

Unlocking Flexibility: Streamlined procurement for a reliable network

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EXECUTIVE SUMMARY

Welcome to our fourth Distribution Flexibility Services Procurement Statement, in which we set out our plans for procuring Flexibility Services for the upcoming regulatory year.

In line with the Clean Energy for all Europeans Package introduced by UK Government in December 2020 (Incentives for the use of flexibility in distribution networks), the Office of Gas and Electricity Markets (Ofgem) added a new condition to our Electricity Distribution Licence: Condition 31E: Procurement and use of distribution flexibility services. C31E sets out Distribution Network Operator's (DNOs) plans for procuring flexibility services for the upcoming regulatory year including the methodologies used to determine the most suitable solution to meet the network needs; (i.e comparing traditional asset reinforcement to procuring flexibility services, energy efficiency measures and Active Network Management (ANM)) and ensure that DNOs and IDNOs consider procuring flexibility services when it is economic and efficient to do so, to run safe and reliable electricity distribution networks.

This statement reflects Electricity North West's approach for supporting and developing the flexibility market in Great Britain as we proactively engage with flexibility stakeholders and collaborate with the wider industry to deliver simplicity, commonality, accessibility and transparency throughout our flexibility processes in this fast-developing new sector.

A Distribution Flexibility Procurement Report detailing the flexibility services we tendered for, contracted and dispatched in 2023/24 will be published alongside our forward looking statement within our <u>document library</u> in April 2024 to provide an annual summary of our progress to date.

Our volume of flexibility requirements has increased significantly since our first tender launch in 2018 which sought 7.5MW of capacity between 2020-23 compared to our requirements in 2023 which sought 1097MW between 2023-28. During the ED2 period we will continue to see an increase in the requirements for flexibility and energy efficiency across our network and we are excited about the opportunities for flexibility providers and benefits to customers that this delivers.

In line with the commitments we made in the ED2 business plan, in Spring 2023 we tendered for platform services for the: procurement, availability declaration, scheduling, baselining, dispatch and settlement of flexibility. We are proud to announce that from Spring 2024 we will be utilising a combination of the newly launched platforms ElectronConnect and Piclo Max to improve visibility of our requirements and enable Flexibility Service Providers (FSPs) to maximise routes to participation and revenue stacking opportunities across multiple markets. This collaboration demonstrates our commitment to supporting market interoperability and is a significant step forward in our journey to create a more efficient and seamless procurement experience for FSPs.

We publish our requirements twice a year in Spring and Autumn in line with the completion of our network loading analysis, <u>Distribution Future Electricity Scenarios (DFES)</u> and <u>Distribution Network Options Assessment (DNOA)</u> and processes, and subsequent reviews. In response to stakeholder feedback gathered throughout 2023, this year we are committed to expanding our procurement of flexibility services to include Low Voltage (LV) and High Voltage (HV) substations in addition to our current requirements at Extra High Voltage (EHV) substations, to help manage constraints at all three levels. We will move to shorter term procurement within the year, publishing monthly tenders for our Operational Utilisation product.

Such progress is made possible by the development of our Active Network Management (ANM) system and the further roll out of smart meters with additional monitoring at HV and LV this year. These cutting-edge technologies and platforms will seamlessly facilitate the procurement and operation of flexibility on our electricity network, ultimately driving enhanced value for customers across the North West region. More information on these digital advancements is provided in section 2.2 of this report.

Below is an overview of our forecasted requirements for each tender round in 2024/25 with further details provided in Section 2.3. We also publish data tables alongside this report providing further detail.

2024/25 FLEXIBILITY SERVICES REQUIREMENTS			
Location	Capacity required (MW)	No. of requirements	£ available
Cumbria	264.01	87	3,080,616
Lancashire	75.73	27	1,094,924
Greater Manchester	146.66	24	2,833,360
Totals	486.4	138	7,008,900

^{*}Table does not include peak reductions as this is a duplication of the revenue and capacity for Operational Utilisation & Variable Availability.

2024/25 FLEXIBILITY SERVICES PRODUCTS AND VALUES			
Product	Sum of capacity required (MW)	Sum of ceiling price for period (£)	
Operational Utilisation	389.2	4,010,040	
Operational Utilisation & Variable Availability	97.2	2,998,860	
Peak Reduction	97.2	2,998,860	

AVAILABILITY WINDOWS		
Operational Utilisation	All year 24/7	
Operational Utilisation & Variable Availability	Bespoke per requirement and will be provided within the data tables submitted alongside this report. These generally are Summer requirements: April-October and Winter requirements: October-	
Peak Reduction	March. However, it is important to note that some of the seasons are different to reflect the different nature of each operation region and its bespoke requirements for services.	

PEAK CAPACITY AND HOURS REQUIRED PER PRODUCT AND SUBSTATION **Operational Utilisation &**

Variable Availability

Peak Reduction

Operational Utilisation

Substation	MW requirements	Max Estimated utilisation hrs per tender period (per annum)	MW requirements	Max Estimated utilisation hrs per tender period (6 months)	MW requirements	Max Estimated utilisation hrs per tender period (6 months)	Grand Total (MW)
Alston	1.5	100					1.5
Ardwick			1.77	48	1.77	414	1.77
Askerton Castle	1.3	100					1.3
Bentham	4	100					4
Bolton By Bowland	3	100	0.41	48	0.41	48	3.41
Catterall Waterworks	8.3	100	3.74	300	3.74	3815	12.04
Chorley South			1.47	48	1.47	59	1.47
Church	6.1	100					6.1
Claughton	3.5	100					3.5
Coniston	2.3	100	0.92	300	0.92	3051	3.22
Flat Lane	3.7	100					3.7
Frederick Rd BSP			16.6	48	16.6	450	16.6
Gillsrow	3.7	100					3.7
Helwith Bridge	3.3	100					3.3
Ingleton	2.2	100					2.2
Marple	4.4	100					4.4
Melling	2.2	100					2.2
Moss Lane			0.81	48	0.81	48	0.81
Moss Side (Leyland)			1.63	48	1.63	125	1.63
Moss Side (Longsight)	18.4	100	5.29	100	5.29	1896	23.69
Newbiggin on Lune	1.1	100					1.1
Newby	5.4	100					5.4
Peel St			0.99	48	0.99	386	0.99
Rossall	3.9	100					3.9
Scarisbrick	3.7	100					3.7
Sebergham	3.8	100					3.8
Sedbergh	4.1	100					4.1
Settle	4.4	100	0.89	48	0.89	360	5.29
Yealand	3	100					3
Grand Total	97.3	2300	34.52	1084	34.52	10652	120.57
are on the 13.	All products within the tables above are requirements at the primary substation 33/HV except for Fredrick Road BSP where the requirements are on the 132/33KV substation. For the primary substation requirements these can be fulfilled by LV or HV DERs, for Fredrick Road these can be also fulfilled by 33KV DERs.						

