 million risk points, taking the total current price control period (2015-23) progress to 9.9 million.

We have now delivered 86% of the 11.5 million risk points after seven years of the eight-year period and we expect to hit the overall target by the end of 2023.





#15. Network health — fault rate

We'll ensure the overall fault rate of the network doesn't deteriorate significantly from the 2011-2013 average

Background

For some of our equipment, particularly buried assets such as cables, it is difficult to measure their condition accurately. For these assets, we are using the rate of faults to measure our network health. We calculate this fault rate as the number of faults we experience each year divided by the amount of equipment we have.

The fault rate method we use allocates weightings to different types of faults to allow us to create an overall picture of how we have performed.

Measurement

Fault rate

Target

Completion date

Less than 110% of 2013 On-going

Performance 🛨

In 2021/22, the annual fault rate was 84% of the 2011-13 average and the network continues to perform well. Performance has improved since last year with the main driver being reduced faults on both high voltage and low voltage underground cables.



#17. Ensure all major substations have appropriate backup battery capacity

We'll ensure our network has 72 hour resilience to restart should the electricity system fail

Background

Black Start is the procedure to restart all or part of the electricity system in the event of a complete shutdown. National Grid controls this and, if required, would sequentially restart generators and parts of the transmission and distribution networks until the whole system was live once again.

Our role in this is to ensure our network has sufficient battery backup so that the network's communications systems will work in the event of a complete mains power failure.

Measurement

Number of substations with 72 hour backup

Target

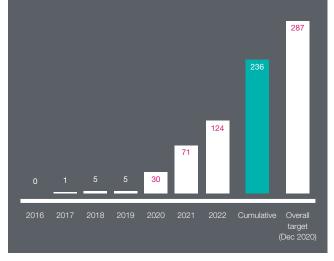
Completion date
December 2020

capability

Performance •

The solution is made up of a combination of two elements. In addition to the installation of 72-hour batteries, we are fitting additional equipment to existing batteries to increase their capacity. We originally estimated that we would need to make enhancements to 287 substations in order to achieve the commitment of ensuring that our network has 72-hour resilience. However, through further investigation work during the period we identified that we only had to make changes to 261 substations to fulfil this commitment.

This commitment is behind schedule as enhancements have been made to 236 substations with the remainder due for completion by the end of the year.



#19. Improve performance for worst-served customers (WSC)

We'll work to ensure none of our customers are classified as 'worst-served'

Background

A WSC is defined by Ofgem as a customer who has experienced 12 or more high voltage interruptions in the last three years, with a minimum of three interruptions per year.

Analysis of WSCs has helped to shape our investment programme. The solutions considered for improving performance are varied and include application of additional remote control and implementation of network automation among other solutions.

Measurement Reduce the number of qualifying as

worst-served

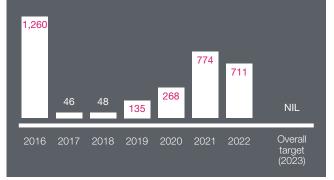
Target No WSC Completion date

Performance •

Of our 2.4 million customers the number classified as worst-served at the end of 2021/22 was 711 across 10 HV feeders. The ten feeders have already attracted WSC work behind schedule as performance is at a similar level to last year. Our aim is still to achieve zero worst-served customers by the end of 2023 but our ability to achieve this this could be impacted by a small number of customers qualifying as 'worst-served' right at the end of the year, giving us no time to react.

We have introduced a proactive approach whereby customers identified as being 'at risk' of becoming worstserved trigger a rapid action response. Owing to the need to respond swiftly to rectify the performance issues and prevent customers qualifying as worst-served, the process sees us doing work in a short as time as possible and no later than the end of the current year.

More details on our worst-served customer strategy are included in the earlier focus area of this report.



#20. Ensure that the loading risk of the network is appropriately managed overloaded substations

We'll manage the loading risk of our network

Background

If demand exceeds capacity for an extended period of time, there is an increased safety risk and a greater vulnerability to faults or an extended loss of supply for customers supplied by such equipment.

We measure asset loading using a load index on our higher voltage substations. This compares the maximum demand on a substation to its capacity. We balance utilisation with an appropriate amount of spare capacity to accommodate short-term increases in demand.

