

electricity
north west

Bringing energy to your door



Flexibility Services webinar

April 2021

Stay connected...



www.enwl.co.uk



Lois Clark



**DSO
commercial
manager**

Lois' role is centred around flexible services and contracted capacity, helping to find innovative alternatives to traditional reinforcement solutions.

Kate Stewart



**Flexible
Solutions
Analyst**

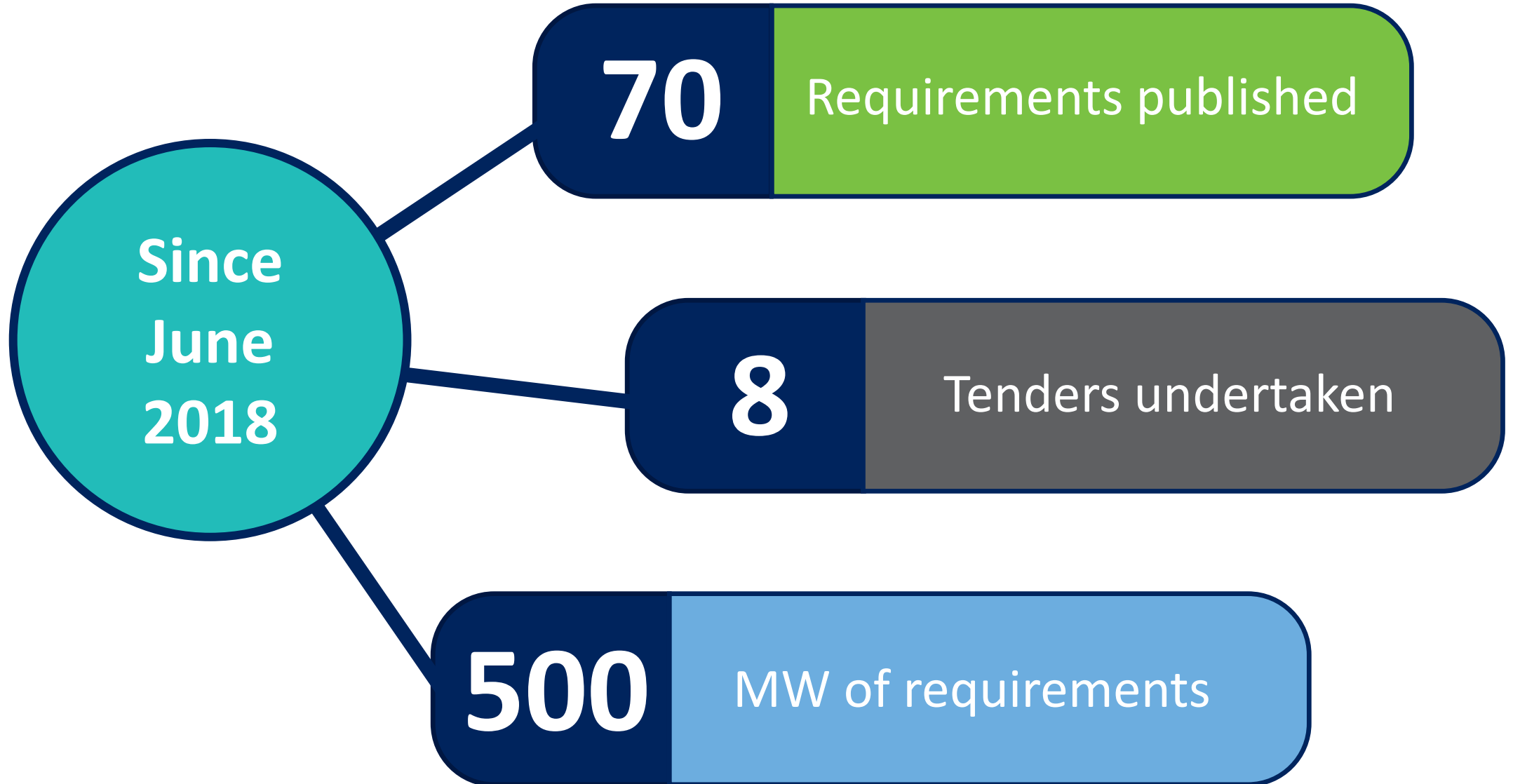
Kate works within the DSO Commercial team, assisting with the procurement and visibility of Flexible Services and developing processes to help break down barriers to participation.



			
Introduction	Background	Our current requirements	How to participate
			
PicloFlex	Flexible Power	Industry updates	Q&A

Background





What are Flexible Services?



Flexible Services is the term given to the act of reducing or increasing consumption or generation following receipt of a signal, due to a network constraint.

In simple terms, it means a customer generating more or using less electricity after we've asked them to.



A network constraint is when safe network operating limits are breached.

This means the requirement for electricity in the area is greater than the amount that the local network is capable of providing.

In return for providing Flexible Services a customer will receive payment



What are the benefits?