1. INTRODUCTION

1.1 About Electricity North West

Electricity North West is one of 6 Distribution Network Operators (DNOs), covering 14 licence areas in GB regulated by Ofgem. We operate the local electricity network and distribute electricity, to 2.4 million homes and businesses in the North West.

We are responsible for maintaining and upgrading 13,000 km of overhead power lines, more than 44,000 km of underground electricity cables and nearly 500 major substations across the region. We supply electricity to the diverse communities in the North West of England which extends from Macclesfield all the way up to Carlisle.

Our network in the North West is one of the most reliable in the country and we are investing £2bn between 2023-28 to ensure we continue to deliver an excellent, safe and affordable service to all our customers.

From 1 April 2023, we entered a regulatory price control period referred to as RIIO-ED2, which runs until March 2028. During this period, we will see significant change in the way and amount of electricity that is generated, consumed and stored, driving innovation across the whole energy system both now and into the future.





2.1 Our approach to flexibility

The use of flexibility services is a key Distribution System Operation (DSO) function and an instrument of change, as it facilitates the North West's transition to Net Zero. The rise in low carbon technologies will ultimately result in a lot more demand being placed on our network, and it is important to look for flexible solutions to deliver the required capacity.

We are therefore trialling smarter, techniques to use the existing network more efficiently, which will reduce costs for all our electricity customers in the future. Some of the ways in which we can facilitate the transition to Net Zero, whilst utilising our existing network, is through the procurement of flexibility services and promotion of energy efficiency measures.

In our RIIO-ED2 business plan, we used cost benefit analysis (CBA) to present how the use of flexibility services can be cost efficient for our customers. Using flexibility, we can deliver over £3.5 million pounds of cost savings per year during 2023 to 2028 by avoiding or deferring conventional reinforcement.

At times of high electricity demand and when the network is operating abnormally, we are looking to enter into contracts with Flexibility Providers to adjust how much electricity they consume or generate either through flexibility or energy efficiency measures, in return for financial payment as an alternative to traditional approaches. The aim is to reduce the cost for electricity distribution networks in customer energy bills while ensuring that our network remains reliable, resilient and meets our customers' needs.

Our approach to the use of flexibility services to support a capacity requirement is two-fold; flexibility services can be a key interim solution while we assess load growth and consider options for conventional reinforcement, therefore avoiding inefficient piecemeal network expansion and stranded assets. Alternatively, flexibility services also allow us to mitigate the risk if demand growth is accelerated and there is a long lead time associated with asset-based interventions.

In some instances, depending on the level of flexibility market in the location of the capacity requirement and the scale of the capacity requirement, flexibility services could be considered as an enduring network solution.

We remain committed to ensuring we champion a level playing field for all network users with connected resources and adopt a neutral market position in everything we do.

Each year we aim to increase the accessibility and transparency of flexibility services opportunities. The publication of the first Network Development Plan (NDP) in 2022 was an important step in presenting best view flexibility requirements for network areas with capacity needs in the next 10 years.

We firmly believe that both flexibility services and energy efficiency play a huge part in reaching Net Zero in the North West. They are complementary and their combined impact will be beneficial to the network and save money for our customers. We are proud to have opened our flexibility service tender process to energy efficiency schemes, facilitating this change, confident that this will lead to wider systemic changes in the way energy is consumed across the UK.

The energy efficiency service allows system users to earn revenue from carrying out long term energy efficiency activities whilst assuring Electricity North West that the site demand will decrease, deferring the need for reinforcement work within the area since average consumption is reduced and/or shifted away from the peak demand creating network capacity.

2.2 Future requirements

During the ED2 period we will see an increase in the requirements for flexibility and energy efficiency across our network and we're pleased to be delivering an opportunity that provides so many benefits to both DNOs and Flexibility Providers.

Electricity North West has a 'flexibility first' approach, in that it promotes flexibility as an efficient solution for network capacity provision and seeks to deploy at all opportunities where it is robust and economic to do so. As a result, for every capacity requirement that capacity can be technically released via flexibility services detailed in our Network Development Plan (NDP) we have outlined the flexibility services option alongside the asset solution and indicated whether this requirement is likely to materialise immediately, or in the next 3-5, or 5-10 years. This is to ensure there is clear signposting of all future requirements for flexibility services providers and it demonstrates our approach of not foreclosing a flexibility services or energy efficiency opportunity before the market has been fully tested for a response.

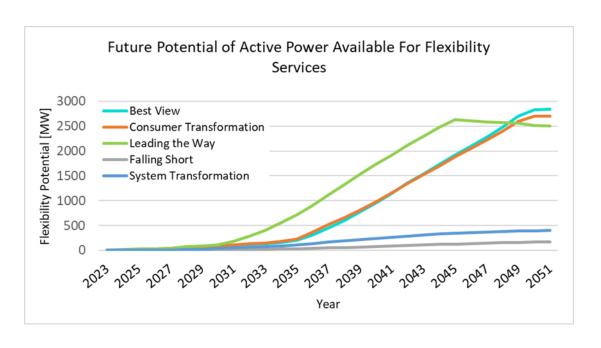
Half-hourly through year capacity balancing requirements across our EHV network can be identified using the detailed assessments supported by our <u>ATLAS</u> forecasting methodology.

This allows us to define detailed flexibility requirements, such as number of days per month, energy requirements per day and capacity requirements per season to procure the required capacity of flexible services only when they are needed, ensuring the efficient and economic use of customers money.