Measurement

Proportion of connected via overloaded

substations

Target

Completion date

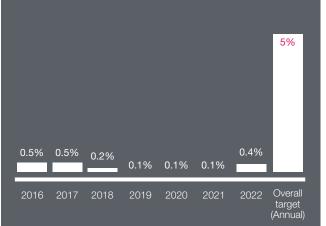
On-going

Performance 🜟



At the end of 2021/22 five substations were running above their firm capacity. The five substations feed 10,261 customers out of our total customer base of 2.4 million (0.4%).*

*Please note data is still provisional





#21. Ensure that the loading risk of the network is appropriately managed — larger transformers

We'll manage the loading risk of our network

Background

Where new connections are added to the network, we may need to reinforce the network so that it can cope with the additional demand. Furthermore, we need to reinforce the network where the load from existing connections increases to the extent that assets become overloaded.

New substations, larger transformers and additional interconnection are standard traditional reinforcement interventions to address current and forecast capacity shortfalls.

Measurement

Install larger capacity transformers and/or additional interconnection at our major substations

Target

Where required, in line with policy

Completion date

2023

Performance •

The following strategic reinforcement schemes are driven by the level of demand connections activity in the relevant area:

- The project for the installation of a third grid transformer at Stuart Street BSP is now complete.
- Construction work is in progress for the installation of additional primary transformer at existing primary stations in the Golborne area.
- Construction work is complete for a new primary substation equipped with two transformers in the South Manchester Enterprise Zone area.
- Construction work is in progress for a new primary substation equipped with two transformers in the Samlesbury Aerospace Enterprise Zone area.
- A scheme for an additional primary transformer at existing Eastlands primary substation in Manchester City centre has been deferred until RIIO ED2.

Four connections driven schemes have been completed, resulting in the installation of seven primary transformers in the Greater Manchester area.

We have improved 33kV interconnection for Rochdale Central BSP so that the majority of customers can be restored in the event of loss of the grid transformers. Also, a scheme was completed to improve 33kV interconnection for Lytham BSP. Improved interconnection can be a cheaper alternative to installing additional transformers.

#22. Ensure that network constraints to the connection of distributed generation are removed

We'll remove network constraints that prevent the connection of distributed generation

Background

The equipment that forms the electricity distribution network has to be able to cope with the large amounts of electrical energy that flow when faults occur. The amount of energy that would flow in a particular part of the network under worst case conditions is known as the fault level. We have designed our network to limit the fault energy to be as low as possible in order to maintain safety margins, but this can constrain our ability to connect new sources of electrical energy such as distributed generation, as well as the widespread adoption of low carbon technologies, in a particular area.

Measurement

Replace switchgear at locations where its current rating is likely to prevent the extensive connection of distributed generation

Target

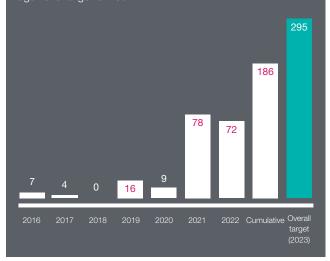
et Completion date 2023

Performance •

Programme delivery continues with the rollout of the conventional reinforcement method expected to cover 183 sites in ED1, with 88 sites due for completion in FY23.

The rollout of the innovative reinforcement technique for Long & Crawford (L&C) 6.6kV switchgear also continues. In total 143 sites are expected to be addressed in ED1, with 52 sites planned for completion in FY23.

Combining the conventional and innovative intervention types gives an expected total interventions on 326 sites against a target of 295.



#46. Improve overall reliability

We'll reduce the number of interruptions our customers experience

Background

Our customers have told us that reliability is one of their top priorities and we work to reduce the amount of times our customers lose supply. We measure our performance against this using Ofgem's standard customer interruptions (CI) metric.

Measurement Customer interruptions per 100 customers

Target

Completion date

Performance 🜟

This is an enhanced commitment to improve reliability by 35% (compared to 2012 levels) by 2023. Our original commitment to improve reliability by 20% has already been met.

In 2021/22, the number of interruptions our customers experienced was 44% lower than 2012 and ahead of our 2023 target. This is also our best ever CI performance.

2022 was challenging due to the impact of seven named storms. This demonstrated the importance of our storm readiness and response. Two of these storms are classified as exceptional enhanced management of network risk and further deployment and development of automation and systems.



