# Contents

# Stakeholder Engagement

| Key measures | | ED1 performance | | ED2 performance Phased targets | | | | | Customer outcome |
|---|---|---|---|---|---|---|---|---|---|
| KPI | Unit | ED1 to date[1] | ED1 forecast[2] | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| **OUTPUTS** | | | | | | | | | |
| Stakeholder satisfaction | % | 85% | 85% | 86% | 87% | 88% | 89% | **90%** | SE4 |
| AA1000 - stakeholder Standard | Hit/Miss | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | SE4 |
| Independent assessment of inclusion and reach | Hit/Miss | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | SE1 |
| **INDICATIVE INPUTS** | | | | | | | | | |
| Regional engagement | Count | 6 | 6 | 12 | 14 | 15 | 16 | **18** | SE1 |
| Community energy engagement | Count | 7 | 7 | 8 | 9 | 12 | 12 | **12** | SE1 |
| Community and customer capacity programmes | Count | 2 | 2 | 4 | 4 | 5 | 6 | **6** | SE2 |
| Cross-utility forums | Count | 1 | 1 | 3 | 3 | 3 | 3 | **3** | SE2 |
| Industrial representative meetings | Count | 1 | 1 | 4 | 4 | 4 | 4 | **4** | SE2 |
| GDN/DNO bilateral | Count | 2 | 2 | 4 | 4 | 4 | 4 | **4** | SE2 |
| LAEP forums | Count | 2 | 2 | 4 | 4 | 4 | 4 | **4** | SE3 |
| Formal local authority consultations | % | - | - | 100% | 100% | 100% | 100% | **100%** | SE3 |

## Description of our key measures – Stakeholder Engagement

| KPI | Definition |
|---|---|
| **OUTPUTS** | |
| Stakeholder satisfaction | To achieve an overall rating through an assessment of satisfaction from events held and a quarterly satisfaction assessment exercise undertaken by a research organisation with a proportion of stakeholders. |
| AA1000 - Stakeholder Standard | To achieve the AA1000 audit on an annual basis through assessment against the standard by an accredited AA1000 auditor. |
| Independent assessment of inclusion and reach | An annual audit undertaken by an industry leading research body to assess our approach against best practice as to whether the engagement planned, undertaken or acted upon was fully representative including (but not limited to) diversity, vulnerability, industrial and commercial, hard to reach, future and seldom heard groups. |
| **INDICATIVE INPUTS** | |
| Regional engagement | The count of engagement activity equally spread across the region's geography to ensure inclusivity and representation. Engagement will include assemblies, panels, forums and bi-lateral meetings. |
| Community Energy engagement | The count of engagement specific to community energy events, conferences, forums and panels. |
| Community and customer capacity programmes sponsored | The count of engagement aimed to equip stakeholders with the skills, knowledge and development they have requested to advance, set up, mobilise or grow their organisations and / or projects within defined areas including (but not limited to) decarbonisation, energy efficiency, education, low carbon technologies, community energy enterprises and sustainability practices. |
| Cross-utility forums | The count of engagement activities held in collaboration with utility partners and regional bodies including (but not limited to) gas, hydrogen, water, electricity, data, transport, and health. |
| Industrial representative meetings | The count of engagement sessions either bilateral / forums / workshops/co-creation events that engage industrial stakeholders and major energy users in horizon scanning, enabling decarbonisation and business development. |
| GDN/DNO bilateral | The count of specific engagement activities held in collaboration with the Gas Distribution Network Operator (Northern Gas Networks). |
| LAEP forums | The count of engagement, co-creation and capacity building sessions with Local Authorities and partners developing a local area energy plan or equivalent. |
| Formal local authority consultations | The proportion of Local Authorities (LAs) with which we formally consulted on our current and future investment programmes and shared priorities. This is a new measure for the ED2 period, as we currently engage with LAs but do not follow a formal consultation process. |

1. 2020/21 actual performance.
2. 2022/23 forecast performance.

# Scenarios and Investment

| Key measures | | ED1 performance | | ED2 performance Phased targets | | | | | Customer outcome |
|---|---|---|---|---|---|---|---|---|---|
| KPI | Unit | ED1 to date | ED1 forecast | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| **OUTPUTS** | | | | | | | | | |
| Network utilisation - major substations > LI3 | % | *1.1%* | *2.5%* | 2.1% | 1.5% | 1.3% | 1.0% | **0.7%** | SI1 |
| **INDICATIVE INPUTS** | | | | | | | | | |
| Investment in creating capacity | £m | *£17.5m* | *£19.5m* | £103.1m | £103.1m | £103.1m | £103.1m | **£103.1m** | SI1 |
| EVs accommodated | Count | *31,000* | *110,000* | 215,000 | 352,000 | 525,000 | 718,000 | **941,000** | SI1 |
| Heat pumps accommodated | Count[1] | *34,000* | *58,000* | 77,000 | 97,000 | 149,000 | 220,000 | **309,000** | SI1 |
| **OTHER SUPPORTING KPIs** | | | | | | | | | |
| Total generation connected | GW[1] | *5.3* | *5.8* | 6.2 | 6.4 | 6.7 | 7.0 | **7.3** | - |

| CROSS REFERENCE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **3.1.3 DSO** *(Mapping to SI2)* | | | | | | | | | |
| EHV substation areas in flexibility market evaluation | Count[1] | *23* | *25* | 35 | 40 | 63 | 67 | **80** | DSO5 |
| Flexibility provider registration acceptance time <30 days | % | - | - | - | - | - | - | **>95%** | DSO5 |
| Local flexibility stakeholder engagement | Count | - | - | - | - | - | - | **120** | DSO5 |

## Description of our key measures – Scenarios and Investment

| KPI | Definition |
|---|---|
| **OUTPUTS** | |
| Network utilisation - major substations > LI3 | The proportion of substations where the loading is >99% |
| **INDICATIVE INPUTS** | |
| Investment in creating capacity | The investment (£m) in each year where the driver is load related reinforcement and the output is creating additional capacity for customers to connect |
| EVs accommodated | The cumulative count of Electric Vehicles that are connected in our region |
| Heat Pumps accommodated | The cumulative count of heat pumps that are connected in our region |
| **OTHER SUPPORTING KPIs** | |
| Total generation connected | The total generation that is connected (or due to be connected in future years) for renewable, non-renewable and storage |

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1. Cumulative.

# DSO Strategy

| Key measures[1] | | ED1 performance | | ED2 performance Phased targets | | | | | Customer outcome |
|---|---|---|---|---|---|---|---|---|---|
| KPI | Unit | ED1 to date | ED1 forecast | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| **OUTPUTS** | | | | | | | | | |
| Ground mounted substation networks directly monitored | %[2] | *4%* | *10%* | 18% | 26% | 34% | 42% | **50%** | DSO1 |
| LV load monitors installed | Count[2] | *1,250* | *2,700* | 4,700 | 6,700 | 8,700 | 10,700 | **12,700** | DSO1 |
| Historical; operational and outage planning data ESO/DSO | % | - | - | >90% | >90% | >90% | >90% | **>90%** | DSO2 |
| New Open Data products and services - increase | % | - | *14%* | 21% | 43% | 57% | 64% | **70%** | DSO3 |
| New network data self service | Hit/Miss | - | - | - | - | - | ✓ | - | DSO3 |
| Error corrections issued for dispatch | % | - | - | <10% | <10% | <10% | <10% | **<10%** | DSO4 |
| Late issuance of dispatch data | % | - | - | <10% | <10% | <10% | <10% | **<10%** | DSO4 |
| Operational data exchange ESO-DSO | % | - | - | >90% | >90% | >90% | >90% | **>90%** | DSO4 |
| Constrained data exchange ESO-DSO | % | - | - | >90% | >90% | >90% | >90% | **>90%** | DSO4 |
| EHV substation areas in flexibility market evaluation | Count[2] | *23* | *25* | 35 | 40 | 63 | 67 | **80** | DSO5 |
| Flexibility provider registration acceptance time <30 days | % | - | - | >95% | >95% | >95% | >95% | **>95%** | DSO5 |
| Procurement events response time <3 months | % | - | - | >95% | >95% | >95% | >95% | **>95%** | DSO5 |
| **INDICATIVE INPUTS** | | | | | | | | | |
| Local flexibility stakeholder engagement | Count[2] | - | - | 24 | 48 | 72 | 96 | **120** | DSO5 |