The constraints identified in the Best View scenario within the NDP are reviewed on an annual basis in alignment with the latest <u>Distribution Future Electricity Scenarios (DFES)</u>. If further data is needed, monitoring will be deployed

Within the NDP we have quantified the minimum level of flexibility required using the Best View scenario up to 2050. We have also presented what levels of flexibility may be required by 2050 under the Consumer Transformation and System Transformation scenarios to highlight the range of future uncertainty.

As our current requirements are based on Best View scenario, we have included the below graph from our recently published 2023 DFES report with Best View scenario showing the highest certainty trend. This scenario has changed from last year to reflect the limited role of hydrogen for domestic heating, which is expected to drive higher electrification of heating especially beyond 2030.



The actual flexibility requirements presented in a tender may be higher than that detailed in the Network Headroom Report (NHR) tables as it accounts for connections pipeline uncertainty and delivery risk mitigation. The intention of the NDP is to provide the future view of flexible requirements in terms of location and baseline quantities, but future tender information will substantiate the volumes and service categorisation.

Last year saw the first full year of operation of our new Network Management System (NMS), developed in collaboration with Schneider Electric. The NMS provides us with a platform on which we can develop enhanced network automation, and deliver significant increases in operational data sharing.

Moving forwards to meet Net Zero we expect more flexibility requirements at more locations, and at lower voltages.

This year will see the delivery of our Active Network Management (ANM) system, and the further roll out of smart meters with additional monitoring at High Voltage (HV) and Low Voltage (LV). This data coupled with aggregated smart meter data will provide increased visibility of our HV and LV networks, allowing us to better understand utilisation of the network, identify both existing and upcoming constraints and expand our opportunities for flexibility services to these lower voltage levels. With approximately 34,000 distribution substations located across the North West, it is estimated that we will have up to 200 opportunities available each year, facilitating the growth of residential flexibility and energy efficiency markets and fulfilling our obligations as a neutral market facilitator.

We will continue to act in the best interest of our customers, and procure flexibility and energy efficiency where it is economic and efficient to do so. With these advancements we will be ready to meet the markets of the future.

2.3 2024/25 Tenders

Our procurement processes are common across the DNOs, and continue to be refined and standardised through dedicated workstreams under the Open Networks Project.

Our Spring tender will launch on 15 April 2024 and our Autumn tender will open at the end of October. Prior to our Autumn tender we will conduct a review of our existing network requirements detailed within the Network Development Plan and sites that have flexibility requirements within the next 0-5 years will be issued within the tender.

2.3.1 Products

A key objective in 2023 was to improve the standardisation of flexibility product definitions to enable flexibility providers and other stakeholder groups to more easily identify the services they're best placed to offer, based on a more streamlined selection of products. The differences between the core parameters of each product will allow for greater standardisation across the distribution network operators and we look forward to transitioning to the new products for our Spring 2024 tender.

An overview of each product is provided at our webinar events and a simple explanation can be found within the <u>document library</u> on our website. Our online guides remain fluid documents that are updated annually to reflect developments in this fast-changing energy market space.

New products Operational Operational Scheduled Operational Peak **Utilisation & Utilisation &** Reduction Utilisation Utilisation Variable Scheduled Availability **Availability** Procured ahead of Provides a service This product is Flexibility Provides a where the procured ahead of time but the providers alter reduction in amount of time with fixed availability their supply up peak power flexibility availability parameters are or down in utilised over delivered is refined closer to the parameters; the accordance agreed nearer to amount of flexibility time event; the amount of with a real time, based delivered is agreed flexibility delivered schedule is agreed nearer to upon actual nearer to real time, based upon actual real time, based network measurement network upon actual network data measurement data measurement data

Peak reduction: This product seeks a reduction in peak power utilised over time. This response can manage peaks in demand and could be provided by long-term energy efficiency activities.

Use case: This product could be used where energy efficiency measures are planned that would reduce a sites overall electricity consumption across the year but specifically during high peak periods.

Scheduled utilisation: In this product, the time that flexibility is delivered has been pre-agreed in advance with the provider. This product will primarily benefit FSPs that cannot respond in real-time or near to real-time.

Use case: This service can be used by the DNOs to manage seasonal peak demands and defer network reinforcement, for example.

Operational utilisation: This product allows for the use case where the amount of flexibility delivered is agreed nearer to real time. This can be utilised to facilitate a change in demand profile from FSPs based on network conditions close to real-time. The assets will be dispatched for the required level of service that is required based upon actual network measurement data thus managing the cost.

Use case: A DNO may utilise this product in order to restore network supplies following an unplanned outage/fault where the regulatory funding does not allow for availability payments e.g. customer interruptions (CI).

Operational utilisation & scheduled availability: This product procures, ahead of time, the ability of an FSP to deliver an agreed change following a network abnormality. The availability will be defined at the point of procurement and cannot be modified once the contract has been agreed. The assets will be dispatched for the required level of service that is required based upon actual network measurement data, meaning that the DNO/ESO is only paying utilisation payments based upon the actual needs of the network.

Use case: A DNO is planning for sufficiency of flexible services contracts based upon short-medium range forecasting of network constraints.

Operational utilisation & variable availability: This product allows for DNOs and the ESO to procure a level of contracted capacity, but then refine the requirements in terms of availability closer to the event. The assets will be dispatched for the required level of service that is required based upon actual network measurement data, meaning that the DNO/ESO is only paying utilisation payments based upon the actual needs of the network.

Use case: A DNO is planning for sufficiency of flexible services contracts based upon long range forecasting of network constraints.

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2.3.2 Open Data Portal

Open and accessible data is a central theme across our commitments under our ED2 Business Plan, the Open Networks Project and the Smart Systems and Flexibility Plan. We will publish our tender information on the company's Open Data Portal. Users of this portal are already able to access the Embedded Capacity Register and the Network Capacity Headroom Data, in a multitude of different data formats. Flexible Services data hosted on the Open Data portal can be downloaded in a range of common industry standard forms including: API, KML, CSV, JSON, Shapefile, and XLSX.