Our Ofgem target has been included to show the target set by the regulator for context. Customer interruptions represent the through interruptions per 100 customers. It is calculated by taking the total number of customer interruptions, divided by multiplied by 100. It is adjusted to exclude exceptional events.

#47. Improve overall availability

We'll reduce the time our customers are without power in the event of an interruption

Background

During a fault it is important that we restore power as soon as possible. To track our performance against this we use Ofgem's standard customer minutes lost (CML) metric.

Measurement Customer minutes lost per customer

Target

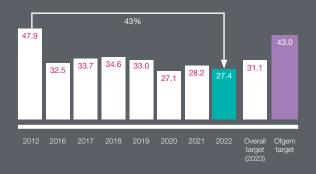
Completion date

Performance 🖈

This is an enhanced commitment to improve availability by 35% (compared to 2012 levels) by 2023. Our original commitment to improve availability by 20% has already been met.

In 2021/22, the length of time our customers were without power in the event of an interruption was 43% lower than 2012 and is the third consecutive year that it is ahead of our 2023 target. This is our second best ever year of CML performance.

2022 was challenging due the impact of seven named storms. This demonstrated the importance of our storm readiness and response. Two of these storms are classified as exceptional events. In 2021/22 we continued to install significant investment programmes of fault detection and restoration equipment. Our new network management computer system was installed in 2022 and provides further opportunity to enhance automation performance in 2023.



Customer minutes lost represent the average time customers are without power per year, in the event of an interruption, It is calculated by taking the sum of the customer minutes lost for all restoration stages of all incidents, excluding exceptional events, and dividing by the number of connected customers as at 30 September each year.



#23. Customer satisfaction — composite score

We'll improve our customer service performance

Background

Our composite score incorporates levels of customer satisfaction for interruptions, connections and general enquiries.



Performance 🎺

Customer satisfaction (CSAT) levels achieved an overall score of 88.7% in 2021/22 compared to 90.8% in 2020/21. ED1 has seen a significant increase in performance in excess of Ofgem's target of 85% through continuous improvement of processes and customer culture. This year, after a difficult third quarter with improved with an overall average satisfaction of 90.2%. We are focused on plans to recover overall customer satisfaction back to above 90% next year.

We continue to drive improvements through clear actions focussing around simplification, compliance with our process that provides a positive customer journey when interacting with us, improvement in IT systems including our telephony platform called STORM to deliver a more tailored customer journey, and resourcing strategies.

Interruptions

This makes up 30% of our CSAT metric, covering planned and unplanned supply interruptions.

For planned supply interruptions (PSI) we provide our customers with PSI cards. These cards provide information about when the power cut will take place along with an explanation about the work that will take place. The continued focus on embedding the PSI Golden Rules (delivery factors which customers have identified as being important to them) underpins performance in this area. During winter months and where the planned outage impacts an area of high vulnerability, generators are used to ensure the electricity supply is maintained.

For unplanned interruptions, all customers who contact us about a loss of electricity either through speaking to an agent or matching to a fault in our messaging system are then updated about our work to restore their power supply. Delivery of the customer journey, accuracy of information and compliance against it is a key focus.

Connections

This makes up 50% of the CSAT metric, covering quotes that we provide to customers and, where progressed, the delivery of this work.

Focus during the year has been on embedding the structure working with our contractors to have clearly defined consistent service levels.

General enquiries

a broad range of enquiries, for example the tidiness of our substations.

service options via the website and collaborative working between contact centre and operational staff to improve processes following feedback, along with managing the growth and mitigating the risk of low carbon technology (LCT) work.



#24. Complaints — one day

We'll resolve 80% of our complaints within one day

Background

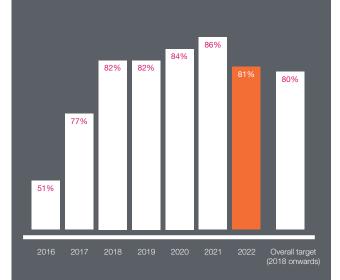
In the instance that a customer feels the need to make a complaint, we endeavour to resolve the issue as efficiently as possible. We aim to resolve the majority of complaints within 24 hours.

Measurement	Target	Completion date
Resolved within one day	80%	2018 onwards

Performance 🛷

In 2021/22 we resolved 80.88% of complaints within 24 hours, exceeding the target of 80%.