## Description of our key measures – DSO Strategy

| KPI | Definition |
|---|---|
| **OUTPUTS** | |
| Low Voltage (LV) Monitoring | Percentage of ground mounted substation networks directly monitored |
| LV load monitors installed | Count of LV load monitors installed |
| Historic operational and outage planning data ESO/DSO | Historic operational and outage planning data to be shared with stakeholders (e.g. monthly) |
| New Open Data products and services - increase | Through a data catalogue, APIs and a dedicated portal we will increase our data and service availability to our customers and stakeholders (further detail in the summary) |
| New network data self service | Enhanced open data through implementing a set of free analytical tools to help processing data and enhanced self-service, such as dynamic heat maps and Autodesign |
| Count of error corrections issued for dispatch | The count of error corrections related to dispatch instructions and/or information which results in incorrect delivery that are issued to market participants |
| Count of late issuance of dispatch data | The count of late issuance of dispatch data (ex-post) |
| Operational data exchange ESO-DSO | The "up time" for exchanging real-time operational data with 90% reliability. |
| Constrained data exchange ESO-DSO | System "up-time" for exchange of network constraint data via the new ICCP link in the Common Information Model (CIM) format (daily) |
| Number of EHV substation areas in flexibility market evaluation | A report detailing the cumulative volume of EHV substations in flexibility evaluation exercises involving our stakeholders |
| Flexibility provider registration acceptance time | Time taken for a response to be provided to new customers who apply to become a flexibility provider |
| Procurement events response time | Time taken for a response to be provided to customers who participate in our flexibility tenders |
| **INDICATIVE INPUTS** | |
| Local flexibility stakeholder engagement | The total number of stakeholder engagements to promote flexibility |

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1. We have provided a view of phased targets where available, however in most cases, these is still uncertainty given that our DSO function is still in the developmental phase.
2. Cumulative.

# Whole Systems

| Key measures | | ED1 performance | | ED2 performance Phased targets | | | | | Customer outcome |
|---|---|---|---|---|---|---|---|---|---|
| KPI | Unit | ED1 to date | ED1 forecast | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| **OUTPUTS** | | | | | | | | | |
| LV customers benefitting from voltage optimisation | % | *0%* | *0%* | 0% | 0% | 10% | 20% | **30%** | WS3 |
| **INDICATIVE INPUTS** | | | | | | | | | |
| Energy matchmaking scheme go-live | Hit/Miss | - | - | - | - | ✓ | - | **-** | WS1 |
| Cross-vector innovation projects across the period | Count[1] | - | - | - | - | 1 | - | **2** | WS2 |
| Large scale sites with voltage optimisation to manage energy efficiency | Count[1] | *0* | *3* | 0 | 49 | 98 | 147 | **196** | WS3 |
| No. low carbon equipment supplier consultations in period | Count[1] | *1* | *5* | 10 | 20 | 30 | 40 | **50** | WS4 |
| **OTHER SUPPORTING KPIs** | | | | | | | | | |
| Fixed microgrids rolled out on low voltage (LV) networks | Count[1] | *0* | *2* | 0 | 5 | 15 | 25 | **30** | WS3 |

## Description of our key measures – Whole Systems

| KPI | Definition |
|---|---|
| **OUTPUTS** | |
| LV customers benefitting from voltage optimisation | The percentage of our LV customers who see an energy bill benefit as a result of our voltage optimisation Customer Value Proposition. |
| **INDICATIVE INPUTS** | |
| Energy matchmaking scheme go-live | A database which allows customers to leave details of their connection or connection application and an indication their willingness to share that connection with other users. Potentially complimentary uses, storage and generation, or generation with non-concurrent peak output, and flexible load have the potential to reduce connection costs and accelerate connection timescales. |
| Cross-vector innovation projects across the period | Innovation considering both more than one energy type in meeting the customers' needs. For example a mix of gas and electricity for heat, a mixture of transport and IT for commuting. |
| Large scale sites with voltage optimisation to manage energy efficiency | A primary substation – typically with a lower voltage of 11kV or 20kV and a higher voltage between 33kV and 132kV – and data flows and remotely configurable voltage control scheme to dynamically alter the voltage set point based on voltages experienced at smart meters or other sensing devices on the low voltage network fed from the primary. |
| No. low carbon equipment supplier consultations in period | Discussions with specifiers and manufacturers of low carbon equipment (e.g. heat pumps, electric vehicles, storage and generation) with a view to building understanding of how to balance equipment costs and infrastructure costs, and accelerate decarbonisation at optimum overall cost. |
| **OTHER SUPPORTING KPIs** | |
| Fixed microgrids rolled out on low voltage (LV) networks | Fixed power electronics installations capable of asynchronously connecting and disconnecting a low voltage network from the wider network together with the associated storage and/or generation and control systems to maintain supplies to customers fed from the low voltage network. The storage and generation may be either DSO owned or contracted from customers. |

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1. Cumulative, in price control.

# Environment

| Key measures | | ED1 performance | | ED2 performance Phased targets | | | | | Customer outcome |
|---|---|---|---|---|---|---|---|---|---|
| KPI | Unit | ED1 to date[1] | ED1 forecast[2] | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| **OUTPUTS** | | | | | | | | | |
| Business carbon footprint (BCF) DNO only | $tCO_2e$ | *14,722* | *14,300* | 13,720 | 13,150 | 12,580 | 12,010 | **11,430** | EP1 |
| BCF - Buildings energy usage | $tCO_2e$ | *7,312* | *6,480* | 6,300 | 6,120 | 5,940 | 5,720 | **5,520** | EP1 |
| BCF - Operational transport | $tCO_2e$ | *4,186* | *4,110* | 3,870 | 3,650 | 3,370 | 3,070 | **2,750** | EP1 |
| BCF - Business transport | $tCO_2e$ | *1,558[3]* | *2,560* | 2,420 | 2,280 | 2,200 | 2,180 | **2,160** | EP1 |
| BCF - Fugitive emissions | $tCO_2e$ | *1,666* | *1,150* | 1,130 | 1,100 | 1,070 | 1,040 | **1,000** | EP1 |
| Science-based target Scope 1 and 2 emissions (excluding losses) | $tCO_2e$ | *12,866* | *11,740* | 11,180 | 10,610 | 10,050 | 9,490 | **8,920** | EP1 |
| Science-based target Scope 1 and 2 emissions (including losses) | $tCO_2e$ | *539,775* | *492,450* | 468,790 | 445,120 | 421,460 | 397,790 | **374,130** | EP1 |
| Science-based target Scope 2 emissions (losses only) | $tCO_2e$ | *526,909* | *480,710* | 457,610 | 434,510 | 411,410 | 388,300 | **365,210** | EP2 |
| Contractor emissions rate target | rate | *68.0* | *62.0* | *59.0* | *56.0* | *53.1* | *50.1* | **47.1** | EP3 |
| $SF_6$ lost | Kg | *73.1* | *50.3* | 48.7 | 47.2 | 45.7 | 44.2 | **42.7** | EP1 |
| Responsible procurement charter | % | - | - | 90% | 90% | 90% | 90% | **90%** | EP3 |
| Oil/fluid lost | Litres | *28,055* | *27,300* | 26,500 | 25,700 | 24,900 | 24,100 | **23,200** | EP4 |
| Overhead lines removed inside and outside of designated areas | km[4] | *74.9* | *114.0* | 10.0 | 20.0 | 35.0 | 50.0 | **73.0** | EP6 |
| Biodiversity - improvement/facilitated on site | Count[4] | *11* | *11* | 40 | 80 | 120 | 160 | **200** | EP6 |
| Waste - diversion from landfill | % | *75%* | *80%* | 82% | 84% | 86% | 88% | **90%** | EP6 |
| Waste - recycled and re-used materials | % | *75%* | *78%* | 79% | 80% | 82% | 84% | **85%** | EP6 |
| Noise pollution – interventions | Count | *28* | *39* | 6 | 12 | 19 | 26 | **33** | EP6 |
| **INDICATIVE INPUTS** | | | | | | | | | |
| Losses - low loss cables | km[4,5] | *1,582* | *2,240* | 680 | 1,360 | 2,040 | 2,720 | **3,400** | EP2 |
| Losses - low loss transformers | Count[4] | *4* | *5* | 2,400 | 4,800 | 7,200 | 9,600 | **12,000** | EP2 |
| Investment to support supply chain standards | £m | - | - | 0.24 | 0.48 | 0.72 | 0.96 | **1.20** | EP3 |
| FFC – replacement | km[4] | *176.5* | *224.4* | 8 | 16 | 24 | 32 | **40** | EP4 |
| FFC - dosing (PFT) | km[4] | *81.9* | *109.2* | 53.4 | 106.8 | 160.2 | 213.6 | **267.0** | EP4 |
| PCB - pole mounted transformers | Count[4] | *0* | *413[6]* | 2,766 | 5,532 | 8,401 | 8,401 | **8,401[6]** | EP5 |
| PCB - ground mounted transformers | Count[4] | *0* | *34* | 155 | 311 | 427 | 427 | **427[7]** | EP5 |
| Visual amenity expenditure – versus allowances | % | *103%* | *127%* | 20% | 40% | 60% | 80% | **100%** | EP6 |

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1. 2020/21 actual performance.
2. 2022/23 forecast performance.
3. This number is lower that the ED1 forecast and ED2 volumes as a result of minimal travel during the COVID-19 pandemic.
4. Cumulative, in price control.
5. Volumes align with our Planning Scenario and will differ in the period according to the decarbonisation pathway that emerges.
6. Includes 500 units delivered synergistically via reinforcement.
7. Includes 15 units delivered synergistically via asset replacement.