Cheaper bills for customers



Reduces CO₂ emissions



Reduction in supply interruptions



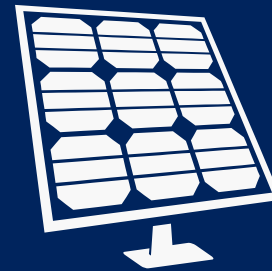
Supports community energy groups



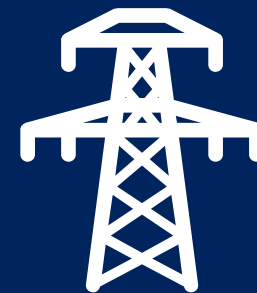
Less disruption



Supports local businesses



Encourages low carbon technologies

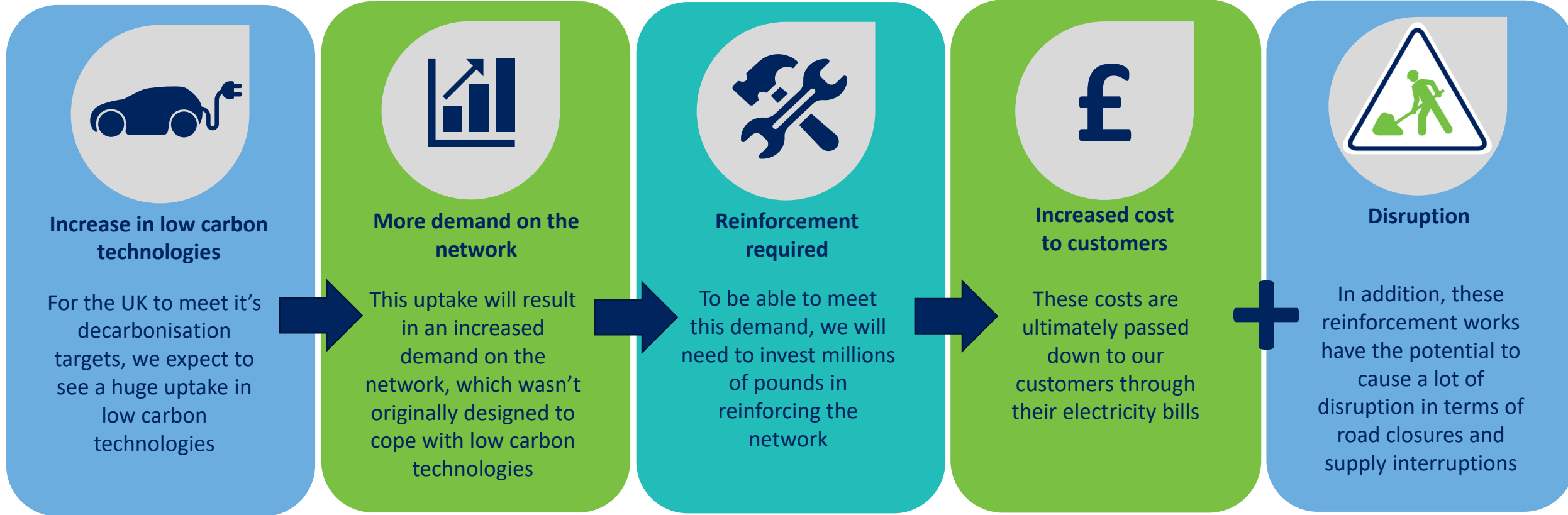


Utilises existing assets

So why now?



A revolution is currently underway as the UK embraces a zero carbon future, and the way energy is generated, stored, consumed and traded is all evolving at a significant pace. The electricity industry is facing one of its biggest challenges yet.

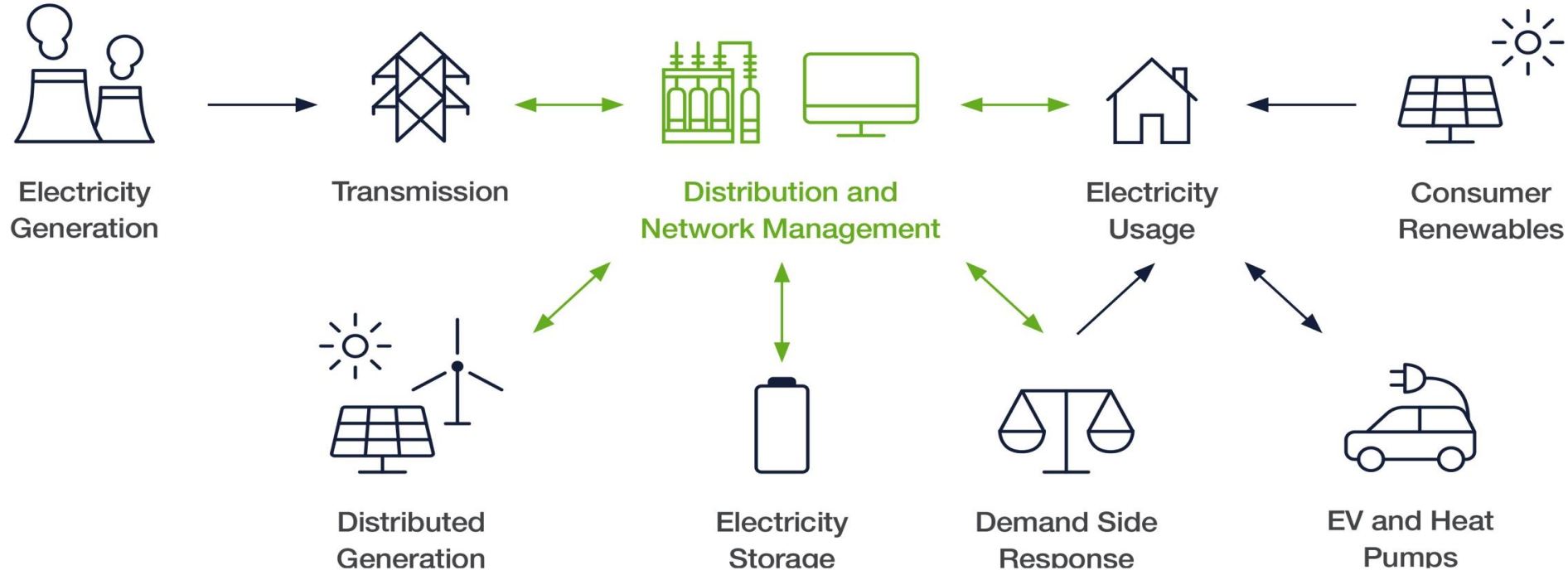


It's our responsibility to find smarter, more flexible ways to meet future needs, and procuring Flexible Services is one of the ways in which we plan to tackle this challenge.