This allows users to incorporate the data into their own modelling and mapping systems and overlay other data sets they may already have including their own asset maps. Further data sets are due to be incorporated into the Data Portal in the future, as these are triaged for being shared in an open format. We are keen to hear from users of the Portal if there are additional data sets or formats of data that would be helpful, particularly those relating to Flexible Services.

We have developed Stakeholder Personas and videos to better address our Distribution System Operation (DSO) stakeholder's needs and facilitate understanding of various data journeys when utilising the Data Portal. These personas demonstrate examples of flexibility stakeholders and describe their behaviours, motivations, needs, the challenges they face and how they can utilise DSO data to help them in their role.

They are intended to assist anyone new to the market in understanding the data that is available and how to interpret it to achieve their goals. These personas and videos are available to view on our website here.

2.3.3 Invitation to Tender

Our requirements will be published twice a year in Spring and Autumn in line with the completion of our network loading analysis as described within the <u>Distribution Future Electricity Scenarios (DFES)</u> and <u>Distribution Networks Options Assessment (DNOA)</u> processes. Details for each site will be published within our Invitation to Tender appendices (detailed below), on the PicloFlex platform, on the Electron Connect platform, on our <u>website</u> and on our <u>Open Data Portal</u> including location, response type, capacity required, availability window, ceiling price and conditions precedent of each tender.

To generate confidence in the North West flexibility market space, we publish half hourly forecasts of our requirements for the next five years within Appendix 4 of our tenders. This allows us to offer longer term flexibility contracts to providers and demonstrates our commitment to transparency and market engagement. This half hourly data will be published within all future tender appendices on our latest requirements page.

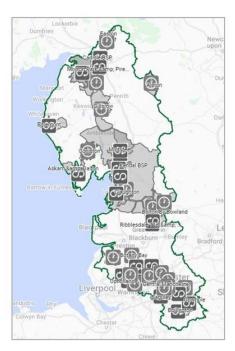
Document name	Contents
Invitation to Tender	The terms and conditions of our flexibility services procurement process.
Appendix 1: Standard Flexibility Agreement	Following submission of a successful bid, the flexibility provider will enter into contract with ENWL using the latest version of the common flexibility agreement.
Appendix 2: Technical Specification	Outlines the technical requirements an asset needs to provide us with flexible services.
Appendix 3: Site Requirements	Provides details of the individual requirement zones in table format including post codes, capacity, delivery windows, response type, estimated utilisation and availability hours and ceiling price.
Appendix 4: Half Hourly Data	Forecasted half hourly requirements for the next five years in excel spreadsheet format for each zone
Post Code Checker	A handy tool that allows flexibility providers to quickly check if their asset is located within one of our flexible services requirement zones.
Cost Calculator Tool	Participants can use this tool to calculate a bid price for utilisation and availability that falls within our budget for that zone and service period before submitting a bid.

2.3.4 Flexibility map

To simplify the information that we provide to stakeholders and assist them in the identification of assets within constraint zones, all of our requirements are published on an interactive flexibility map on our <u>Latest Requirements</u> page and on our <u>flexibility hub homepage</u>. The map on the homepage also shows indications of over 70 future requirements spanning the RIIO-ED2 and ED3 periods out to 2033. Our current requirements are represented by **navy icons** and forecasted requirements over the next five to ten years are represented by grey icons to provide more notice of future tenders.







L-R: all requirements, current requirements and future requirements.

2.3.5 Flexibility platforms

This year we will be utilising a combination of the newly launched platforms <u>ElectronConnect</u> and <u>Piclo Max</u> to improve visibility of our requirements and enable Flexibility Service Providers (FSPs) to maximise routes to participation.

We're excited to be collaborating with two platform providers, demonstrating our commitment to supporting market interoperability and creating a more efficient and seamless experience for FSPs.

Piclo Max streamlines access to all electricity markets from a single place, ensuring that FSPs have the power of choice, enabling them to maximise their revenue stacking opportunities across multiple markets.

FSPs will have the choice to onboard and pre-qualify via either platform and pick the simplest, most efficient route to successfully participate in our tenders. ElectronConnect will serve as our core market platform offering an end-to-end solution for providers to participate; from onboarding through to dispatch and settlement.

We will gather feedback on this new collaborative approach throughout the year as we look to continually remove barriers to entry for market participants by increasing visibility and accessibility through these market platforms.

Complimentary one-to-one discussions are available for potential providers to pose specific questions to the team and for assistance in obtaining and understanding the information required to successfully participate. These sessions are available to book on our website.

We will continue to ensure that all future opportunities remain open for all to participate in and seek to help customers understand the methodologies and criteria that are used to procure, dispatch and settle flexibility services and energy efficiency programmes.

2.3.6 Spring 2024 procurement timeline



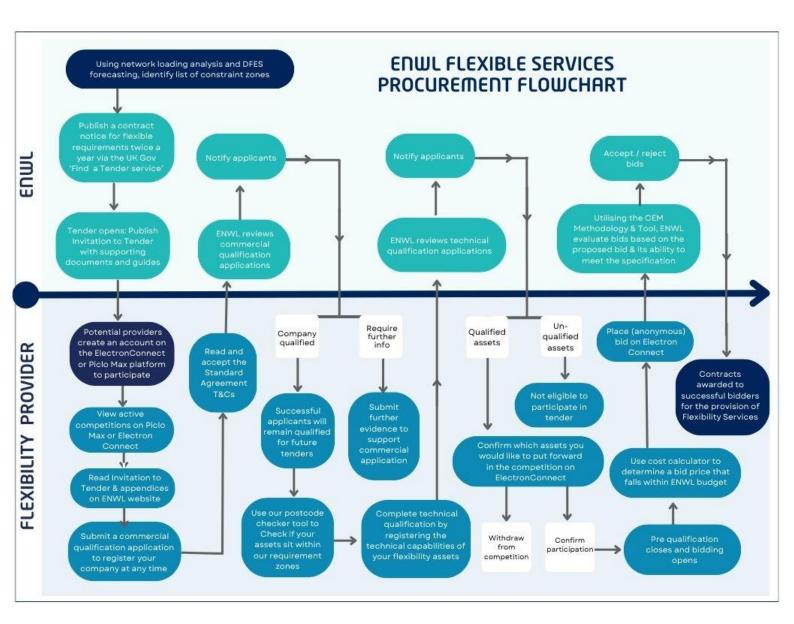
2.3.7 Autumn 2024/25 procurement timeline