## Description of our key measures – Environment

| KPI | Definition |
|---|---|
| **OUTPUTS** | |
| Business carbon footprint (BCF) DNO only | The total Greenhouse Gas Emissions $tCO_2e$ (tonnes of $CO_2$ equivalent) from the operations of our distribution business. |
| BCF - Buildings energy usage | The total $tCO_2e$ from energy use at our depots and substations – including gas and electricity. |
| BCF - Operational transport | The total $tCO_2e$ from our fleet fuel use. |
| BCF - Business transport | The total $tCO_2e$ from business travel – including road, rail and air. |
| BCF - Fugitive emissions | The total $tCO_2e$ from emission relative to sulphur hexafluoride gas ($SF_6$) lost. |
| Science-based target Scope 1 and 2 (excluding losses) | Targets are considered 'science-based' if they are in line with the goals of the Paris Agreement – limiting global warming to well-below 2°C and pursuing efforts to limit warming to 1.5°C. |
| Science-based target Scope 1 and 2 emissions (including losses) | Losses are the difference between the amount of energy entering the network and the amount of energy drawn out of it. |
| Science-based target Scope 2 emissions (losses only) | |
| Contractor emissions rate | The total emissions ($tCO_2e$) from contractor operations as a proportion of investment activity completed by the contractors – with a targeted reduction in line with our science based targets of 4.2% per annum |
| $SF_6$ lost | The total amount of sulphur hexafluoride gas ($SF_6$) lost into the atmosphere |
| Responsible procurement charter | Sets out the requirements that suppliers must adhere to from an environmental, regulatory, health and Safety and compliance perspective. Supports Northern Powergrid's Responsible Procurement Policy. |
| Oil/Fluid lost | The total discharge of insulating oil into the environment as a result of operational activities. |
| Overhead lines removed inside and outside of designated areas | The length of overhead lines removed from within areas of outstanding natural beauty and national parks in line with our ED1 programme. This now also includes a small number of schemes that will be completed outside of designated areas. |
| Biodiversity - improvement/facilitated on site | Biodiversity is the variety of plant and animal life in the world or in a particular habitat, a high level of which is usually considered to be important and desirable. |
| Waste - Diversion from landfill | The proportion of total waste that is not sent to landfill (landfill is the process of burying waste material). |
| Waste - Recycled and re-used materials | The proportion of total waste that is retuned to a previous stage in its life cycle and either re-used for its original purpose or converted into other usable material. |
| Noise pollution - interventions | The number of remedial works required to rectify noise complaints that are above the levels of normal operating characteristics of electrical assets. |
| **INDICATIVE INPUTS** | |
| Losses - low loss cables | The length of cable installation relative to Low voltage and High voltage circuits. The cable being installed results in a reduction of electrical losses. |
| Losses - low loss transformers | The count of transformers classed as low loss – see our losses strategy for more information. |
| Investment to support supply chain standards | The level of investment to support suppliers to obtain ISO14001 accreditation, where they do not hold this already. The investment will also cover the internal resource and IT costs associated with the increase in the data we will process and analyse on a monthly basis from supplier environmental returns to improve transparency around scope 3 emissions. |
| FFC - replacement | The length of fluid filled cable replaced. |
| FFC - dosing (PFT) | The length of circuits dosed with Perfluorocarbon (PFT) tracers. PFT tracers are an additive put into fluid-filled cables which can detect leaks by 'sniffing' the specific chemical structure of the additive in the ground above the leak, locating leakage from above the ground to target repair. |
| PCB - Pole Mounted Transformers | A high voltage electrical transformer located on a pole that contains Polychlorinated Biphenyls (PCBs). PCBs are organic chemicals that were manufactured with a thermal and chemical stability making them an excellent insulating material. |
| PCB - Ground Mounted Transformers | A high voltage electrical transformer located at ground level that contains PCBs. |
| Visual amenity expenditure – | The proportion of the 'use it or lose it' allowance used to remove overhead lines as part of our visual amenity programme. Where this exceeds 100%, we will have re-invested plan efficiencies in completing more work. |

# Safety

| Key measures | | ED1 performance | | ED2 performance<br>Phased targets | | | | | Customer<br>outcome |
|---|---|---|---|---|---|---|---|---|---|
| KPI | Unit | ED1<br>to date | ED1<br>forecast | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| **OUTPUTS** | | | | | | | | | |
| OSHA rate (DNO) | Rate[1] | *0.27* | *0.22* | 0.18 | 0.18 | 0.17 | 0.13 | **0.12** | S1 |
| RIDDOR rate (DNO) | Rate[1] | *0.12* | *0.07* | 0.06 | 0.06 | 0.06 | 0.03 | **0.02** | S1 |
| HSE compliance | Hit/Miss | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | S1 |
| OSHA rate (contractor) | Rate[1] | *0.73* | *0.55* | 0.43 | 0.53[1] | 0.45[1] | 0.42[1] | **0.37**[1] | S2 |
| Overhead line contacts | Count[1] | *43* | *41* | 37 | 35 | 34 | 32 | **31** | S4 |
| **INDICATIVE INPUTS** | | | | | | | | | |
| Training: behavioural safety | Count | - | - | - | 450 | 900 | 1,350 | **1,800** | S1 |
| Training: driver awareness | Count[1] | *112* | *120* | 143 | 151 | 180 | 200 | **200** | S1 |
| Safety audits (contractor) | Count[1] | *1,047* | *1,340* | 1,490 | 1,560 | 1,610 | 1,610 | **1,610** | S2 |
| ISO45003 accreditation | Achieve | - | - | Achieve | Maintain | Maintain | Maintain | **Maintain** | S3 |
| Safety awareness programme | Count[1] | *43,473* | *43,400* | 42,200 | 42,600 | 49,800 | 52,600 | **55,000** | S4 |

## Description of our key measures - Safety

| KPI | Definition |
|---|---|
| **OUTPUTS** | |
| OSHA rate (DNO) | The OSHA accident rate of injuries and illnesses applicable to our employees, which is calculated from the formula Number of injuries and illnesses X 200,000) / Employee hours worked. In this instance. In this case, we have considered a 5 year rolling average.<br><br>OSHA - The Occupational Safety and Health Administration, more commonly known by its acronym OSHA, is a regulatory agency the United States Department of Labor, which is responsible for protecting worker health and safety in the United States. |
| RIDDOR rate (DNO) | The RIDDOR incident rate, which is calculated by dividing the number of reportable incidents by the number of employees then multiplied by 100. In this case, we have considered a 5 year rolling average.<br><br>RIDDOR - Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013. RIDDOR puts duties on employers, the self-employed and people in control of work premises (the Responsible Person) to report certain serious workplace accidents, occupational diseases and specified dangerous occurrences (near misses). |
| HSE Compliance | Achieving compliance means no penalties or notices are received from the Health and Safety Executive. |
| OSHA rate (Contractor) | The OSHA accident rate of injuries and illnesses applicable to our contractors. |
| Overhead line contacts | Number of overhead line contacts by a third party that resulted in a power failure/fault. |
| **INDICATIVE INPUTS** | |
| Training: Behavioural safety | Number of our colleagues who completed behavioural safety training programme. |
| Training: Driver awareness | Number of our colleagues who completed training to ensure ongoing competence. |
| Safety audits (Contractor) | Audits of contractors undertaken by our safety auditors. |
| ISO45003 accreditation | ISO45003 is a global standard giving practical guidance on managing psychological health in the workplace. It provides guidance on the management of psychosocial risk as part of an occupational health and safety management system. |
| Safety awareness programme | The number of people receiving a safety education message. This includes face-to face lessons, lesson downloads and video views/downloads. |

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1. Rolling five-year average – reflecting length of ED2 period.