Distribution System Operation (DSO)



The facilitation of flexible services will play a crucial role in our transition to Distribution System Operation-the systems and processes needed to operate energy networks in the net zero carbon future



“DSO balances capacity on the distribution network to enable new connections and meet the requirements of existing customers through the use of flexible distributed energy resources, network investment and commercial services ensuring security and quality of supply standards are delivered”

Types of flexibility



Service parameters



SUSTAIN



SECURE



DYNAMIC



RESTORE

Maximum Ramping Period

N/A

<15 mins

<2 mins

<2 mins

Availability Agreement Period

N/A

Contract stage

Contract stage

Contract stage

**Utilisation Instruction
Notification Period**

Scheduled in
advance

Contract stage

Real Time

Real Time

When required?

Scheduled forecast
overload

Pre-fault / peak
shaving

Network abnormality / planned outage
Network Abnormality

Risk to Network

Low

Medium

High

High

Utilisation Certainty

High

High

Low

Low

Frequency of Use*

High

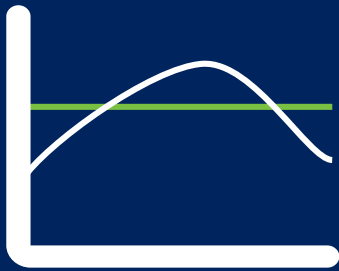
Medium

Low

Low



Provide a scheduled response to prevent network constraints



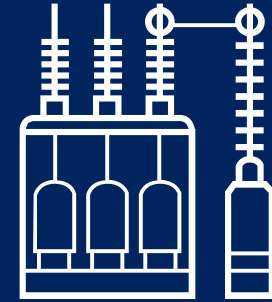
Using our demand and generation forecasts we will identify times in which demand is likely to exceed capacity



We will then specify – in advance - a schedule in which we require flexible services



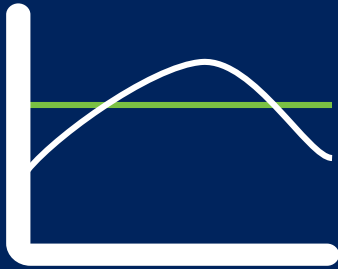
Each day during the specified time period a DER will provide Flexible Services



This supports the network in providing additional capacity and capability



Provide a scheduled response to manage network loading



Using our demand and generation forecasts we will identify times in which demand is likely to exceed capacity



We will ask a DER to be readily **available** to provide flexible services during these times



DERs will then need to provide flexible services only on days where demand is forecast to exceed capacity, in line with a schedule



This will help to manage the load on the networks and **prevent** exceeding it's capabilities



Help us to keep the power flowing during an unplanned network event



Using our demand and generation forecasts we will identify times in which demand is likely to exceed capacity



We will ask a DER to be readily **available** to provide flexible services during these times



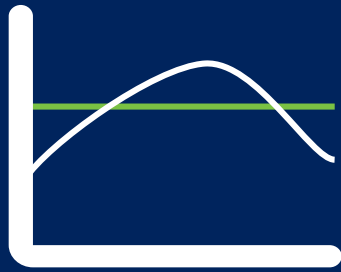
Following a network fault, the DER will be required to provide flexible services



This will allow the load to remain within the rating of the assets, avoiding loss of supply for customers



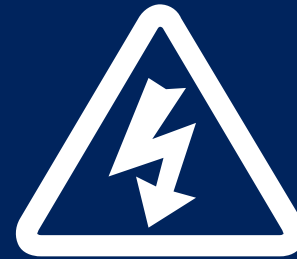
Help us to get the lights back on following an unplanned network event



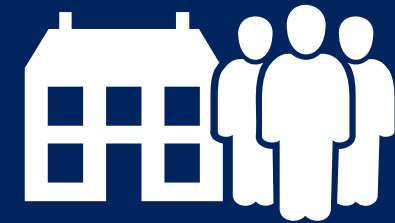
Using our demand and generation forecasts we will identify times in which demand is likely to exceed capacity



We will ask a DER to be readily **available** to provide flexible services during these times



Following a loss of supply due to a network fault, the DER will be required to provide flexible services



This will help us to restore the supplies to more of our customers at a quicker rate

Current requirements





Autumn 2020 tender

20 bids

6 zones

30 MW

We have evaluated the bids received for this tender using the newly developed Common Evaluation Methodology and Tool, and are confirming contractual agreements with successful participants. Further information will be made available [on our website](#) in due course.

Spring 2021 tender

35 zones

339 MW

Mar – Jul 21

This is our largest ever tender! We are now tendering for Restore services across 19 of our EHV sites to further aid restoration following loss of supply.