This period saw us record an additional 1,825 complaints compared to the same period in 2021/22 as a direct result of Storm Arwen. However, we were still able to achieve our target despite the significant increase in volume of complaints due to our focus on following our well embedded complaint procedures and prioritising a swift resolution to the majority of our complaints.



#25. Complaints — average days to close

We'll close all of our complaints, on average, within four days

Background

The majority of our complaints are resolved within the first 24 hours; however some complaints can be more complex than others and take longer to close.

We appreciate the importance and need for continual focus on each and every one of our complaints and we therefore aim for an average resolution time for all complaints of less than four days.

Measurement	Target	Completion date
Average days to close	Average < four days	2018 onwards

Performance X

On average, complaints were closed within 5 days in 2021/22, which is above the business target of 4 days and has increased from the 2020/21 performance of 2.5 days.

The impact of Storm Arwen was the major challenge to our days to close performance, as each payment claim required a manual audit of data impeding our ability to close the complaint cases quickly. March 2022 saw an average days to close performance of 8 days, driven by the influx of Storm Arwen payment complaints. The additional storms Dudley, Eunice and Franklin compounded this with additional increases in complaint volumes in the immediate aftermath of Storm Arwen.

With the challenges encountered we focused our resource onto ensuring we met the 24-hr resolution business target, whilst also working on aged cases which inevitably led to an increase in average days to close.

We are confident that our management processes are sufficiently robust to manage an improved performance to exceed this commitment in circumstances where service challenges are not so extreme.

The growing awareness of Subject Access Requests (SAR) amongst the general population has been evident this year with 19 customer SARs being received, and 100% compliance with regulatory response times being achieved.



#26. Stakeholder engagement

We'll continuously improve our stakeholder engagement

Background

Stakeholder engagement is a cornerstone of our business and we will continue to make sure we respond to our stakeholders' changing needs.

To measure how we are progressing, we use Ofgem's evaluation of our annual Stakeholder Engagement and Consumer Vulnerability (SECV) submission.

Measurement

Ofgem's evaluation of annual stakeholder engagement

Target

Pass part one submission

Completion date

2015 onwards

Performance 🗳

Our SECV score for 2021/22 has been confirmed as 4.31 which is a decline in performance from the prior year. We have made good progress in ED1 to improve our stakeholder engagement and we are disappointed with this years score. We will look to refine our improvement plans based on the detailed feedback from the panel.

#27. Guaranteed standards

We'll pay out the required guaranteed standard payments

Background

Guaranteed standard payments compensate customers where our performance doesn't adhere to regulatory standards.

Measurement Due compensation

Target

Completion date

2015 onwards

Performance 🛷

In 2021/22 we met our target of paying 100% of automatic and requested Guaranteed Standard payments for 12-hour failures, paying 3,637 payments and an additional 684 totalling £333,840.

We will continue to proactively contact any customers who may be eligible for compensation and automatically make payments to customers who are on the Priority Services Register.

#28. Storms

We'll pay out guaranteed standards even in storm conditions, retaining discretion for extreme events to balance the impact on customer bills

Background

Following the devastating winter storms of December

2013 and February 2014 we consulted with stakeholders on the regulatory approach to making guaranteed standard payments to customers affected by power outages in exceptional weather events.

Stakeholders told us it was appropriate to make such payments even in storm conditions. This is beyond the regulatory requirements.

Stakeholders also recognised the need to balance guaranteed standard payments against the costs incurred by other customers to fund this commitment.

We therefore agreed that the company would retain discretion with regard to the application of this commitment to ensure that all customers are protected from the impact of significant payments in the event of an extreme event.

Measurement

Target

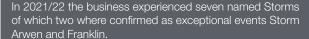
Completion date

100%

Pay out guaranteed standards even in storm conditions

2014-15 onwards

Performance 🛷



In relation to payments made:

- In Storm Franklin we paid 475 initial failure payments and an additional 89 guaranteed standards payments totalling £48,580
- In Storm Arwen we paid 3,741 initial failure payments and 23,925 additional guaranteed standards payments totalling £1,936,620
- In Storm Arwen an additional £1,598,205 ex-gratia was also paid to customers who hadn't reached the guaranteed standard



#29. Connection quotation – single domestic connections

We'll provide a quotation after receipt of the customer's initial application on average within six working days

Background

Connecting customers efficiently and economically is an important part of our business and a crucial service for our customers. It is a service that facilitates economic growth and allows us to support delivery of our stakeholder priorities.

