

▶ Distributed Generation Owner/Operator Forum

Bristol, 31 January 19



- 13.30 **Arrival, registration and buffet lunch**
- 14.00 **Introduction, action review and objective setting from the chair and WPD**
- 14.10 **Improving industry and WPD communication to address outages/constraints**
 - Forum member feedback on communication
 - Report back from single point of contact
 - Progress on updating outage portal
- 14.30 **Cost of lost generation due to outages update**
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 - Matt Watson, innovation and low carbon networks engineer, Western Power Distribution
- 16.00 AOB
- 16.30 **Networking and close**

Future Forums (Bristol)

25 April 2019

18 July 2019





Connections

New connections

Generation

- > G59 Applications
- > G59 Fast track applications
- > G83 Applications
- > Energy Storage
- > Generator application / commissioning forms
- > Study and offer quote
- > Community Energy Schemes
- > Payments for generated energy
- > Generation Infrastructure Schemes
- > Facilitating sharing of information for potential generation connections consortiums

Distribution Generation owner/operator forum

We have set up a forum in partnership with Regen aimed at owners and operators of MW scale renewables connected to a WPD network to provide an opportunity for WPD and Distributed Generation (DG) owners/operators to improve communication on issues including:

- WPD work to address grid constraints;
- Improving communication with generators on outages and constraints;
- Potential approaches for forecasting and mitigating outages.

The next meetings of the forum will take place on:

26 April 2018
19 July 2018

Meeting notes from previous events:

- [25 January 2018](#)
- [15 July 2016](#)
- [28 Sept 2016](#)
- [24 Jan 2017](#)
- [27 April 2017](#) [Power factor and maintenance frequency slides](#)
- [11 Jul 2017](#)
- [20 Sept 2017](#)

If you or a colleague would like to join the forum then please contact Olly at Regen on ofrankland@regensw.co.uk for further details.



Contact us

Emergency information

0800 6783 105

General contact enquiries

0800 096 3080



**Western Power
Distribution
Generation Portal**

Log in

You are being granted access to Western Power Distribution's Generation Portal. You understand that your access to this website is subject to the website's [Terms of Use and Privacy Policy](#).

User name:

Password:

PLEASE NOTE, THESE TERMS AND CONDITIONS GOVERN THE USE OF OUR GENERATOR PORTAL. BY CLICKING ON THE "ACCEPT" BUTTON BELOW OR USING THE GENERATOR PORTAL, YOU AGREE TO THESE TERMS AND CONDITIONS, WHICH WILL BIND YOU. IF YOU DO NOT AGREE TO THESE TERMS AND CONDITIONS, YOU MAY NOT USE THE GENERATOR PORTAL AND YOU AGREE THAT YOU WILL CEASE TO DO SO IMMEDIATELY.

<https://generation.westernpower.co.uk/>

WPD ICE plan 2018/19

Section 2 – Availability of information

Initiative		Initiative description
2.1*	Provide historic and forecast outage information and improved curtailment information for DG EHV connections at the point of issue of the connection offer	Develop systems and processes to provide better historical and forecast outage information, for a proposed DG EHV connection at the point of issue of the connection offer. Where the connection offer is for an alternative connection, we will also undertake developments to provide improved curtailment information. This improved information is intended to provide clarity on the likelihood of the level of curtailment
2.2	Further develop the WPD DGOO	Continue to develop the WPD DG Owner Operator Forum, developing an action plan with members to deliver further improvements to outage information provision. Host 4 forums including a visit to a WPD Control Centre providing further insight to members.
2.3	Continuing 2017/18 initiative: report on lost generation due to outages	Continuing 2017/18 initiative: Publish the report developed with the DGOO, on the quantity of generation loss (in MWh) caused due to WPD and National Grid system outages (132kV, 66kV & 33kV only) by generation technology type.
2.4	Further develop the report on lost generation due to outages	Further develop the report on lost generation due to outages to include an estimation of the £ value lost due to outages in the published report.
2.5	Report on reduced DG losses avoided during outages	Develop a report on the amount of DG losses avoided with the processes and procedures which have been developed to reduce the impacts of outages on DG. Develop ways of both quantifying reduced losses and of reporting case studies.
2.6	DG Constraints information leaflet	Produce a leaflet which will provide guidance to DG customers on how outages and constraints on the distribution system may effect their connections.