This is now [open for submissions](#) until 2 July for delivery over FY22 & FY23

RIIO-ED2 forecast

32 EHV zones

Up to 200 HV/LV zones

>200 MW

We have updated our flexibility map to include the sites forecasted to require flexibility from 2023-28.

You can view the details of these requirements and help shape our future approach to flexibility by completing our survey [here](#).



Our Spring 2021 tender asks Flexibility Providers for 339MW of flexibility across **35 locations** in the North West:

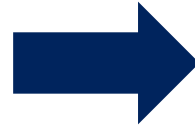
- Alston
- Ardwick
- Askerton Castle
- Bentham
- Blackfriars
- Bolton by Bowland
- Chester Rd
- Church
- Claughton
- Coniston
- Easton
- Flat Lane
- Frederick Rd BSP
- Gillsrow
- Helwith Bridge
- Ingleton BSP
- Kirkby Lonsdale
- Lower Darwen BSP
- Lyons Road
- Marple
- Melling
- Mosley Road
- Moss Lane
- Moss Side (Leyland) & Seven Stars
- Newbiggin on Lune
- Newby
- Scarisbrick
- Sebergham
- Sedbergh
- Settle
- Strangeways
- Trafford
- Wigton
- Yealand

Visit our [website](#) or [Piclo](#) to view these sites on a map



Delivery from October 2021

FY22 159 MW



FY23 180 MW

2



SUSTAIN

10



SECURE

4



DYNAMIC

19



RESTORE

Flexibility requirements map



Our flexibility map displays the locations within our distribution area where we are currently seeking Flexible Services, or may have a requirement in the future.

The icons next to each location name relate to the response type that we are looking for:



Sustain



Restore



Dynamic



Secure

Flexibility requirements map



← NEWBY

Substation Name
NEWBY

Post Codes
CA10 1, CA10 2, CA10 3, CA16 6

Voltage of connection (kV)
0.24/11kV

Maximum requirement (MVA)
5.48

Need type
Restore

Delivery start date
10/1/2021

Months required
All year

Times required

Map 2021

Map showing flexibility requirements across Great Britain, with a specific icon highlighted in a red circle.

Select an icon to expand the details of each site requirement

You can find this map on our:

- [Flexible Services homepage](#)
- [Current requirements page](#)
- [Distribution Flexibility Procurement Statement page](#)



Our full invitation to tender documentation is on our website, and includes:

- Invitation to Tender terms and conditions
- Standard Flexibility Agreement
- Technical specification
- Summary site requirements
- Half hourly flexibility requirements
- **NEW** online Pre-Qualification Questionnaire
- Post-code checker



<https://www.enwl.co.uk/go-net-zero/flexible-services/latest-requirement/spring-2021/>



We have listened to your feedback and continue to adapt and develop our approach to procuring flexibility to meet your requirements, making it easier than ever to participate in our tenders



We introduced **ceiling prices** to encourage flexibility providers to submit competitive prices for the competition zone at the bidding stage of each tender.

- Determined using new [Common Evaluation Methodology and Tool \(CEM\)](#)
- Can be found within Appendix 3 of our [current tender documentation](#) and on our flexibility map



We embedded the [Pre-Qualification Questionnaire \(PQQ\)](#) on our website for this tender, replacing the previous Word document version to:

- Improve and simplify the pre-qualification process;
- Save you time and effort; and
- Ensure we have all of the required information to assess your application.

Pre Qualification Questionnaire (PQQ)

Flexibility Providers are required to complete our [PQQ](#) to participate in our tenders. This questionnaire can be submitted once you have already:

- ✓ Successfully registered onto our Dynamic Purchasing System (DPS) on Piclo.
- ✓ Uploaded your assets on Piclo.

- Asks for technical details of the site and the capability for delivering flexibility.
- **All fields must be accurately completed by 2 July 2021** to receive an invite to submit a bid.
- If you need assistance when completing the PQQ, you can [book a 1-2-1 surgery appointment](#) with a member of our team.

Details of protection arrangements including loss of mains protection

e.g. RoCoF, Vector Shift, Intertrip.

Is this site already connected to the ENWL network?

Yes

No

If not, does this site have an accepted offer for connection to the ENWL network?

Yes

No

If the site has an accepted offer please provide quote reference number

If not already connected to the network, please indicate development timescales for this site including progress of application, and energisation date, and upload development proposals if available