# Reliability and Availability

| Key measures | | ED1 performance | | ED2 performance Phased targets | | | | | Customer outcome |
|---|---|---|---|---|---|---|---|---|---|
| KPI | Unit | ED1 to date[1] | ED1 forecast[2] | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| **OUTPUTS** | | | | | | | | | |
| Customer interruptions (CI) | CI[3] | *48.6* | *47.4* | 46.5 | 45.2 | 44.0 | 42.7 | **42.0** | RA1 |
| CI - Northeast | CI[3] | *44.1* | *43.6* | 43.1 | 42.4 | 41.6 | 40.9 | **40.5** | RA1 |
| CI - Yorkshire | CI[3] | *51.7* | *50.0* | 48.9 | 47.2 | 45.6 | 43.9 | **43.1** | RA1 |
| Customer minutes lost (CML) | CML[3] | *37.2* | *34.0* | 32.8 | 31.5 | 30.2 | 28.9 | **28.3** | RA2 |
| CML – Northeast | CML[3] | *35.0* | *32.0* | 31.8 | 31.0 | 30.2 | 29.5 | **29.1** | RA2 |
| CML - Yorkshire | CML[3] | *38.8* | *35.4* | 33.6 | 31.9 | 30.2 | 28.6 | **27.7** | RA2 |
| Power cuts > 12 hour (pre-clock) | Count | *3,943* | *3,600* | 3,500 | 3,300 | 3,100 | 2,900 | **2,700** | RA3 |
| Power cuts > 6 hours | Count[4] | *87,001* | *82,500* | 80,000 | 78,500 | 77,000 | 75,500 | **74,000** | RA4 |
| Power cuts ≥ 5 interruptions | Count[4] | *30,174* | *26,000* | 25,000 | 24,500 | 24,000 | 23,500 | **23,000** | RA5 |
| Worst served customers addressed | Count[5] | - | - | 184 | 976 | 1,373 | 1,624 | **2,835** | RA6 |
| 10 days' notice given for planned power cuts | % | *63.5%* | *70.0%* | 72.0% | 74.0% | 76.0% | 78.0% | **80.0%** | RA7 |
| **OTHER SUPPORTING KPIs** | | | | | | | | | |
| HV Automation investment | £m | *£27.4m* | *£35.1m* | £16.2m | £32.4m | £44.3m | £56.2m | **£64.8m** | RA1 |
| Northeast | £m | *£18.9m* | *£21.1m* | £2.2m | £4.4m | £6.1m | £7.8m | **£8.6m** | RA1 |
| Yorkshire | £m | *£8.5m* | *£13.0m* | £14.0m | £28.0m | £38.2m | £48.4m | **£56.2m** | RA1 |
| HV Automation deployment | Count | *4,742* | *5,719* | 2,150 | 4,300 | 5,881 | 7,461 | **8,600** | RA1 |
| Northeast | Count | *1,541* | *2,300* | 287 | 574 | 805 | 1,035 | **1,147** | RA1 |
| Yorkshire | Count | *3,201* | *3,419* | 1,863 | 3,726 | 5,076 | 6,426 | **7,453** | RA1 |
| HV restoration time | Mins | *51* | *50* | 49 | 48 | 47 | 46 | **45** | RA2 |
| LV restoration time | Mins | *174* | *165* | 163 | 161 | 159 | 157 | **155** | RA2 |

## Description of our key measures – Reliability and Availability

| KPI | Definition |
|---|---|
| **OUTPUTS** | |
| Customer Interruptions | The proportion of total customers in a year that were affected by a power cut that lasted for three minutes or longer i.e. the number of customers affected by a power cut that lasted for three minutes or longer, multiplied by 100 and divided by the total number of customers. |
| Customer Minutes Lost | The average number of minutes lost per customer per year where a power cut lasts for three minutes or longer. |
| Power Cuts > 12hrs (pre-clock) | The number of customers who are off supply for more than 12 hours under normal operating conditions per year. |
| Power Cuts > 6 hrs | The number of customers who are off supply for more than 6 hours under normal operating conditions per year. Actual and forecast performance is set on the basis of a 4 year average due to the 'volatility' of these numbers. |
| Power Cuts ≥ 5 interruptions | Number of customers who experience 5 or more unplanned power cuts lasting more than 3 minutes in a year. Actual and forecast performance is set on the basis of a 4 year average due to the 'volatility' of these numbers. |
| Worst Served Customers addressed | In ED1 a worst served customers is a customer experiencing on average at least four higher voltage interruptions per year over a three year period (i.e. 12 or more over three years), with a minimum of **three** higher voltage interruptions in each year. In ED2 a worst served customer is a customer experiencing on average at least four higher voltage power cuts per year, over a three year period (i.e. 12 or more over three years), with a minimum of **two** power cuts per year. |
| 10 days' notice given for planned power cuts | The proportion of planned power cuts where we give at least 10 working days' notice. |
| **OTHER SUPPORTING KPIs** | |
| HV automation investment | The level of cumulative investment (£m) in the period related to HV automation. |
| HV automation deployment | The cumulative count of deployment related to HV automation. |
| HV Restoration Time | The average time a customer is off supply during a high voltage unplanned power cut. |
| LV Restoration Time | The average time a customer is off supply during a low voltage unplanned power cut. |

1. 2020/21 actual performance.
2. 2022/23 forecast performance.
3. Unplanned, excluding exceptional events.
4. Four-year average.
5. In line with the Ofgem definition (See Description of our key measures) – the classification of customers that fall into this category is changing in RIIO-ED2.

# Asset Resilience

| Key measures | | ED1 performance | | ED2 performance Phased targets | | | | | Customer outcome |
|---|---|---|---|---|---|---|---|---|---|
| KPI | Unit | ED1 to date | ED1 forecast | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| **OUTPUTS** | | | | | | | | | |
| Delivery of plan target (NOMs ED1 target) | % | 79.1% | 100% | - | - | - | - | - | AR2 |
| Delivery of plan target (NARMS ED2 target) | % | - | - | 20% | 40% | 60% | 80% | **100%** | AR2 |
| Impact of interventions on whole life risk | % | - | - | - | - | - | - | **24.5%** | AR2 |
| **INDICATIVE INPUTS** | | | | | | | | | |
| High risk substations replaced | Count[1] | 168 | 178 | 14 | 28 | 42 | 56 | 70 | AR2 |
| **OTHER SUPPORTING KPIs** | | | | | | | | | |
| NOMs (ED1) monetised risk | £m | 15.8 | 20 | - | - | - | - | - | AR2 |
| NARMs (ED2) monetised risk | £m[2] | - | - | 157.0 | 314.0 | 471.1 | 628.1 | 785.1 | AR2 |
| Innovative transformer monitoring | Count[1] | - | - | 6 | 12 | 18 | 24 | 30 | AR2 |
| Risk mapping (partial discharge) | Circuits[1] | - | - | 20 | 40 | 60 | 80 | 100 | AR2 |

## Description of our key measures – Asset Resilience

| KPI | Definition |
|---|---|
| **OUTPUTS** | |
| % delivery of plan target (NOMs ED1) | The Network Output Measures (NOMs) refers to the outputs (or Network Asset Secondary Deliverables, NASD) related to asset health, criticality and risk, as defined for the RIIO-ED1 period in Standard Condition 51 of the electricity distribution licence. They allow the level of risk to be quantified consistently across asset categories and DNOs in accordance with the requirements of the v1.1 of the Common Networks Asset Indices Methodology (CNAIM), by determining the Health Index and Criticality Index for individual assets before and after an intervention. |
| % delivery of plan target NARMS target | Network Asset Risk Metric (NARM) is the equivalent measure to NOMs by which Ofgem will measure the effectiveness of the asset intervention programmes as directed in its RIIO-ED2 price control determination and is governed by v2.1 of CNAIM. |
| Impact of interventions on whole life risk | The improvement in as a result of the asset intervention programmes completed in the ED2 period compared to a scenario where we did not complete said activity. |
| **INDICATIVE INPUTS** | |
| Count of high risk substations replaced | The count of high risk outdoor substations replaced with indoor substations. |
| **OTHER SUPPORTING KPIs** | |
| NOMs (ED1) Monetised risk | Relates to the Risk Index which is a monetised risk measure, determined from the combination of the Health Index and Criticality Index, in accordance with the requirements of CNAIM v1.1. |
| NARMs (ED2) Monetised risk | Relates to the Risk Index which is a monetised risk measure, determined from the combination of the Health Index and Criticality Index, in accordance with the requirements of CNAIM v2.1. |
| Innovative transformer monitoring | Online dissolved gas analysis of the transformer main tank and tap changer. |
| Risk Mapping (Partial discharge) | The gathering of asset intelligence/information relating to HV cables through the use of partial discharge surveys by portable installations. |

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1. Cumulative, in price control.
2. Whole life risk, in line with the new Ofgem definition for the 2023-28 period.