2.3.8 Procurement process

To participate in our flexibility tenders, flexibility providers will need to complete the following steps on ElectronConnect or Piclo Max:

- 1. Create an account on either ElectronConnect or Piclo Max to become a registered provider on your chosen platform
- 2. Commercially qualify to participate in ENWL's tenders on ElectronConnect or Piclo Max
- 3. Register and upload your assets on ElectronConnect or Piclo Max- these will be marked as 'ineligible' until our competition opens. Potential providers can upload both planned and operational assets via either platform to assist in the identification of assets within constraint zones
- 4. Confirm which assets you wish to put forward for participation on ElectronConnect. These assets will be technically assessed by ENWL to ensure they meet the technical requirements of the tender.
- 5. The status of successful assets will then change to 'eligible', and you will be able to submit a bid for the provision of Flexible Services on ElectronConnect



2.4 Criteria for participation

To participate in Electricity North West's flexibility services, the flexibility provider will need to meet the following high-level conditions:

a) The Flexible Resource must:

Either be already connected to the network location being supported; providers should use the highlighted area on the maps provided on our website, on ElectronConnect and on the Piclo Max platform as an indication of whether the resource is in the right geographic location,

Or

Be able to locate (i.e. install, commission, and deliver) the Flexible Resource in the locality of the network asset being supported 1 month prior to the delivery start date.

- b) The minimum size for directly contracted resources should be at least 10kW. There are no restrictions on the size of sub-sites of aggregated portfolios, but the total portfolio size also needs to be at least 10kW (flexibility capability and not capacity).
- c) The provider should be able to deliver and manage, upon the Company's request, a net reduction in the demand or an increase in the export, as seen by the distribution network through flexibility or energy efficiency
- d) The Flexible Resource should have the ability to act (ie provide a response) reliably and consistently, in both magnitude and duration, throughout the contracted windows.
- e) Generators and electrical storage, greater than 16A per phase, looking to export to the network will need to have a long-term parallel connection and be compliant with the requirements of EREC G59 or EREC G99.
- f) The provider/Flexible Resource should be able to deliver the service by the specified delivery start date

2.5 Dispatch of flexibility services

2.5.1 Dispatch platform

In line with the commitments we made in the ED2 business plan, in Spring 2023 we tendered for platform services covering: Procurement, availability declaration, scheduling, baselining, dispatch and settlement. In March 2024, we successfully contracted with ElectronConnect to serve as our core market platform where Procurement, availability declaration, scheduling, baselining, dispatch and settlement will take place. We believe it is important that we regularly tender for platform services to: Stimulate market growth, facilitate market development of third party platform providers, ensure we are getting the most economical solution, deliver a positive user experience for flexibility providers, foster innovation in the marketplace ensuring value for money for our customers, demonstrate transparency and promote market neutrality.

^{*}Participants are required to complete Technical Qualification on either <u>ElectronConnect</u> or <u>Piclo Max</u> prior to the opening of the bidding window to allow us to confirm the prospective asset(s) are technically compliant with these requirements.

2.5.2 Dispatch and settlement processes

Electricity North West's Active Network Management system (ANM) is in its final stages of development and testing, before going into business as usual this year. This system will automate a number of system control functions providing our operations teams the capabilities to increase the signalling of control decisions to distributed energy resources. A key feature of this system will be the automated dispatch of Flexible Services, increasing the utilisation of these assets; and in future, increase the range of network constraints that Flexible Services can help to resolve.

Through the Open Networks Project, we are developing common and standardised processes for the dispatch and settlement of Flexible Services. The key aim of this work is to ensure that there is a common framework of signalling which participants can adopt across the UK when delivering Flexible Services to any of the DNOs or ESO. We are keen to support this work as we recognise this is perceived currently as a one of the largest barriers for participants providing services to multiple network and system operators.

The consensus of the technical working group is that the communication of dispatch and settlement requirements is best handled at scale via Applications Programming Interfaces (APIs) as this will enable the use of automated systems to process dispatch requirements. The ongoing work in 2023 will look to produce a common API which can be utilised across the UK. It has also been agreed that it will be necessary to provide backup methods for dispatching and settling services to ensure services can be dispatched in the event of a failure of systems associated with an API or where it is not efficient, affordable, or desired for participants to implement API systems.

We recently published our <u>Operational Decision Making Framework</u> which goes into more detail about our decision making process for the utilisation of flexibility services. This document also provides increased detail about our ANM system and its benefits.

2.5.3 Baselining

As part of our work with the Open Networks Project we developed a range of standardised <u>baselining</u> <u>methodologies</u> which can be used across the industry when measuring and settling flexible services dispatch contracts. We encourage participants within our tenders to engage with us regarding the baselining methodology which represents the best solution for their site's asset type and the level of data they are able to provide of historical and future usage patterns.

The supported baselines are:

- Mid 8-in-10: A rolling historical baseline which uses data from the "middle" of the last 8 of 10 days.
- Mid 8-in-10 with Same Day Adjustment: A rolling historical baseline which uses data from the "middle" of the last 8 of 10 days, but also applies a "same day adjustment".
- Mid X-in-Y: A custom rolling historical baseline, where the user can choose how many days to consider and what length of same day adjustment to use.
- Nominated: A nominated baseline, which allows the user to input the self-declared baseline of the asset in advance of the flexibility dispatch event.
- Zero: A baseline which assumes that the asset is not operating except for when providing a flexible service.

An industry standard <u>baselining tool</u> and <u>user guide</u> has also been produced to allow participants to verify their baselines, delivering transparency into how baselines are calculated by DNOs.