* Initiative shared between Control and Connections Policy

WPD ICE plan 2018/19

Section 2 – Availability of information

Initiative		Initiative description
2.7	Pro-active fault explanation email	In conjunction with the WPD DGOO, develop a pro-active email notification process to provide DG customers with explanations regarding faults on the distribution system which may have effected their connection.
2.8	Contacts for assistance with DG portal	Provide contact details for users to obtain assistance with the WPD DG portal.
2.9	Present to the WPD DGOO on ANM	Present to the WPD DGOO forum on Active Network Management connections and their bearing on outages and constraints.
2.10	Present to the WPD DGOO on operational best practice	Present to the WPD DGOO forum on operational best practice, raising awareness with stakeholders regarding the operation of their connections assets, in particular around outages and constraints.
2.11	Continuing 2017/18 initiative: DNO best practice on outages and constraints	Continuing 2017/18 initiative: WPD to work with Distributed Generation stakeholders to establish DNO industry good practice initiatives with regard to the management & notification of Network outages and generation constraints.

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DG Owner Operator Forum

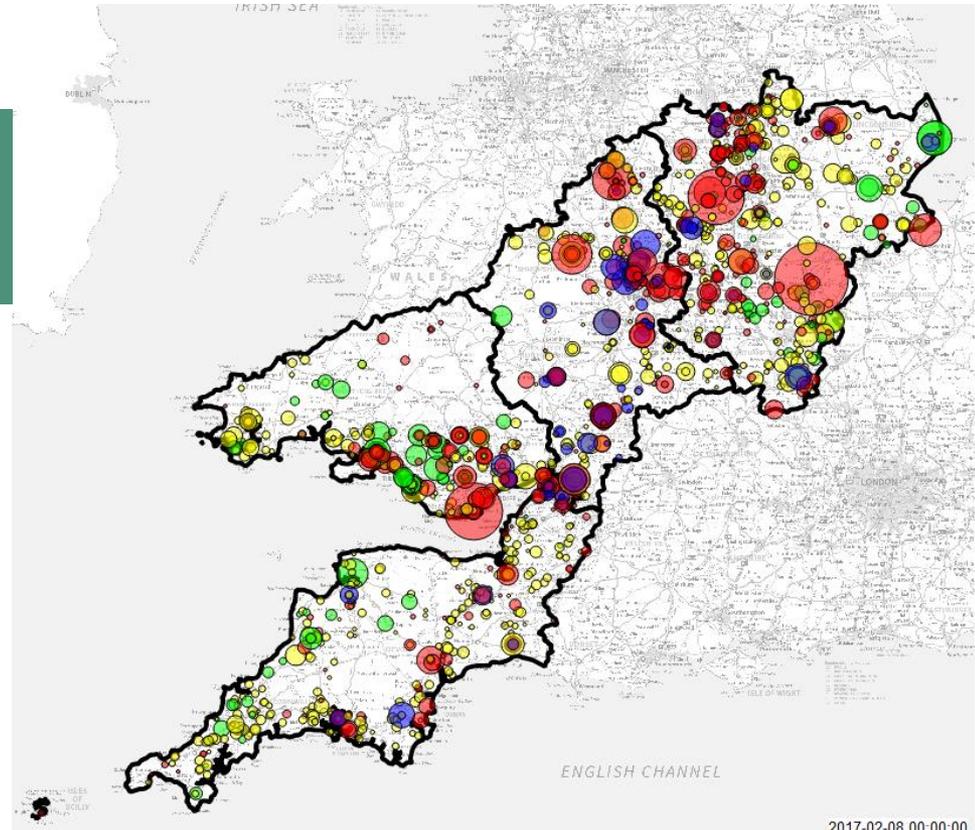
Matt Watson

31.01.19

Connection of DER

The way we generate, distribute and consume electricity is changing.