# Climate Resilience

| Key measures | | ED1 performance | | ED2 performance Phased targets | | | | | Customer outcome |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| KPI | Unit | ED1 to date | ED1 forecast | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| **OUTPUTS** | | | | | | | | | |
| High risk sites protected to flooding (ETR138) | % | *93%* | *99%* | 100% | 100% | 100% | 100% | **100%** | CR1 |
| HV network resilient to high winds (ETR132) | % | *42%* | *60%* | 63% | 66% | 69% | 72% | **75%** | CR2 |
| **INDICATIVE INPUTS** | | | | | | | | | |
| Total sites resilient to flooding (including surveys) | Count[1] | *255* | *271* | 12 | 21 | 30 | 39 | **48**[2] | CR1 |
| Total sites resilient to flooding (Upgrades only - excluding surveys) | Count | *199* | *211* | 12 | 21 | 30 | 39 | **48**[2] | CR1 |
| Major substation flood defences installed | Count[1] | *73* | *84* | 5 | 7 | 9 | 11 | **13** | CR1 |
| High criticality distribution substations with increased resilience | Count[1] | *-* | *-* | 7 | 14 | 21 | 28 | **35** | CR1 |
| ETR132: Network clearance | km | *889*[3] | *1,295*[3] | 844 | 844 | 844 | 844 | **844** | CR2 |
| ENATS 43-8: VM clearance | Spans | *24,813*[3] | *25,780*[3] | 24,100 | 24,100 | 24,100 | 24,100 | **24,100** | CR2 |
| LiDAR network surveys | Count | *0* | *0*[4] | - | - | 1 | - | **1** | CR2 |

## Description of our key measures – Climate Resilience

| KPI | Definition |
| --- | --- |
| **OUTPUTS** | |
| High risk sites protected from flooding (ETR138) | The number of sites that have been protected from flooding to ETR 138 – Electricity Substation Resilience to Flooding:<br>• Level 1: most important grid substations (typically supplying 50,000 to 500,000 customers) - likelihood of flooding should be no more than 1 in 1,000 years.<br>• Level 2: other primary substations (typically supplying 5,000 to 30,000 customers) - likelihood of fluvial flooding should be no more than 1 in 100 years and of sea flooding no more than 1 in 200 years.<br>• Level 3: for sites where level 1 or 2 cannot be justified – other flood resilience measures. |
| HV network resilient to high winds (ETR132) | The number of kilometres of overhead lines which have undergone enhanced vegetation clearance works in line with ETR 132 – Improving resilience of overhead networks under abnormal weather conditions using a risk based methodology. |
| **INDICATIVE INPUTS** | |
| Total sites resilient to flooding (including surveys) | The count of sites where work has been done to increase their resilience to flooding. This includes major works (i.e. construction of a wall around the perimeter or relocation of the assets), minor works (i.e. installation of flood protection to door openings, raising ventilation holes and sealing cable troughs) and remedials (i.e. works to improve site drainage or rectify issues with existing flood mitigation measures)<br><br>This also includes where we have conducted a survey and deemed that no work was required as the site was sufficiently protected. |
| Total sites resilient to flooding (Upgrades only - excluding surveys) | In line with the description above, but excluding where we have conducted a survey and deemed that no work was required as the site was sufficiently protected. |
| Major substation flood defences installed | The count of flood defences installations at major substations. |
| High criticality distribution substations with increased resilience | Substations which provide supplies to other infrastructure providers or services or where the general topography means that it is beneficial to implement flood mitigation measures. |
| ETR132: Network clearance | The length of network which has undergone enhanced vegetation clearance as set out in ETR132 guidelines. |
| ENATS43-8: VM clearance | The number of spans of overhead networks which have undergone works to ensure compliance with ENATS43-8 – Overhead Line Clearances. |
| LiDAR network surveys | Complete surveys of the network using LiDAR (Light Detection and Ranging) technology. |

1. Cumulative, in price control.
2. This includes 3 schemes from the ED1 period to be completed. One major internal upgrade and two shared National Grid sites.
3. ED1 annual average.
4. We have completed a LiDAR survey in the ED1 period, but only on a partial section of the network. ED2 surveys will be full network surveys.

# Physical and Cyber resilience

| Key measures | | ED1 performance | | ED2 performance Phased targets | | | | | Customer outcome |
|---|---|---|---|---|---|---|---|---|---|
| KPI | Unit | ED1 to date | ED1 forecast | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| **OUTPUTS** | | | | | | | | | |
| Loss of information (cyber) | Count | *0* | *0* | 0 | 0 | 0 | 0 | **0** | PC1 |
| Loss of supply (physical or Cyber) | Count | *0* | *0* | 0 | 0 | 0 | 0 | **0** | PC2, 3 |
| **INDICATIVE INPUTS** | | | | | | | | | |
| Operational technology network monitoring upgrades | Count | - | - | 100 | 350 | 550 | 700 | **700** | PC2 |
| Intelligent perimeter upgrades | Count | - | - | 31 | 62 | 93 | 124 | **155** | PC3 |
| **OTHER SUPPORTING KPIs** | | | | | | | | | |
| NCSC CAF principles met | Count | *20* | *21* | 22 | 25 | 27 | 30 | **35** | PC1 |
| NCSC CAF principles met | % | *51%* | *54%* | 56% | 64% | 69% | 77% | **90%** | PC1 |
| Employee phishing test success | % | *97.08%[1]* | *99.95%* | 99.96% | 99.97% | 99.97% | 99.97% | **99.97%** | PC1 |
| Training: cyber (1. basic) | % | *100%* | *100%* | 100% | 100% | 100% | 100% | **100%** | PC1 |
| Training: cyber (2. advanced) | % | - | *2%* | 5% | 10% | 50% | 100% | **100%** | PC1, PC2 |
| Mobile resilience system | Go live | - | - | - | - | ✓ | - | - | PC4 |
| Mobile resilience vehicles | Count | - | - | - | 4 | - | - | - | PC4 |

## Description of our key measures – Physical and Cyber Resilience

| KPI | Definition |
|---|---|
| **OUTPUTS** | |
| Loss of Information (Cyber) | A power cut that occurs as a direct result of a cyber-breach and affects >50,000 customers. |
| Loss of Supply (Physical) | A physical breach at a permanent site (substation intrusion or interference) that results directly in the loss of customer supplies. |
| **INDICATIVE INPUTS** | |
| Operational technology network monitoring upgrades | The number of substations where SCADA network traffic to and from the site is been actively monitored, analysed with exceptions reported to the Security Operation Centre. |
| Intelligent perimeter upgrades | High risk sites (including CNI) with perimeter security applied. This includes electric fences and CCTV equipment with updated technology that will improve our physical defences and be less prone to false alarms. |
| **OTHER SUPPORTING KPIs** | |
| NCSC CAF Principles met | Areas in which the National Cyber Security Centre (NCSC) Cyber Assessment Framework (CAF) targets are met or exceeded. In total, 39 Principles are defined in the CAF. |
| Employee phishing test success | The success rate of raising employee cyber awareness in terms of the ability to identify malicious emails. The success rate is calculated by Failed tests/total tests issued. |
| Training: Cyber (1. Basic) | The proportion of colleagues who complete the basic cyber training programme. This is applicable to all colleagues who use or support any form of IT/OT equipment. |
| Training: Cyber (2. Advanced) | The proportion of colleagues who complete advanced cyber training. This is limited to those colleagues who work on higher risk systems or have a need for more advanced knowledge to carry out their roles. |
| Mobile resilience System | The availability of a power resilient mobile radio communication system for use by field colleagues in place of the current 'Airwave' solution. |
| Mobile resilience vehicles | The number of vehicles that are readily deployable to provide emergency fixed communications in circumstances such as a failure of a key communication site or communication link. |

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1. Five-year average.