3 TENDERING PROCESS

3.1. Signposting

To ensure visibility and accessibility to our tenders, we signpost our requirements via:

- Our website
- ElectronConnect platform
- Piclo Max platform
- Open Data Portal
- Our Flexible Services mailing list
- Our bi-annual DSO Functions webinars
- The ENA flexibility in Great Britain webpage
- Press releases
- ENWL social media channels
- Connections Engagement, Stakeholder and Community Energy newsletters and events
- Network Development Plan (NDP)
- Directly to customers with assets in requirement zones
- In-person events: Joint events, industry events and our new DSO Roadshow events
- 1-2-1 flexible services discussions

3.2. Pricing strategy

We currently operate a pay-as-bid pricing strategy for our flexibility tenders. We utilise the Common Evaluation Methodology and Tool (CEM) to determine the guide price for the competition zone at the tender stage; meaning that we will issue in the tender materials the price above which the use of flexibility or energy efficiency is deemed uneconomic. This encourages bidders to submit competitive prices and ensures consistency with our evaluation process whilst continuing to drive competition in the market. These prices are based on the annual deferral fee and will be subject to full evaluation post bid assessment. These prices for each requirement are published within Appendix 3: Site Requirements as part of our suite of tender documentation on our website, in addition to being published on Piclo and our interactive flexibility map.

3.3. Bidding

In the pre-qualification stage of the procurement process we assess the applications received and identify

bidders that meet the specified requirements in section 2.4. Only bidders that fulfil the requirements will be eligible to submit bids in the two-week bidding window. Bids will be submitted, and bidders notified of the outcome via Electron Connect.

During the assessment period, we may hold a Post Quotation Negotiation or Best and Final Offer meeting with successful bidders. Bids will be assessed using the standardised Common Evaluation Methodology Tool as detailed in section 5 below. Prices above the guide price provided may be accepted if bids are submitted for multiple years following full evaluation. We now also consult with the DSO Stakeholder Panel to provide full transparency prior to formally accepting/ rejecting bids.

3.4. Contracts

We have adopted the Standard Flexibility Agreement and will continue to adopt updated versions, created in collaboration with all Great Britain DNOs, National Grid Electricity System Operator (ESO) and stakeholders. This consistent approach boosts market confidence and facilitates participation in flexibility markets; having a common agreement simplifies the standard contract, reduces jargon and ensures clear and consistent terminology. The terms of the contract will be made publicly available on our website throughout the year and are issued as part of our Invitation to Tender (ITT) documentation. V3 of this agreement remains a key deliverable for 2024 as the networks intend to move towards a framework style agreement to facilitate shorter term procurement in the near future. The latest version of the agreement is available to view within our document library. In line with the rest of the DNOs, we will utilise V2.1 of the agreement for our Spring 2024 tender and V3 for our Autumn tender.

The results of our tenders are communicated out to our stakeholders directly via our distribution list and published on our website on the <u>'Previous requirements'</u> page to provide clarity on the bids which are accepted and rejected, as well as showing the contract lengths and the bid price accepted. This information delivers transparency in the procurement process as well as giving future market participants an insight into the potential values of revenue they could expect to achieve by participating.

4.1 Flexibility market information

4.1.1 Newsletters

We provide regular, consistent and transparent reporting by issuing quarterly newsletters to our distribution list and providing updates on future requirements, consultations, results of our tenders and upcoming events. We keep a newsletter archive on our website so that stakeholders can follow our journey and keep up to date with any new opportunities in our area. To reach wider audiences, we also include flexibility services updates in Electricity North West's Stakeholder Engagement, Community and Local Energy, Innovation and Connections Engagement newsletters, and promote our distribution list, upcoming tenders, events and flexible services updates across our social media channels. Stakeholders can sign up to receive our newsletters on our website.

4.1.2 Webinars

Our original online flexibility workshops have evolved to incorporate updates from the wider DSO team to deliver a series of DSO Functions webinars focusing on different elements of DSO including forecasting data, publications, net zero and flexible services. These interactive online events are held bi-annually in Spring and Autumn following the publication of our latest requirements to present an overview of our procurement processes and provide guidance on the platforms utilised in the process to ensure that our stakeholders are provided with the necessary tools to submit a tender response. We welcome questions and feedback from attendees on their experiences of providing flexibility services. Recordings of our online workshops are available to view on our website and stakeholders can sign up to receive future event invites here.

4.1.3 In-person events

Following stakeholder feedback looking for a mix of webinars and in-person events, we began collaborating with Piclo, UK Power Networks (UKPN), Northern Powergrid (NPg) and SP Energy Networks (SPEN) to deliver bi-annual workshops that focus on engaging with flexibility providers from across the country to better understand their needs and obstacles they face when submitting a tender response.

These in-person workshops are invaluable for gathering feedback which we will continue to use to simplify our processes.

This year we look forward to co-hosting more inperson events as we support the launches of both Piclo Max and ElectronConnect, meeting with key stakeholders to hear about their experiences to collectively influence the future of flexibility markets in Great Britain.

The presentation slides and full event roundups including feedback and slide packs from previous events can be found on our <u>Flexibility engagement page</u> and will be updated throughout the year following subsequent events.

4.1.4 Consultations

We strive to make the process of providing flexibility to the network as simple and seamless as possible for both local and national players by helping to remove barriers to participation and encourage growth in the UK flexibility market space. We run flexibility consultations to capture our stakeholders' feedback on how we can help to remove any barriers to entry into our flexibility markets and how we should shape these markets of the future to best suit everyone's needs. We also contribute to industry wide consultations led by organisations such as ENA and Ofgem and include links to these in our communication activities to improve visibility and response rate. We consider all feedback received from these consultations and incorporate it where possible into our future plans.

Our previous consultation documents, webinar recordings and response summaries which provide an overview of main responses received and our plans for taking it forward can be found on <u>our website</u>.

Open and accessible data is a central theme across our ED2 Business Plan.

Open and accessible data is a central theme across our commitments under our ED2 Business Plan, the Open Networks Project and the Smart Systems and Flexibility Plan.

We anticipate that these consultations will help develop lasting relationships and deliver ongoing mutual benefit to the market and efficient use of Electricity North West's distribution network.

Feedback received through our consultations is invaluable to the development of our processes and to ensure that flexibility services remain open and accessible for all to participate in.