-  Solar Photovoltaic
-  Wind
-  Energy Storage
-  Other

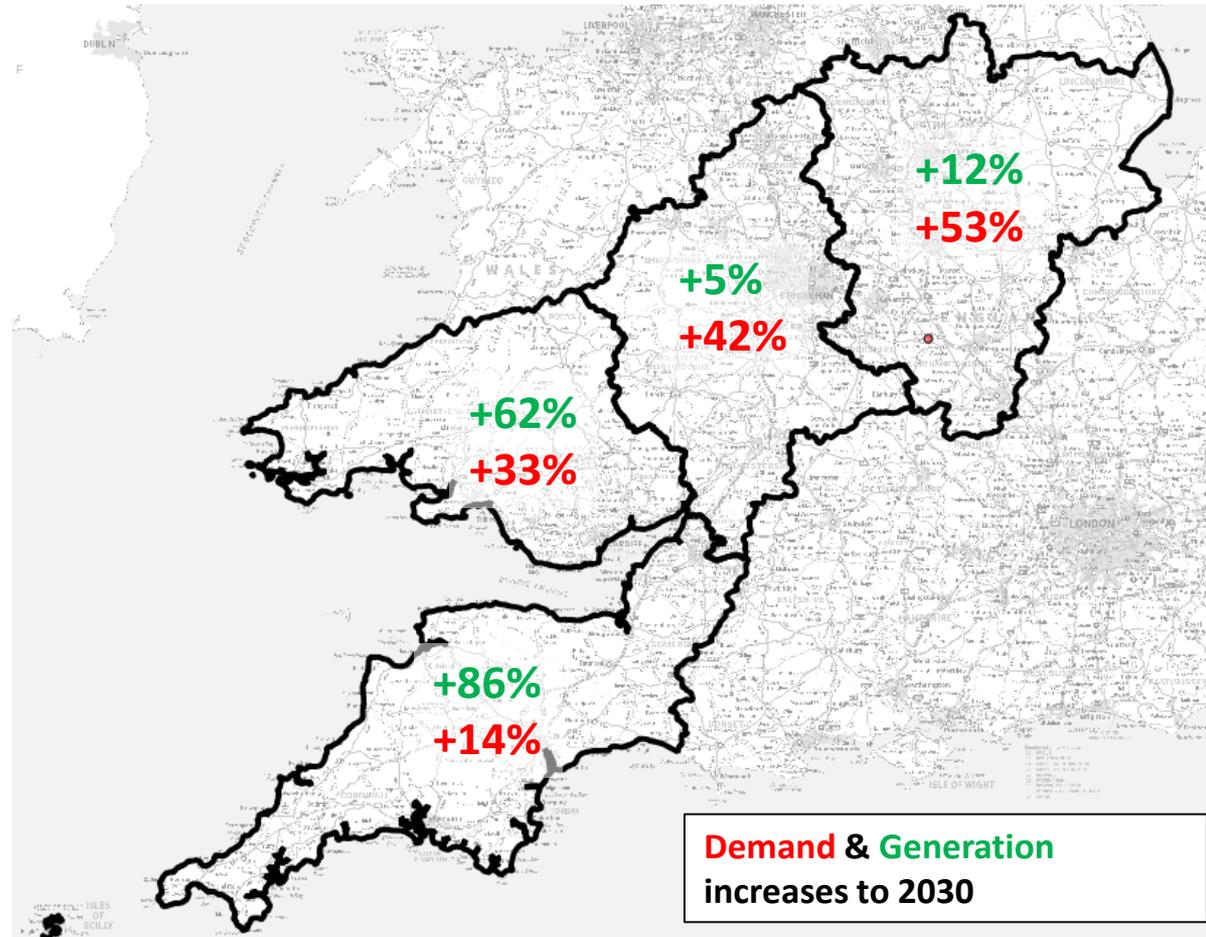


Future Growth

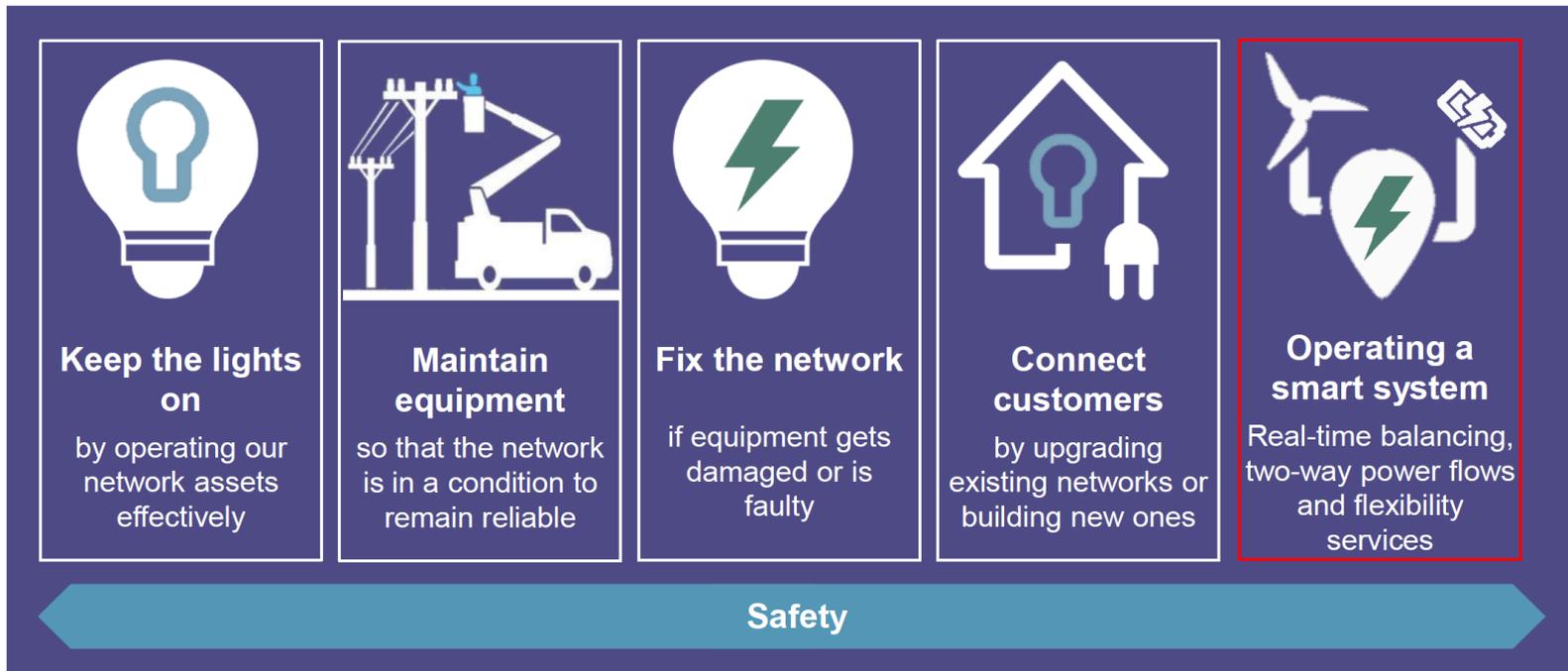
Our growth scenarios out to 2030 show that both demand and generation are expected to grow significantly in all regions.

We will need more generation!