# Customer Service

| Key measures | | ED1 performance | | ED2 performance Phased targets | | | | | Customer outcome |
|---|---|---|---|---|---|---|---|---|---|
| KPI | Unit | ED1 to date[1] | ED1 forecast[2] | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| **OUTPUTS** | | | | | | | | | |
| BMCS score: overall | % | *90.5%* | *92.0%* | 92.3% | 92.6% | 92.9% | 93.2% | **93.5%** | CS1 |
| Complaints resolved within day+1 | % | 83.3% | 88.0% | 88.0% | 89.0% | 90.0% | ≥90.0% | **≥90.0%** | CS2 |
| Complaints resolved within day+31 | % | 96.4% | 98.0% | 98.1% | 98.2% | 98.3% | 98.4% | **98.5%** | CS2 |
| Complaints metric | Score | *2.8* | *1.8* | 1.8 | 1.7 | 1.6 | 1.5 | **1.4** | CS2 |
| **INDICATIVE INPUTS** | | | | | | | | | |
| Digital contact channels | Count[3] | *5* | *5* | 6 | 7 | 8 | 8 | **8** | CS1 |
| Bespoke satisfaction survey – data services | % | - | - | - | - | - | - | **>90.0%** | CS3 |
| **OTHER SUPPORTING KPIs** | | | | | | | | | |
| BMCS score: powercuts | % | *90.7%* | *91.8%* | 92.1% | 92.3% | 92.6% | 92.8% | **93.1%** | CS1 |
| BMCS score: connections | % | *88.9%* | *91.2%* | 91.5% | 91.7% | 92.0% | 92.2% | **92.5%** | CS1 |
| BMCS score: general enquiries | % | *94.0%* | *94.2%* | 94.7% | 95.1% | 95.6% | 96.0% | **96.5%** | CS1 |

## Description of our key measures – Customer Service

| KPI | Definition |
|---|---|
| **OUTPUTS** | |
| BMCS score: Overall | The Broad Measure of Customer Service (BMCS). The overall score is a weighted average score for the three main BMCS service lines. The weighting applied is: Power cuts (30%), Connections (50%) and General Enquiries (20%). |
| Complaints resolved within day+1 | The percentage of complaints resolved within one day (the day of receipt is counted as day 0). |
| Complaints resolved within day+31 | The percentage of complaints resolved within 31 days of receipt. |
| Complaints metric | The complaints metric measures performance against four key indicators to assess the quality of our complaints handling procedures. Performance against each indicator is weighted to calculate an overall complaints metric score. The weighting applied is: % of complaints outstanding after one day (10%), % of complaints outstanding after 31 days (30%), % of complaints that are repeat complaints (50%), and number of Ombudsman decisions against Northern Powergrid as a % of the total complaints (10%). |
| **INDICATIVE INPUTS** | |
| Digital contact channels | Number of inbound contact channels we operate to allow customers to get in touch with us. |
| Bespoke satisfaction survey – data services | A new bespoke survey, specific to the data services we offer. The scope and detail of this will be developed and implemented in the first year of ED2. |
| **OTHER SUPPORTING KPIs** | |
| BMCS score: Power cuts | Average customer satisfaction score (out of 10) for customers surveyed under the Power cuts service type for BMCS. |
| BMCS score: Connections | Average customer satisfaction score (out of 10) for customers surveyed under the Connections service type for BMCS. |
| BMCS score: General Enquiries | Average customer satisfaction score (out of 10) for customers surveyed under the General Enquiry service type for BMCS. |

1. 2021/22 actual performance.
2. 2022/23 forecast performance.
3. Cumulative.

# Vulnerability

| Key measures | | ED1 performance | | ED2 performance Phased targets | | | | | Customer outcome |
|---|---|---|---|---|---|---|---|---|---|
| KPI | Unit | ED1 to date[1] | ED1 forecast[2] | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| *OUTPUTS* | | | | | | | | | |
| Eligible high risk customers recruited to the PSM | % | *37%* | *42%* | 47% | 53% | 59% | 64% | **70%** | VN1 |
| All eligible customers recruited to the PSM | % | *35%* | *37%* | 39% | 42% | 45% | 47% | **50%** | VN1 |
| Proactive contact for data cleanse every 24 months (PSM customers) | % | *100%* | *100%* | *100%* | *100%* | *100%* | *100%* | ***100%*** | VN1 |
| BMCS: overall (PSM customers) | % | *N/a[3]* | *N/a[3]* | 92.3% | 92.6% | 92.9% | 93.2% | **93.5%** | VN1 |
| BMCS: power cuts (PSM customers) | % | *91.4%* | *91.8%* | 92.1% | 92.3% | 92.6% | 92.8% | **93.1%** | VN2 |
| Proactive contact of high risk (P1) customers within 1 hour | % | - | - | 100% | 100% | 100% | 100% | **100%** | VN2 |
| proactive contact of all PSM customers within 3 hours | % | - | - | 95% | 95% | 95% | 95% | **95%** | VN2 |
| Customers offered enhanced support on site for >6hr power cuts | % | *7%* | *14%* | 17% | 35% | 55% | 65% | **75%** | VN2 |
| Fuel poverty interventions | Count[4] | *4,356* | *6,320* | 20,000 | 20,000 | 20,000 | 20,000 | **20,000** | VN4 |
| Customers engaged via 'No one left behind' programme | Count[4] | - | - | 5,000 | 5,000 | 5,000 | 5,000 | **5,000** | VN5 |
| *INDICATIVE INPUTS* | | | | | | | | | |
| PSM sign-ups from referrals | % | *8%* | *13%* | 15% | 18% | 20% | 23% | **25%** | VN1 |
| Front-line staff trained in rolling 24 month programme | % | *N/a[5]* | *N/a[5]* | *100%* | *100%* | *100%* | *100%* | ***100%*** | VN6 |

## Description of our key measures - Vulnerability

| KPI | Definition |
|---|---|
| *OUTPUTS* | |
| Eligible high risk customers recruited to the PSM | The proportion of eligible high risk vulnerable customers to be recruited to Priority Service Membership (PSM) during ED2 (utilising social indicator data). High-risk customers are defined as those who are medically dependent on electricity, have a severe physical disability, chronic serious illness or have mental health needs. |
| All eligible customers recruited to the PSM | The proportion of eligible vulnerable customers to be recruited to Priority Service Membership (PSM) during ED2 (utilising social indicator data). |
| Proactive contact for data cleanse every 24 months (PSM) | The proportion of PSM customers contacted every two years to update their PSM record. |
| BMCS: Overall (PSM customers) | The average overall customer satisfaction score (out of 10) for PSM customers surveyed as part of the Broad Measure of Customer Service. This is not currently measured in RIIO-ED1. |
| BMCS: Power cuts (PSM customers) | The average customer satisfaction score (out of 10) for PSM customers surveyed under the Power cuts service type for BMCS. |
| Proactive contact of high risk (P1) customers within 1 hour | The proportion of high risk PSM customers proactively contacted within 1 hour to notify them of an unplanned power cut. This is applicable where we have a contact number. |
| proactive contact of all PSM customers within 3 hours | The proportion of all PSM customers proactively contacted within 3 hours to notify them of an unplanned power cut. This is applicable where we have a contact number. |
| Customers offered enhanced support on site for >6hr power cuts | The proportion of PSM customers who receive on-site, enhanced welfare support when an unplanned power cut exceeds 6 hours. This includes face to face response, enhanced customer support vehicles and capacity to install more mobile generators. |
| Fuel poverty interventions | The number of customers directly supported through one of our affordability programmes. These include programmes that are aimed at supporting customers impacted by fuel poverty. |
| Customers engaged via 'No one left behind' programme | The number of customers directly supported through one of our no-one left behind programmes. This includes programmes that support vulnerable customers on their journey to net zero. |
| *INDICATIVE INPUTS* | |
| PSM sign-ups from referrals | The number of new PSM registrations that have resulted from referrals from our colleagues, partners and campaigns. |
| Front-line staff trained in rolling 24 month programme | The target percentage for training colleagues on vulnerability and support services. |

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1. 2020/21 actual performance.
2. 2022/23 forecast performance.
3. Only the power cuts element of BMCS is measured in RIIO-ED1.
4. Performance reflects the annual average within the price control period.
5. ED1 performance is not comparable as this is currently on a three year cycle – we currently train 100% of colleagues on this basis.