Upload

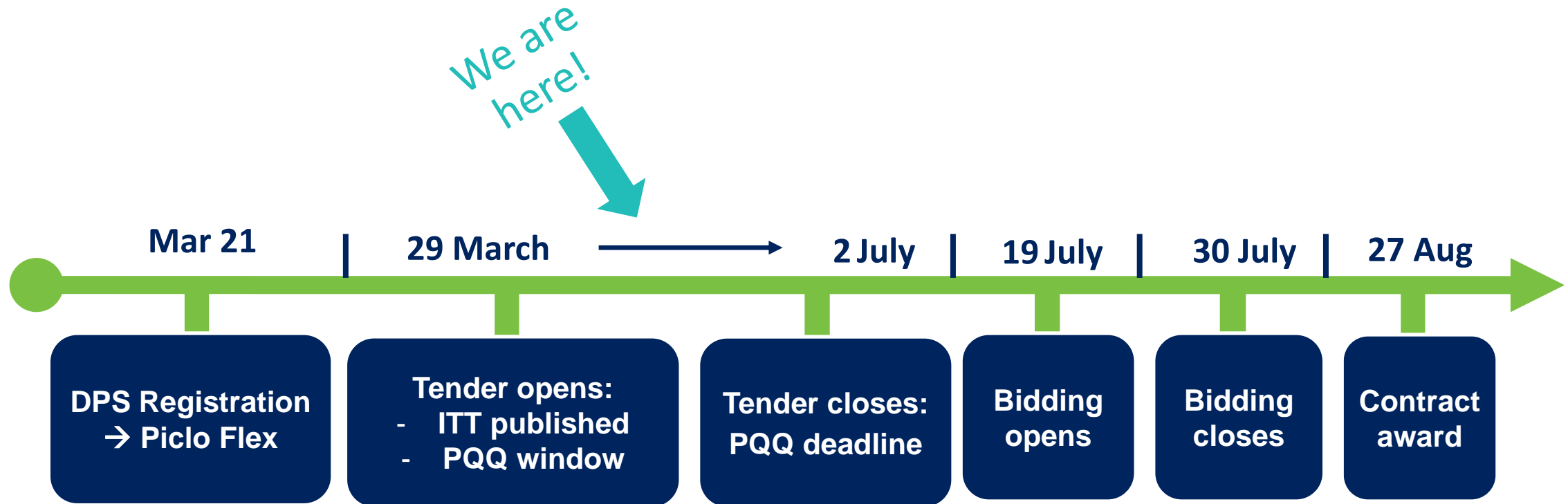
Choose File No file chosen

If not currently connected, please outline the expected typical demand/generation profile and upload data/charts if available

Upload

Choose File No file chosen

Procurement timeline



We are here!

Put this in the diary!



In order to participate in our procurement rounds, you will need to:

1

Sign up to the Dynamic Purchasing System via [PicloFlex](#)

2

Register and upload your assets via [PicloFlex](#)

3

Complete the pre-qualification questionnaire on [our website](#)

4

Submit a bid via [PicloFlex](#)

Website updates



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POWER CUT?
CALL 105



Enter a search term

Bringing energy to your door

Power cuts

Get connected

Go net zero

Advice and support

Private networks

About us

[Home](#) > [Go net zero](#) > Flexible services



New [2020- The year in review](#) report



First [Distribution Flexibility Procurement Statement](#)



Updated 'Understanding Flexible Services' section:

- [New Glossary](#)
- [Standard Flexibility Agreement Version 1.2](#)
- Updated [Technical Specification](#) document
- New flexibility valuation document:
[Common Evaluation Methodology and Tool](#)



New [Request a surgery appointment](#) online booking form



Name	Definition
Active Network Management (ANM)	The use of distributed control systems to continually monitor network assets, along with systems that provide signals to DER to enable control in line with these limits.
Aggregator	Third party intermediaries operating on commodity markets to aggregate demand from individual consumers for specific routes to market.
Availability Rate	This defines the maximum number of hours that we may need flexible capacity from the provider.
Availability Window	This defines the hourly time periods, which we expect to need flexible capacity support from the provider.
Baseline	Industry leading innovation project demonstrating the ability to deliver flexible capacity to the grid.
Capacity to Customers (C2C)	Standardised tool allowing DNOs to compare the cost of flexibility or other solutions e.g. energy efficiency against traditional network reinforcement.
Common Evaluation Methodology	Brings together responsibility for business, customer and supplier.
Deployment for Business, Energy and Industrial Parks (DEIP)	An online process for contracting flexible services on a pay-as-you-go basis. DNOs advertising their requirements and providers sign up to the DNO to demonstrate and deliver services in line with their requirements and technical specifications.
Dynamic Purchasing System (DPS)	Brings together responsibility for business, customer and supplier.

Request a surgery appointment

We need one-to-one surgery appointments for our flexible services stakeholders relating to the process of providing flexibility to the network.

Name:

Email:

Company:

Contact number:

Are you already providing flexible services to ENWL or any other network operator?

Yes

No

Would like to be



PicloFlex Platform





In 2018 we began signposting our flexibility requirements on the PicoFlex platform and last year we joined UKPN and SPEN in utilising the platform for the procurement of our tenders and the Dynamic Purchasing System (DPS)

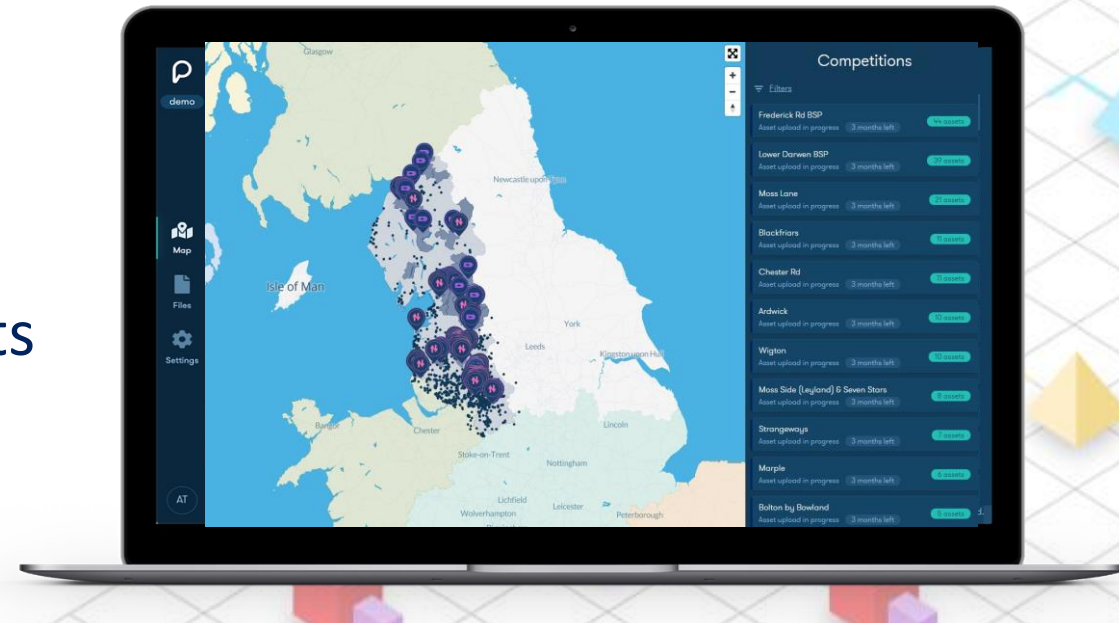
Benefits:

- ✓ UK's leading marketplace for DSO flexibility procurement
- ✓ Provides market visibility and transparency
- ✓ Streamlines processes for flexibility procurement (qualification, auctions and contracts)
- ✓ Stimulates participation from Flex Providers



Visit <https://picloflex.com/> to:

- View our current requirements
- Sign up to the free DPS
- Upload and pre-qualify your flexibility assets
- Submit a bid
- View past competition data



Contact support@picloflex.com for all queries relating to the platform or to book a personalised demo with a member of the team

Flexible Power



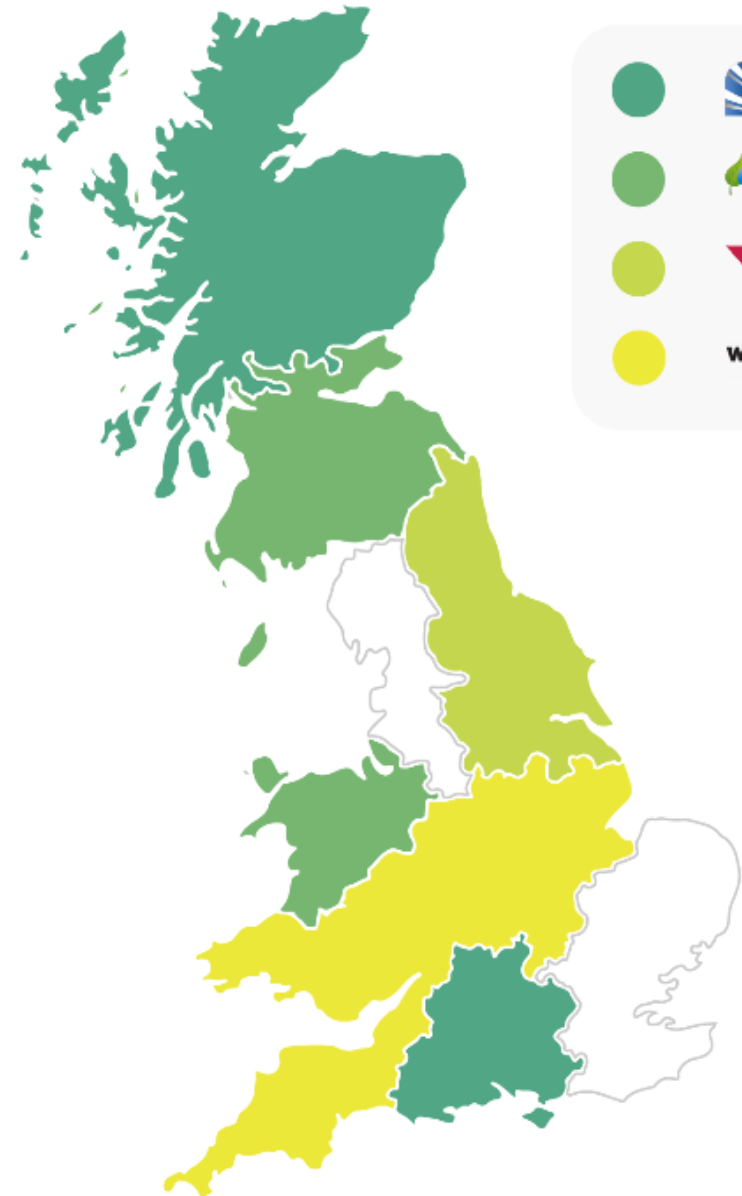
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north west









Bringing energy to your door



It's our intention to join Northern Powergrid, Scottish and Southern Electricity Networks & Scottish Power Energy Networks in utilising Western Power Distribution's Flexible Power platform for the dispatch and settlement of our flexibility requirements.

Ongoing developments of the platform will be conducted in collaboration with the other networks in line with best practice from the industry.