To allow efficient connection timescales, it is important that we provide customers with quotations in a timely manner following their initial application.

Measurement Single domestic Target

Completion date

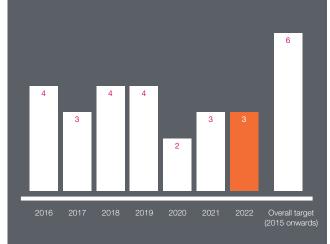
Six working days connections

2015 onwards

Performance 🪖



Our average performance in 2021/22 was three days. In the year we produced 2,523 quotes within this sector and we continue to recognise the importance of serving our customers quickly and are pleased to have outperformed our commitment.



#30. Connection quotation up to four domestic connections

We'll provide a quotation after receipt of the customer's initial application on average within ten working days

Background

Connecting customers efficiently and economically is an important part of our business and a crucial service for our customers. It is a service that facilitates economic growth and allows us to support delivery of our stakeholder priorities.

To allow efficient connection timescales, it is important that we provide customers with quotations in a timely manner following their initial application.

Measurement

Target

Completion date

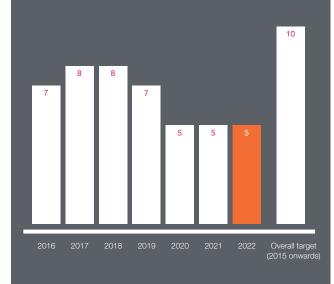
Up to four connections Ten working days

2015 onwards

Performance 🜟



Our average performance in 2021/22 was five days. In the year we produced 2,198 quotes within this sector and we continue to recognise the importance of serving our customers quickly and are pleased to have outperformed our commitment.





#31. Connection quotation all other connections

We'll provide a quotation after receipt of the customer's initial application on average within 25 working days

Background

Connecting customers efficiently and economically is an important part of our business and a crucial service for our customers. It is a service that facilitates economic growth and allows us to support delivery of our stakeholder priorities.

To allow efficient connection timescales, it is important that we provide customers with quotations in a timely manner following their initial application.

Measurement

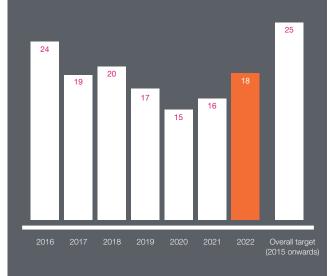
Target

Completion date

All other 25 working days 2015 onwards connections

Performance 🚖

We continue to outperform this commitment and our average performance in 2021/22 was 18 days. During the year we produced 9,934 quotes for this group of customers which was a 21% increase from the year before.



#32. Connection completion single domestic connections

We'll complete the connection after agreeing terms with the customer on average within 30 working days

Background

Connecting customers efficiently and economically is an important part of our business and a crucial service for our customers. It is a service that facilitates economic growth and allows us to support delivery of our stakeholder priorities.

After agreeing terms with a customer, it is important that we provide a completed connection as efficiently as possible.

Measurement

Target

Completion date

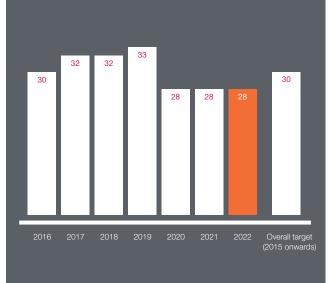
Single domestic connections

30 working days

2015 onwards

Performance 🜟

Our average performance in 2021/22 was 28 days. In the year 989 connections were completed within this sector. We are ahead of both of our incentive maximum and



#33. Connection completion up to four domestic connections

We'll complete the connection after agreeing terms with the customer on average within 40 working days

Background

Connecting customers efficiently and economically is an important part of our business and a crucial service for our customers. It is a service that facilitates economic growth and allows us to support delivery of our stakeholder priorities.

After agreeing terms with a customer, it is important that we provide a completed connection as efficiently as possible.