# Communities

| Key measures | | ED1 performance | | ED2 performance Phased targets | | | | | Customer outcome |
| KPI | Unit | ED1 to date | ED1 forecast | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
|---|---|---|---|---|---|---|---|---|---|
| **OUTPUTS** | | | | | | | | | |
| Major schemes with social impact scheme attached | % | *15%* | *17%* | 20% | 25% | 30% | 45% | **50%** | CO1 |
| **INDICATIVE INPUTS** | | | | | | | | | |
| Investment in social programmes | £m[1] | *£0.3m* | *£0.4m* | £0.2m | £0.4m | £0.6m | £1.0m | **£1.4m** | CO1 |
| STEM pupils supported in deprived areas | Count | *245[2]* | *450* | 600 | 650 | 700 | 750 | **800** | CO2 |
| Hours volunteered | Hours[2] | *616* | *770* | 805 | 875 | 945 | 1,015 | **1,130** | CO2 |
| No. schemes supported through community energy advisors | Count[1] | - | - | 5 | 12 | 21 | 31 | **45** | CO3 |
| Average number of customers supported on decarbonisation via support schemes p.a. | Count | *4,356* | *6,320* | 20,000 | 20,000 | 20,000 | 20,000 | **20,000** | CO3 |

## Description of our key measures - Communities

| KPI | Definition |
|---|---|
| **OUTPUTS** | |
| % of major schemes with social impact scheme attached | The number of social initiatives (community projects aligned to our sustainability objectives of social, environmental and financial) attached to our investment schemes |
| **INDICATIVE INPUTS** | |
| Investment in social programmes | The value of funding for community based social initiatives aligned to our investment programmes |
| STEM pupils supported in deprived areas | The number of pupils in our region who are engaging in learning about decarbonisation, STEM and energy efficiency through school based initiatives and online channels |
| Hours volunteered | The number of hours our colleagues volunteer in community based engagement through in work time volunteering |
| No. schemes supported through community energy advisors | The number of local community energy projects supported by our social initiatives aligned to our sustainability objectives |
| Average number of customers supported on decarbonisation via support schemes p.a. | The number of customers directly supported via support schemes on decarbonisation |

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1. Cumulative total, in price control.
2. ED1 Annual average used due to COVID-19 impact on figures.

# Connections

| Key measures | | ED1 performance | | ED2 performance Phased targets | | | | | Customer outcome |
|---|---|---|---|---|---|---|---|---|---|
| KPI | Unit | ED1 to date[1] | ED1 forecast[2] | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| *OUTPUTS* | | | | | | | | | |
| *SMALL WORKS* | | | | | | | | | |
| BMCS connections – overall | % | *88.9%* | *91.2%* | 91.5% | 91.7% | 92.0% | 92.2% | **92.5%** | CN1 |
| Time to quote LVSSA | Days | *6.6* | *3.4* | 2.7 | 2.7 | 2.7 | 2.7 | **2.7** | CN1 |
| Time to quote LVSSB | Days | *14.3* | *5.5* | 4.4 | 4.4 | 4.4 | 4.4 | **4.4** | CN1 |
| Time to deliver LVSSA | Days | *48.7* | *28.3* | 22.7 | 22.7 | 22.7 | 22.7 | **22.7** | CN1 |
| Time to deliver LVSSB | Days | *78.5* | *36.5* | 29.2 | 29.2 | 29.2 | 29.2 | **29.2** | CN1 |
| Average connections lead time – small works | Days | *71.2* | *36.2* | 29.0 | 29.0 | 29.0 | 29.0 | **29.0** | CN1 |
| Guaranteed standards met | % | *98.9%[3]* | *99.0%* | 99.1% | 99.2% | 99.3% | 99.4% | **99.5%** | CN1 |
| *MAJOR WORKS* | | | | | | | | | |
| Major connections satisfaction (overall) | % | *84.3%* | *85.0%* | 86.0% | 87.0% | 88.0% | 89.0% | **90.0%** | CN2 |
| Major connections satisfaction (pre-application services) | % | *-* | *-* | 86.0% | 87.0% | 88.0% | 89.0% | **90.0%** | CN2 |
| Major connections satisfaction (quotations) | % | *-* | *-* | 86.0% | 87.0% | 88.0% | 89.0% | **90.0%** | CN2 |
| Major connections satisfaction (delivery) | % | *-* | *-* | 86.0% | 87.0% | 88.0% | 89.0% | **90.0%** | CN2 |
| Guaranteed standards met | % | *99.8%[3]* | *99.8%* | *99.8%* | *99.8%* | *99.8%* | 99.9% | **99.9%** | CN5 |
| Appointments met | % | *99.3%* | *99.5%* | 99.7% | 99.7% | 99.7% | 99.7% | **99.7%** | CN5 |
| *OTHER SUPPORTING KPIs* | | | | | | | | | |
| *SMALL WORKS* | | | | | | | | | |
| Auto design budgets issued (<55kVA) | % | *70%* | *76%* | 79% | 81% | 83% | 87% | **90%** | CN2 |
| Auto design customers registered | Count | *430* | *1,040* | 1,450 | 1,890 | 2,270 | 2,500 | **2,500** | CN2 |
| *MAJOR WORKS* | | | | | | | | | |
| Provision/self-service of network data | Count | *33,850* | *41,830* | 44,520 | 47,310 | 50,120 | 52,890 | **55,530** | CN3, CN4 |

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1. 2020/21 actual performance.
2. 2022/23 forecast performance.
3. ED1 annual average.

## Description of our key measures - Connections

| KPI | Definition |
|---|---|
| **OUTPUTS** | |
| *SMALL WORKS* | |
| BMCS connections – overall | Average customer satisfaction score (out of 10) for customers surveyed under the Connections service type. |
| Time to Quote LVSSA | The difference in working days between the date on which a connection application is received and the date on which a quotation is issued for a LVSSA connection. LVSSA is defined in the Regulatory Instructions and Guidance. |
| Time to Quote LVSSB | As above for a LVSSB connection – LVSSB is defined in the Regulatory Instructions and Guidance. |
| Time to Deliver LVSSA | The difference in working days between the date on which a quotation is accepted and the date on which the work to provide the connection is completed for a LVSSA connection. |
| Time to Deliver LVSSB | As above, for a LVSSB connection. |
| Average connections lead time – small works  (Time to Connect) | The difference between the date on which a quotation is accepted and the date on which the work to provide the connection is completed, as further defined in the Regulatory Instructions and Guidance. |
| Guaranteed standards met | The number of times a quotation is issued, action is taken or work is completed in accordance with the prescribed timescale required by the connections guaranteed standards or the Distributed Generation Standards Direction, as applicable, and where a failure payment is not required to be made. |
| *MAJOR WORKS* | |
| Major connections satisfaction (Overall) | The average customer satisfaction score (out of 10) for customers surveyed under the three major connection satisfaction survey – in line with our ODI-F proposal. |
| Major connections satisfaction (pre-application services) | The average customer satisfaction score (out of 10) for customers surveyed for the 'pre-application services' element of the major connection satisfaction survey – in line with our ODI-F proposal. |
| Major connections satisfaction (quotations) | The average customer satisfaction score (out of 10) for customers surveyed for the 'quotations' element of the major connection satisfaction survey – in line with our ODI-F proposal. |
| Major connections satisfaction (delivery) | The average customer satisfaction score (out of 10) for customers surveyed for the 'delivery' element of the major connection satisfaction survey – in line with our ODI-F proposal. |
| Guaranteed standards met | The number of times a quotation is issued, action is taken or work is completed in accordance with the prescribed timescale required by the connections guaranteed standards or the Distributed Generation Standards Direction, as applicable, and where a failure payment is not required to be made. |
| Appointments met | The number of times work commenced on site in accordance with ECGS5 or condition 4(5) of the Distributed Generation Standards Direction, as applicable. |
| *SUPPORTING MEASURES* | |
| Auto Design budgets issued (<55kVA) | The number of budget estimates self-served through AutoDesign as a percentage of the total number of budget estimates issued for Small Works customers i.e. <55kVAthrough both self-serve and the usual budget estimate process. |
| Auto Design Customers registered | The number of unique customers e.g. a company, a Local Authority or an individual registered to use AutoDesign. |
| Provision/self-service of Network data | The number of downloads by and provision of network information to customers on a self-serve basis (e.g. Contracted capacity register, Embedded Capacity register , downloads of Distribution Future Energy Scenarios (DFES), Long Term Development Statement (LTDS), Demand/Generation/Availability maps). |