-  
-  
-  
-  



By collaborating with the other four DNOs on the Flexible Power Portal, we can support flexibility providers in utilising a single platform to:



Declare their flexible assets' availability



Receive dispatch signals



View all information relating to the service they provide to different DNOs including performance and settlement reports all in one place



Measure the energy provided to DNOs through the portal enabling automatic settlement built on common baselining principles

For more information, visit: <https://www.flexiblepower.co.uk/>

Industry updates



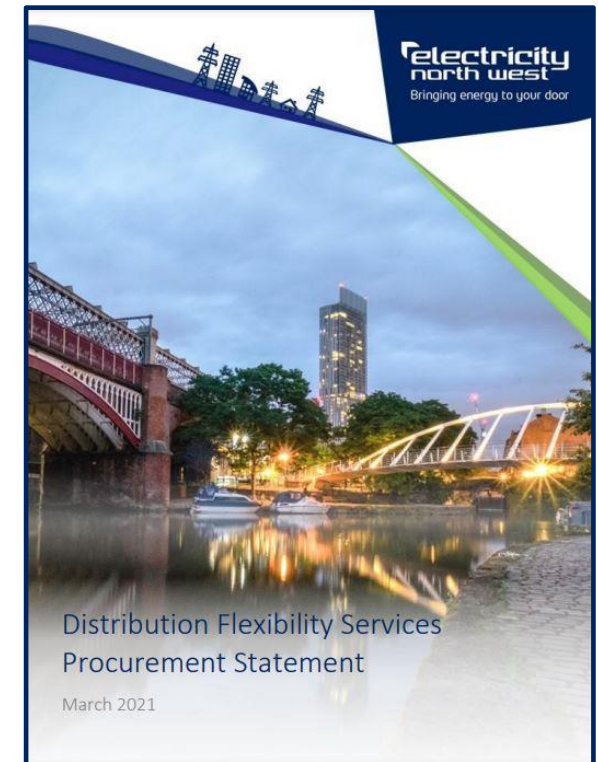


- *Clean Energy for all Europeans Package* introduced by UK Government in December 2020
- Ofgem added a new condition to our Electricity Distribution Licence:
Condition 31E: Procurement and use of distribution flexibility services

We published our first [Distribution Flexibility Procurement Statement](#) which sets out our plans for procuring Flexible Services for the upcoming regulatory year and supports the flexibility market in Great Britain as we cooperate with other DNOs and IDNOs to deliver:



throughout our flexibility processes in this fast-developing new sector.

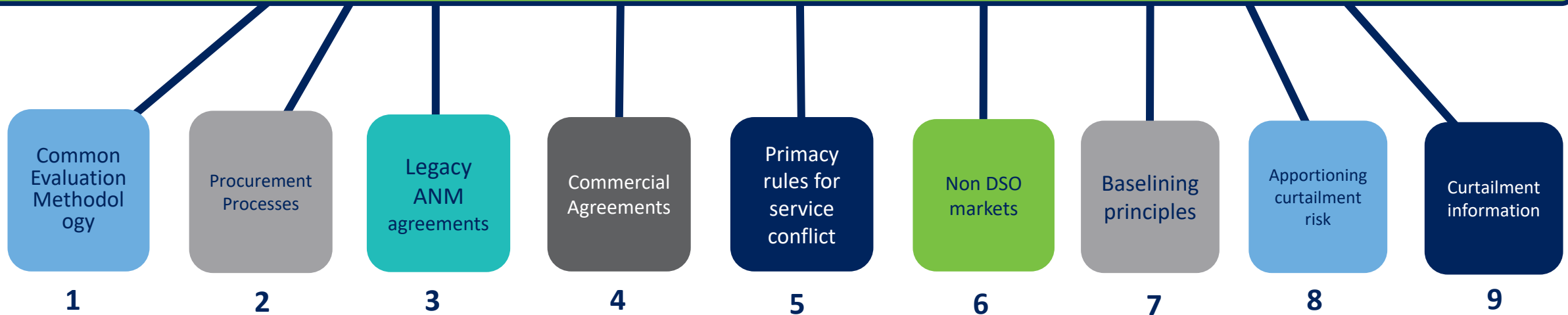




We participate in the **Open Networks Project** hosted by the Energy Networks Association
This project sees all 6 DNOs working together along with BEIS, Ofgem and the TO's



As part of the Open Networks project there is a **flexibility workstream**, divided into 9 parts





SUSTAIN



SECURE



DYNAMIC



RESTORE

- Implementation of consistent branding across all networks
- Consistency of parameters for each of these products
- Reduction of minimum aggregated capacity to 50kW
- We were the first DNO to adopt these as part of our Autumn 2020 tender





A new Common Evaluation Methodology (CEM) tool has been developed in collaboration with all the GB DNO's and Baringa



- Built on Ofgem CBA, it compares flexibility vs network intervention
- From April, the tool will be utilised by the networks
- Compares network capacity, network losses over the 5 different DFES scenarios to identify the most cost effective solution and optimise contract lengths
- We have used this tool to evaluate our Autumn-20 tender, and to identify the ceiling prices for our Spring-21 tender

Find out more about the CEM and Tool [here](#)



Bi-annual procurement windows and ESO alignment

Use of DPS and PQQ to save wasted effort

Clear and consistent reporting





A Standard Flexibility Agreement was established back in Spring 2020



- Following stakeholder feedback, we are now using a revised version (Version 1.2)
- We recently published version 1.2 [on our website](#), which implements further improvements for aggregated portfolios
- Utilised for this tender
- Work is continuing for Version 2 which is being developed with the ESO for further consistency