Measurement

Up to four connections

Target

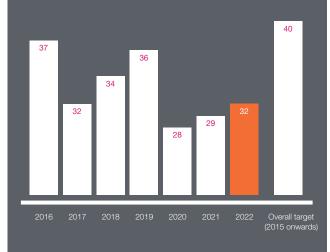
40 working days

Completion date

2015 onwards

Performance 🖈

Our average performance in 2021/22 was 32 days. In the year 755 connections were completed within this sector.
We are pleased that we are outperforming our commitment.



#34. Connection completion — all other connections below extra high voltage

We'll complete the connection after agreeing terms with the customer on average within 50 working days (from when the customer is ready)

Background

Connecting customers efficiently and economically is an important part of our business and a crucial service for our customers. It is a service that facilitates economic growth and allows us to support delivery of our stakeholder priorities.

After agreeing terms with a customer, it is important that we provide a completed connection as efficiently as possible.

Measurement

All other connections below extra high voltage

Target

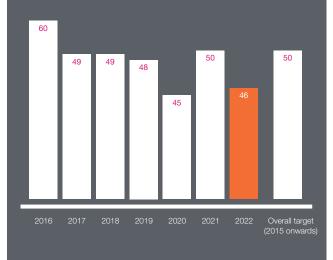
50 working days (from when the customer is ready)

Completion date

2015 onwards

Performance 🖈

Our average performance in 2021/22 was 46 days. We connected 437 customers in this sector during the year which was almost a 50% increase compared to the previous year. We are pleased to have met our target despite this increase in activity.





#35. Engagement — Incentive on connections engagement

We'll continuously improve our stakeholder engagement for connections customers

Background

The Incentive on Connections Engagement is a penaltyonly incentive that requires us to engage with our stakeholders and make commitments to address their issues and deliver against those commitments. It is assessed annually by Ofgem.

Measurement

Target

Completion date

Incentive on Connections Engagement No penalty

2015 onwards

Performance 🛷

Overall, we have worked hard to deliver this commitment and we are pleased to report that Ofgem's assessment during 2021/22 was again positive.

Engagement this year continued being done via virtual events. Our events are recorded and published on our website which stakeholders have found useful to view at more convenient times and to share with colleagues that could not join the event

Workplans, reports and updates are available on our websits via the link below:

www.enwl.co.uk/ice

#36. Guaranteed standards of performance

We'll meet the regulatory standards of performance

Background

There are a number of guaranteed standards of performance that cover our provision of quotes, contacting customers, commencing and completing work on site. If we fail to meet these standards we make a payment to the customer affected.

MeasurementGuaranteed

standards of

performance

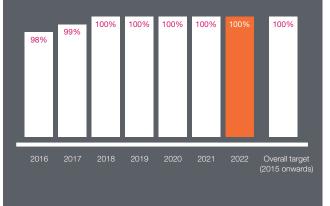
Target 100% Completion date

2015 onwards

Performance 🗳

Guaranteed standards of performance continue to be an important focus and we are pleased to report another year of good performance in this area.

We have reduced the number of failures during the current price control (2015-2023), improving on the 338 failures in 2015/16. This is the fifth year in a row that we have met our target.



#39. Reduce oil lost from cables

We'll reduce the amount of oil lost from cables

Background

Oil filled cables have been used since the 1960s where the oil acts as an electrical insulator. Leaks from oil filled cables can occur and, whilst only a small percentage develop leaks, the oil can present an environmental risk particularly if it is adjacent to a water course. The use of modern replacement oil mitigates this risk.

We currently have approximately 383km of legacy oil filled cable on our network. We're addressing leakage from oil filled cables by replacing them with alternative modern oil-free cabling. Where we do have leaks, we replace the oil with a biodegradable equivalent.

Measurement

Target

Completion date

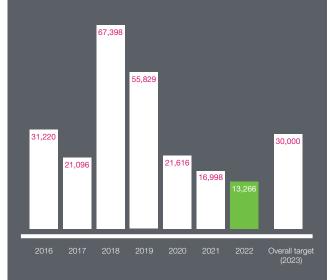
Litres lost <30,000 litres/

Performance 🖈



In 2021/22 our cable oil leakage was 13,266 litres which is significantly better than the target leakage of below 30,000 litres per annum by 2023. It is also an improvement on last year which was leakage of 16,998

Whilst we are replacing all of our oil filled cables in a long-term programme, the circuits that leak are repaired and put back into service. Conventional methods of finding leaks are time consuming and not always accurate. In 2019 we started using a new tracing technique which requires the cables to be dosed with Perfluorocarbon which enables the source of the leak to be detected more accurately and quickly.