4.1.5 Forums

To ensure we are delivering enhanced DSO functionality which is at the heart of a smart and flexible distribution network able to evolve to the changing ways customers produce and consume energy, we host bi-monthly DSO Discussions: online forums where topics relating to market development, planning and network development, and network operation will be discussed and evaluated in a more informal and equal atmosphere to stimulate conversations and feedback from industry stakeholders. Each session will focus on a different topic relating to DSO, all of which are outlined in our engagement calendar on pages 17 and 18 of this statement. These sessions are available to book via our events page.

4.2 Industry engagement

As an active participant of the Energy Networks
Association's (ENA) Open Networks Project, we will coordinate with the other UK DNOs and IDNOs, the Electricity System Operator (ESO), the Department for Business, Energy and Industrial Strategy (BEIS), the energy regulator Ofgem and the Transmission Operators (TOs) to identify good practice and standardise the process of providing flexibility services to the grid to create a streamlined customer experience.

As the ENA Open Network Project consults with stakeholders widely on the scope of its work and has regular engagement with its Dissemination Forum and Challenge Group, which contains stakeholders from across the energy industry, we are confident that the outputs are welcomed across the electricity and gas sectors.

This year we will continue to coordinate our approach to procuring flexibility alongside other DNOs as we implement interoperable platforms and continue developing standardised

processes to reflect the priorities of our stakeholders and the industry. Following publication of the Smart Systems and Flexibility Plan in 2021, our plans throughout 2024 are driven by the need for standardisation, ensuring that we continue working collaboratively and in line with these expectations.

This year a key objective is to improve the standardisation of flexibility product definitions to enable flexibility providers to more easily identify the services they're best placed to offer, based on a more streamlined selection of products. The aim of this objective is to have at least 80% of flexibility tendered through common products within 2024. Full details of the work products and intended deliverables for this year can be found on the Open Networks Website.

In collaboration with the Open Networks Project, we will be issuing a consultation seeking focused input on the three key areas of Market Development, Planning and network development and network operation, which will be issued in October. The feedback received from this consultation will inform the collective decision making and implementation of the ENA Open Network Project's products across all GB networks.



4.3 Planned engagement activities 2024/25

ENWL engagement activities held throughout the year		
In-person events	We hold in-person events alongside our wider DSO team as well as collaborating with DNOs and industry organisations such as Flex Assure, Electron and Piclo.	
Targeted customer engagement	Direct engagement with Local Authorities, Housing Associations, Customers and Community groups within the identified constraint zones.	
DSO Discussions	Bi-monthly DSO forum covering topics such as Heatmaps, Flexible Services, Open Data Portal and ANM.	
DSO Functions webinars	Bi-annual DSO Functions webinar to present new flexibility requirements and a range of topics from the wider DSO Team	
Sustainability Advisory Panel	External advisory panel with external chair	
Quarterly newsletter	ENWL flexibility services newsletter issued every quarter to promote our latest requirements, tender results, updates, events and publications.	

All events will be promoted via our newsletter and social media channels, and available to register via our website.

Industry events

We also attend and participate in a wide range of industry events held across the country including:

- The Energy Efficiency Show
- National Grid Power Responsive event
- Energy Innovation Summit
- GMCA Green Summit
- ENA Open Networks consultations
- Distributed Energy Show

- Utility Week
- Northern Sustainability Summit
- Cumbria Tourism events
- Power X Live North
- Energy Xtra
- Westmorland County Show

5 DETAILED QUANTITATIVE ASSESSMENT

Since January 2022 we have be utilising the <u>Common Evaluation Methodology (CEM) and Tool</u> (which can be found in the helpful guides section) to determine the most suitable solution to meet the network needs; comparing traditional asset reinforcement to procuring flexibility services, energy efficiency measures and Active Network Management (ANM) solutions.

The CEM tool evaluates solution options comparing network capacity and network losses over the range of DFES scenarios to identify the most cost-effective solution and proposes optimum contract length. Based on the format of the Ofgem CBA for RIIO-ED1, the CEM tool is closely related to Electricity North West's Real Options Cost Benefit Analysis (ROCBA) methodology developed for evaluating the flexibility products against network intervention. This standardised industry approach provides greater visibility and confidence amongst flexibility providers and helps stimulate volumes and competition in the market, ultimately reducing costs for network customers.

To demonstrate our commitment to procuring flexibility in an open and transparent manner, we will publish a high level summary table on our <u>Latest Requirements</u> page following each tender round, along with a more detailed analysis of the valuations for each requirement zone. Further information describing this methodology is available to view via the Flexibility Valuation link on our website. An archive of our previous tenders including full requirement details and results is also available to view on our <u>Previous Requirements</u> page.

6 CONTACT US

Our approach to procuring flexibility will continue to evolve in line with best practice as identified by the industry and through stakeholder engagement. This year we look forward to building upon the improvements we have made to reduce barriers to participation, facilitating the developments of markets and enhancing visibility and transparency of information relating to flexibility.

If you have any comments or questions relating to this statement or the process of providing flexible services to the network, please get in touch with our team at Flexible.contracts@enwl.co.uk.

7 Resource library

In addition to our Invitation to Tender documents on page 11, we also have a suite of helpful guides, event materials, reports and forecasting data available on our website and via the links below. Please note that our guidance notes will be updated throughout 2024 as we introduce changes to our procurement process, products and technical requirements.

Guidance documents		
The below documents	can be found in the helpful guides section of our document library	
A guide to flexible services	A simple introductory guide for anyone new to Flexible Services	
Procurement process	Our flexibility procurement process including how to take part on Electron Connect, our ITT documents and how to use our interactive flexibility map.	
Summary of service requirements	Provides a detailed breakdown of our Invitation to Tender Appendix 3 site requirements table.	
Products and response times	An overview of the five flexibility products we procure and their service parameters.	
Decision making criteria	Explains how we assess bids received based on the conditions precedent, specification and cost.	
Common Evaluation Methodology and Tool	The latest version of the standardised tool utilised by all UK DNOs to calculate ceiling prices for each requirement zone that	

Engagement			
The below resource	The below resources can be found on our flexibility services engagement page		
Engagement document library	Previously held event recordings, presentations and summaries and newsletter archive		
Sign up to our mailing list	Sign up to be the first to hear about our latest requirements and flexibility events		
Request a one-to-one discussion	We host complimentary discussions to guide stakeholders through the process of providing flexible services to the network.		
Upcoming events	View our upcoming flexibility events and register your place		

Reports and publications		
Distribution Flexibility Procurement reporting	Our suite of publications relating to Ofgem's Electricity Distribution Standard Licence Condition 31E: Procurement and use of Distribution Flexibility Services includes our statement, report, consultation and webinar recording.	
The Year in Review	Annual publication detailing our continued commitment to delivering flexibility services, providing an overview of the previous year's work	
Tender results	All details of our requirements from 2018 including Invitation to Tender documents, results and Expressions of Interest.	
ENWL Business Plan 2023-28	This plan sets out our commitment to Net Zero, innovation and efficiency for the RIIO-ED2 Period.	