# Openness and Transparency

| Key measures<br>Openness and transparency | | ED1 performance | | ED2 performance<br>Phased targets | | | | | Customer<br>outcome |
|---|---|---|---|---|---|---|---|---|---|
| KPI | Unit | ED1<br>to date[1] | ED1<br>forecast[2] | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| **OUTPUTS** | | | | | | | | | |
| Responsible procurement charter (Northern Powergrid) | % | - | - | 90% | 90% | 90% | 90% | **90%** | OT3 |
| ISO14001 accreditation (supply chain) | % | *97%* | *97%* | 98% | 98% | 98% | 98% | **≥ 98%** | OT3 |
| **OTHER SUPPORTING KPIs** | | | | | | | | | |
| ISO20400 accreditation (Northern Powergrid) | Achieve/<br>Maintain | - | *Achieve* | Maintain | Maintain | Maintain<br>*(+ enhanced audit)* | Maintain | **Maintain**<br>*(+ enhanced audit)* | OT3 |

| CROSS REFERENCE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **3.1.3 DSO** *(Mapping to OT1, OT2)* | | | | | | | | | |
| EHV substation areas in flexibility market evaluation | Count | *23* | *25* | 35 | 40 | 63 | 67 | **80** | DSO5 |
| Flexibility provider registration acceptance time <30 days | % | - | - | **>95%** | **>95%** | **>95%** | **>95%** | **>95%** | DSO5 |
| Local flexibility stakeholder engagement | Count | - | - | 24 | 48 | 72 | 96 | **120** | DSO5 |
| **3.7 Physical and cyber** *(Mapping to OT1)* | | | | | | | | | |
| Training: cyber (1. basic) | % | *100%* | *100%* | *100%* | *100%* | *100%* | *100%* | ***100%*** | PC1 |
| Training: cyber (2. advanced) | % | - | *2%* | 5% | 10% | 50% | 100% | **100%** | PC1, PC2 |
| **3.9 Connections** *(Mapping to OT1, OT4)* | | | | | | | | | |
| Auto design budgets issued (<55kVA) | % | *70%* | *76%* | 79% | 81% | 83% | 87% | **90%** | CN2 |
| Auto design customers registered | Count | *430* | *1,040* | 1,450 | 1,890 | 2,270 | 2,500 | **2,500** | CN2 |
| Provision/self-service of network data | Count | *33,850* | *41,830* | 44,520 | 47,310 | 50,120 | 52,890 | **55,530** | CN3, CN4 |

## Description of our key measures – Openness and Transparency

| KPI | Definition |
|---|---|
| **OUTPUTS** | |
| Responsible Procurement Charter (Northern Powergrid) | Sets out the requirements that suppliers must adhere to from an environmental, regulatory, health and safety and compliance perspective. Supports Northern Powergrid's Responsible Procurement Policy. |
| ISO14001 accreditation (Supply chain) | ISO 14001 sets out the criteria for an environmental management system to enhance environmental performance and compliance. |
| **OTHER SUPPORTING KPIs** | |
| ISO20400 accreditation (Northern Powergrid) | ISO20400 provides guidance on integrating sustainability within procurement. |

1. 2020/21 actual performance.
2. 2022/23 forecast performance.

# Data and Digitalisation

| Key measures | | ED1 performance | | ED2 performance Phased targets | | | | | Customer outcome |
|---|---|---|---|---|---|---|---|---|---|
| KPI | Unit | ED1 to date | ED1 forecast | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| *OUTPUTS* | | | | | | | | | |
| Data best practice compliant | % | *50%* | *80%* | 80% | 100% | 100% | 100% | **100%** | DD1 |
| Reduction in technical debt attributable to back-office | % | - | - | 10% | 30% | 60% | 100% | **100%** | DD5 |
| Reduction in avoidable 'return to base' action taken by field colleagues | % | - | - | 5% | 10% | 20% | **25%** | **25%** | DD6 |
| Total number of processes with automation | Count | *0* | *5* | 10 | 20 | 30 | 40 | **50** | DD7 |
| Process productivity improvement through automation | % | - | - | 5% | 10% | 20% | 25% | **30%** | DD7 |
| Colleagues using self-service analytics | % | - | - | 20% | 25% | 30% | 40% | **50%** | DD10 |
| *INDICATIVE INPUTS* | | | | | | | | | |
| Collaborative open data projects | Count | *2* | *2* | 3 | 4 | 5 | 5 | **5** | DD1 |
| Field colleagues with access to mobile collaboration applications | % | *20%* | *40%* | 40% | 60% | 80% | 90% | **100%** | DD3 |
| HR and training processes available to complete via mobile intranet | % | *40%* | *50%* | 60% | 70% | 80% | 90% | **100%** | DD3 |
| Telecoms estate managed within single asset repository linked to automated patching | % | *50%* | *50%* | 50% | 75% | 100% | 100% | **100%** | DD4 |
| Work allocated automatically via work management system | % | *0%* | *0%* | 0% | 20% | 30% | 40% | **60%** | DD6 |
| Increase in customers using new self-serve functionality | % | - | *10%* | 15% | 20% | 25% | 30% | **30%** | DD8 |

| CROSS REFERENCE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **DSO** (Mapping to DD1, DD9) | | | | | | | | | |
| New Open Data products and services - increase | % | - | *14%* | 21% | 43% | 57% | 64% | **70%** | DSO3 |
| **CUSTOMER SERVICE** (Mapping to DD3, DD8) | | | | | | | | | |
| Bespoke satisfaction survey – data services | % | - | - | - | - | - | - | **>90.0%** | CS3 |
| Digital contact channels | Count | *5* | *5* | 6 | 7 | 8 | 8 | **8** | CS1 |
| **PHYSICAL & CYBER SECURITY** (Mapping to DD4) | | | | | | | | | |
| Loss of information (cyber) | Count | *0* | *0* | 0 | 0 | 0 | 0 | **0** | PC1 |
| Loss of supply (physical or Cyber) | Count | *0* | *0* | 0 | 0 | 0 | 0 | **0** | PC2, 3 |
| Operational technology network monitoring upgrades | Count | - | - | 100 | 350 | 550 | 700 | **700** | PC2 |

## Description of our key measures – Data and Digitalisation

| KPI | Definition |
|---|---|
| *OUTPUTS* | |
| Data best practice compliant | The proportion of compliance with the twelve data best practice principles as defined by Ofgem. |
| Reduction in technical debt attributable to back-office | The amount of technical debt defined as "back office" (Finance, HR, etc.), measured as a percentage of the entire estate, that has been replaced by new services. |
| Reduction in avoidable 'return to base' action taken by field colleagues | The percentage reduction in situations where a field based colleague would have traditionally returned to site. |
| Total number of processes with automation | Count of processes that have been improved using automation within the period. |
| Process productivity improvement through automation | Measure of efficiency improvement in productivity for each process automated. This is likely to be measured in many ways, such as effort, customer service improvements, financial. |
| Colleagues using self-service analytics | Count of colleagues regularly using our intranet solution, providing a channel for internal communications, self-service, knowledge management and other services to increase colleague engagement. |
| *INDICATIVE INPUTS* | |
| Collaborative open data projects | Count of open data projects that we are collaborating on with other external parties. |
| Field colleagues with access to mobile collaboration applications | Count of colleagues regularly accessing mobile collaboration applications such as Microsoft 365 and teams. |
| HR and training processes available to complete via mobile intranet | Measure of colleague's training record and completion of HR processes available online. |
| Telecoms estate managed within single asset repository linked to automated patching | Percentage of telecoms estate managed within single asset repository linked to automated patching. |
| Work allocated automatically via work management system | Percentage of planned work allocation using workflow. |
| Increase in customers using new self-serve functionality | Percentage of customers using our self-serve, personalised services, resulting in a reduction of human contact via the contact centre. |

# Workforce

| Key measures | | ED1 performance | | ED2 performance Phased targets | | | | | Customer outcome |
|---|---|---|---|---|---|---|---|---|---|
| KPI | Unit | ED1 to date | ED1 forecast | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| **OUTPUTS** | | | | | | | | | |
| Job opportunities | Count | *855* | *1,175* | 200 | 400 | 600 | 800 | **>1,000** | WR1 |
| Employees completing training related to future skills | % | - | - | 25% | 50% | 75% | 100% | **100%** | WR2 |
| **INDICATIVE INPUTS** | | | | | | | | | |
| Attendance rate | % | *97%* | *97%* | 97.1% | 97.2% | 97.3% | 97.4% | **97.5%** | WR3 |

*OTHER SUPPORTING KPIs - to be tracked in period:*

- Women in workforce
- Women in engineering roles
- Women in leadership roles
- Mean gender pay gap in average hourly pay
- Average number of applicants per role
- Applicants from underrepresented groups
- Students engaged through activities to promote STEM careers
- Colleagues attaining career progression
- New joiner retention rate
- Employees from ethnic minorities
- Employees from less socio-economically advantaged backgrounds

## Description of our key measures – Workforce

| KPI | Definition |
|---|---|
| **OUTPUTS** | |
| Job opportunities | New vacancies that lead to the recruitment of an external hire, typically as a result of a new role being created or to replace a colleague who has exited the business or has moved roles internally, requiring backfill. |
| Employees completing training related to future skills | Percentage of our direct-labour workforce that have completed an up-skilling training course, module or programme related to data and digitalisation, DSO or smart grid operations on the network. |
| **INDICATIVE INPUTS** | |
| Attendance rate | Overall percentage of colleagues that are present at work on scheduled days divided by the total number of possible scheduled days |

INTENTIONALLY BLANK

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