#40. Undergrounding overhead lines

We'll remove overhead lines in National Parks and Areas of Outstanding Natural Beauty

Background

There are three National Parks and four Areas of Outstanding Natural Beauty in our region and the overhead lines that run through them can be visually intrusive.

We are working with the relevant authorities and other stakeholders who identify and prioritise potential undergrounding schemes.

Measurement Km removed

Target

Completion date

80km*

Performance •

In 2021/22 we have undergrounded 5.7km of overhead line, taking the total progress to 51.3km. This equates to 64% of the original 80km target. We have continued our work with the National Parks and Areas of Outstanding Natural Beauty throughout the year and developed the work bank for the remainder of ED1.

*The selection of sites is driven by our stakeholder partners and is ultimately driven by improvements in visual impact rather than length. As some of these priority sites are expensive to underground, we will deliver a lower total length than originally forecast for the same cost in line with our stakeholders' priorities.

We continue to identify additional schemes and prioritise investment with our partners. We still intend to spend the full entitlement for this activity included in the RIIO-ED1 settlement.





#43. Driving transition to DSO

We'll deploy Active Network Management (ANM) across all of our high voltage (HV) network

Background

Traditionally, distribution networks were designed to meet worst case demand and generation scenarios in order to remain stable under any load or generation condition.

The drive towards a Net Zero economy relies on connecting much more renewable generation and low carbon technology to the network quickly and without the need for expensive and disruptive network reinforcement.

By placing additional load measurement sensors at strategic points in the network and deploying software algorithms in our Network Management System (NMS), in conjunction with new types of flexible connection, and services contracts, it is possible to manage flows on the network in real time by turning generation and demand up or down to balance available network capacity at any given time. This is typically known as Active Network Management (ANM).

Measurement

Deployment of ANM

Target

Available across all of our HV network

Completion date

2023

Performance •

The development of the Active Network Management (ANM) system is progressing with our supplier, Schneider Electric. They continue to develop the Active Network Management (ANM) software algorithms for deployment in our new control systems.

The ANM algorithms will monitor and balance the available network capacity. The capacity balancing will be achieved through varying customer demand and generation in real time using flexible connections and services contracts to prevent network limits being exceeded.

ANM will dynamically manage available network capacity to facilitate the connection of more renewable and low carbon technology by using all the available capacity inherent in the existing network infrastructure. By seeking flexible services contracts, we aim to reduce the need for network reinforcement and in the future we envisage that many of these contracts will be established with low carbon technology providers.

#44. Facilitating expansion of electric vehicles

We'll help domestic properties to connect low carbon technologies to the network

Background

Over the next 20 years, we expect demand for electricity to increase significantly (up to double) as we move our reliance away from fossil fuels and more people adopt electric vehicles. We will ensure that network capacity is there and it's increasingly important that we support our customers transition to a Net Zero economy by connecting low carbon technologies such as renewable energy, heat pumps and electric vehicles (EV) to our network.

As a key part of our responsibility to lead the North West to zero carbon we will help our customers move to electric vehicles. The government has brought forward to 2030, the date by which the sale of new pure petrol and diesel vehicles will be banned. We will facilitate the uptake in electric vehicles by providing a free connection for EV charging posts at domestic properties where these can be installed.

<u>Measurement</u>

Connection of low carbon technologies

Target

Swiftly facilitate all connections

Completion date

2023

Performance •

We continue our programme of investment with domestic properties and where properties have "looped services" (the connection of homes together rather than separately to the network) we are intervening to ensure that all domestic customers can swiftly install low carbon technologies.

We have completed our Network Innovation Allowance (NIA) project, called Reflect, looking at the effects of EV charging on our networks. We have taken the Reflect learnings and incorporated them into our forecasting methodologies used to develop our future investment plans.

Throughout 2021/22 we held and attended several events explaining our new EV Strategy and detailing how we are preparing the electricity network for the rapid uptake of electric vehicles (EVs) and associated charging infrastructure. As a key element of our own decarbonisation plans we are sharing our experiences to support stakeholders on their journey to decarbonise their transport arrangements.

Alongside this, we have published information for small businesses on how they can start their decarbonisation journey and provided useful case study information based on our own carbon reduction activity.