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7 USEFUL LINKS

DSO data		
Open Data Portal	Our flexibility requirements are available to view on our new Open Data Portal and can be downloaded in a range of common industry standard formats including API, KML, CSV, JSON, Shapefile and XLSX.	
<u>Distribution Future Electricity</u> <u>Scenarios Report (DFES)</u>	Presents well informed future trends across the North West for the electrification of transport & heating, the penetration of local distributed generation & storage, the future effects of hydrogen & how all these drive demand growth that our future network needs to supply.	
Network Development Plan (NDP)	Part of the Clean Energy Package, this annual report details future distribution network requirements for 1-10 years beyond publication.	
Long Term Development Statement (LTDS)	Details future distribution network requirements for the next five years, allowing existing and potential customers to make an initial assessment of the capabilities of the electricity network and opportunities for changes in their use of the network or for connecting to it.	
Operational Decision Making Framework	Optimising distribution with automation, flexibility, and informed decisions	

Industry links		
<u>Electron Connect</u>	Our core market platform for flexibility services. Providers can use this platform for commercial and technical qualification, placing bids, dispatch and settlement. It is an end-to-end platform.	
<u>Piclo Max</u>	Our tenders are signposted via the Piclo Max platform and providers can use this platform to commercially and technically pre-qualify to participate in our tenders	
Flex Assure	A code of conduct and compliance scheme defining and enforcing minimum standards of practice to provide assurance for business energy users of the standard of service they will receive from businesses signed up to the scheme.	
<u>Ofgem</u>	The website of the energy regulator for Great Britain.	
National Grid ESO	The website of the electricity system operator for Great Britain.	
Energy Networks Association (ENA) website	The website of the industry body that representing energy network operators in the UK and Ireland.	
Department for Energy Security and Net Zero	The former Business, Energy and Industrial Strategy (BEIS) Department was split into the Energy Security and Net Zero Department in February 2023.	

8 GLOSSARY

Term	Definition
Active Network Management (ANM)	The use of distributed control systems to continually monitor network limits, along with systems that provide signals to DER to modify outputs in line with these limits.
Aggregators	Third party intermediaries specialising in coordinating or aggregating demand response from individual consumers to better meet industry parties' technical requirements for specific routes to market.
Baseline	The point from which any delivery of flexibility is measured.
Common Evaluation Methodology and Tool (CEM)	Standardised tool allowing DNOs to compare the cost of flexibility or other solutions e.g. energy efficiency against traditional network reinforcement.
The Department for Business, Energy and Industrial Strategy (BEIS)	A department of the UK government which brings together responsibilities for business, industrial strategy, science, innovation, energy and climate change.
Demand Side Response (DSR)	Demand side Response (DSR) refers to the ability of sources of demand (for example, an industrial process) to increase or decrease their net demand in response to signals (sometimes price-signal) to support system or network management.
Distributed Energy Resource (DER)	Small-scale power generation and storage such as solar, wind and electric vehicles that operate locally and are connected to a larger power grid at the distribution level.
Distribution network operator (DNO)	The owner and operator of a distribution network licensed by the Gas and Electricity Markets Authority.
Distribution System Operation (DSO)	DSO balances capacity on the distribution network to enable new connections and meet the requirements of existing customers using flexible distributed energy resources, network investment and commercial services ensuring security and quality of supply standards are delivered.
Energy Networks Association (ENA)	The ENA is the industry body funded by UK gas and electricity transmission and distribution licence holders.
ENA Open Networks Project	Brings together the nine electricity grid operators in the UK and Ireland to work together to standardise customer experiences and align processes to make connecting to the networks as easy as possible and bring record amounts of renewable DERs to the local electricity grid.

8 GLOSSARY

Term	Definition
Extra High Voltage (EHV)	Voltages greater than 22kV in Electricity North West's distribution network.
Flexibility Market	The arena of commercial dealings between buyers and sellers of flexible services.
Flexibility Provider	The owner and/or operator of assets that have the capability to provide Flexibility Services and wishes to make available each Site for the provision of such Flexibility Services, for example through aggregated or individual assets. The Company will pay the Provider for these Flexibility Services in accordance with this Agreement.
Flexible Resource	Resources like generators, consumers, and electricity storage connected to the distribution network.
Flexible Services	DERs connected to our networks can increase exports (generate more) or reduce imports (consume less) when instructed by the network and receive payment in return.
High Voltage (HV)	The voltages of 6.6kV or 11kV in Electricity North West's distribution network.
Low Voltage (LV)	The voltages of 400V / 230V in Electricity North West's distribution network.
National Grid Electricity System Operator (ESO)	National Grid moves high voltage electricity from where it's generated, such as a wind farm, through the energy system. Across Great Britain. They convert it into a more manageable voltage that's suited for domestic use.
Network Management System (NMS)	A system that will allow us to manage the energy in the North West in real time, operating as a smart network allowing supply to meet demand. It will facilitate our ability to provide future generations with a low carbon, sustainable and reliable electricity network throughout the region.
Neutral Market Facilitator (NMF)	A transparent, neutral market for flexible services, providing attractive opportunities for customers of all scales to respond to requests for flexibility, allowing existing and new renewables to be fully utilised.
Transmission System Operator (TSO)	TSOs own, operate and maintain the transmission networks. There are three licensed TSOs in Britain, and each is responsible for a regional transmission services area.