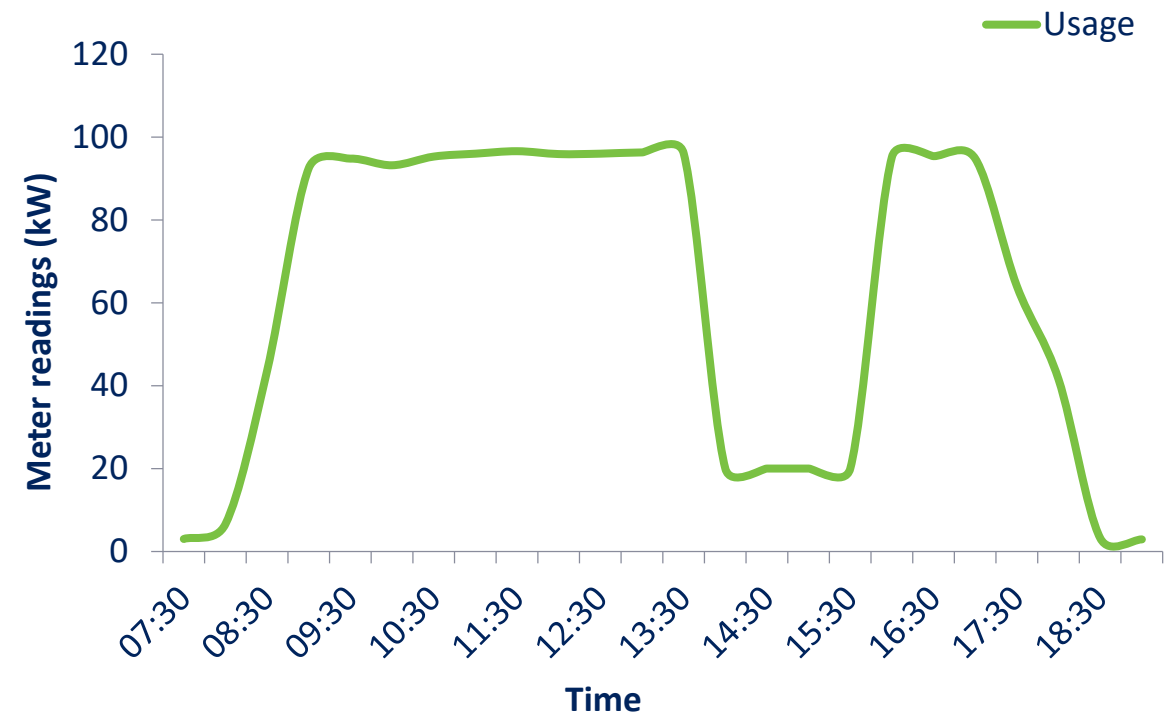
Work is underway within the Open Networks to establish a common baselining principle to be implemented in 2021

An additional workstream will be undertaken looking at metering requirements

Identified different products need different methodologies

DNV-GL are currently working on this on behalf of the networks

How much energy you have delivered



How much payment you're going to receive



Following stakeholder feedback from last years' flexibility consultation, WS1A in 2021 has a focus on conflict management, coordination and information provision relating to connections

Improving and standardising curtailment information providing assurance to connecting customers

Establish principle and primacy rules for dispatch of service to ensure optimisation and efficiency

Ensure transparency for market participants across transmission & distribution markets



ED2 Requirements



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Bringing energy to your door




Last year we asked flexibility providers to express an interest in providing us with flexibility in the next price control period (2023 to 2028) to identify both current and future levels of flexibility available on the network.


We forecasted that 208MW will be required over 5 years across 21 different Grid & Primary sites:

- Cumbria – 4 sites
- Lancashire – 4 sites
- Greater Manchester – 13 sites

HELP US SHAPE FLEXIBILITY IN ED2

208 MW
ALREADY FORECASTED






132kV & 33kV

EXPRESSION OF INTEREST

REQUIRED FROM 2023 TO 2028

UP TO 200 HV & LV SITES PER YEAR

 |  **RESPOND BY 1ST FEB**

Although the deadline for responses was February 2021, you can still view the details of these requirements and help shape our future approach to flexibility by completing our survey [here](#).

Or, [register your asset](#), and we will notify you when there is a requirement in your area.

Powering Up the North West: Our Future Plan

12:30 - 13:30 Thursday 22nd April 2021

Our early draft business plan for 2030-2038 is now available on our [engagement hub](#) for consultation and we want to hear your views.

We have engaged with more than 18,000 stakeholders to develop this plan which would see us invest almost £2bn in the region.

To help summarise the plan we want to invite you to our [Powering Up the North West: Our Future Plan](#) webinar on **Thursday 22nd April**.

We'll also be inviting questions and comments from attendees before submitting the plan to Ofgem.

22 April

12:30-13:30

[Register Now](#)

Take a look at our [consultation](#) and [share your thoughts](#) before **3 May 2021**

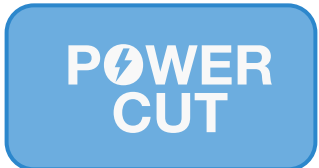
In brief, our outline business plan is proposing to:



Invest £1.97bn between 2023 and 2028



Continue increasing the capacity of the network to meet rising demand



Cut the number and duration of power cuts by a further 20%



Provide support for those in fuel poverty



Limit annual bill increases to just £2.14 for domestic customers



Go even further in protecting the network from storms and floods



Email



Feedback form



Register asset



Surgery appointments



Sign up

For all queries relating to this event, or flexibility services, please contact our team at flexible.contracts@enwl.co.uk

Alternatively, you can fill out our [online feedback form](#)

You can [register your asset\(s\)](#) on our website to be notified when we have a requirement in your area

We offer 1-2-1 surgery appointments to assist with any queries relating to the process of providing flexibility
[Book here](#)

[Sign up to our distribution list](#) to receive our newsletters, tender information and event invites

Thank you!