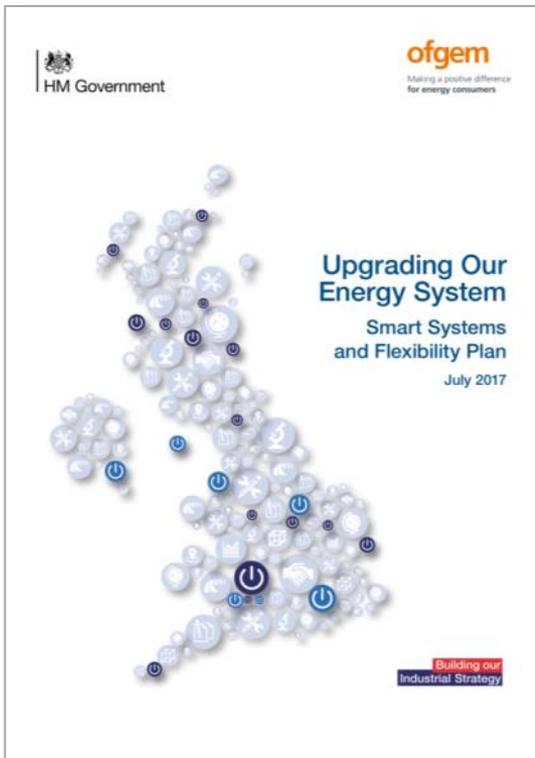
Demand and Generation growth



We are taking on DSO activities



Whole System Benefits



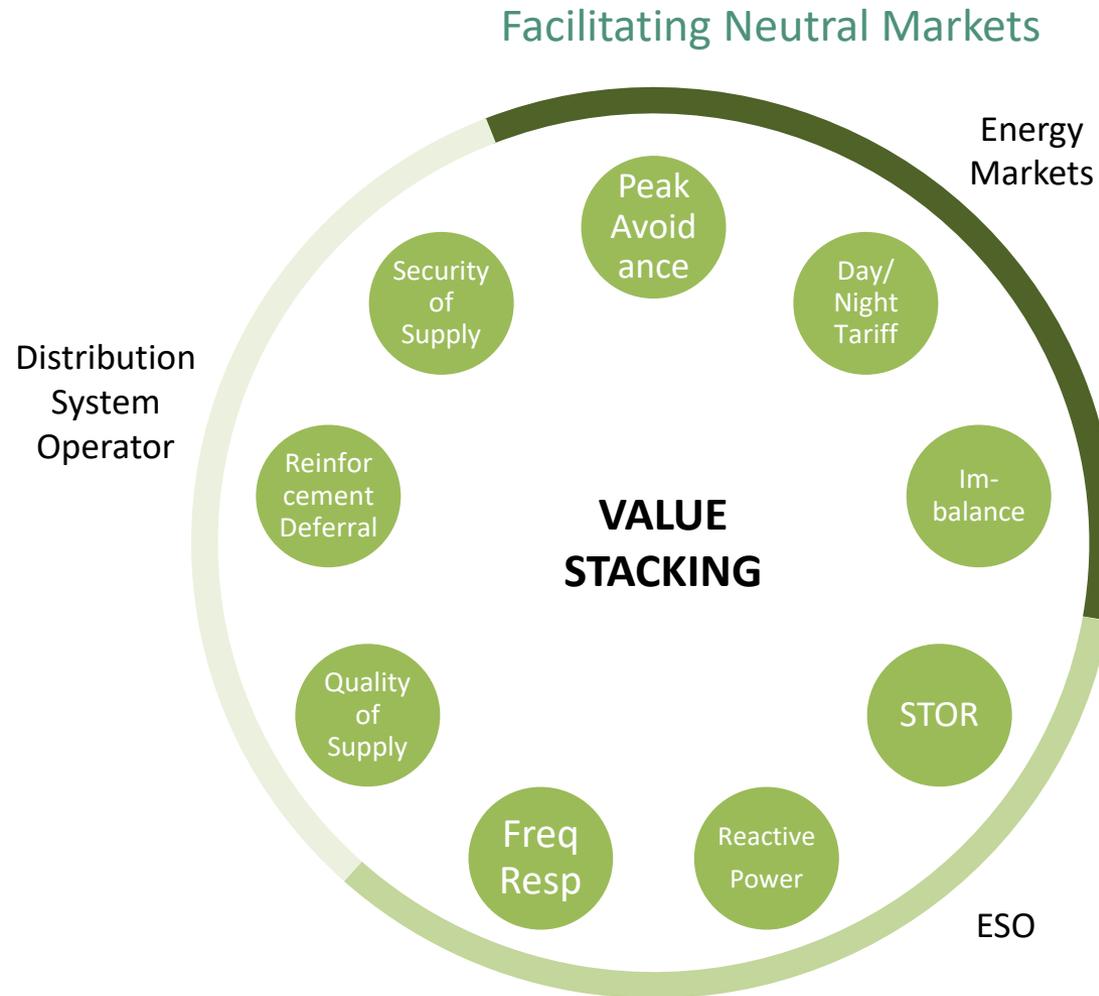
ofgem

“If we take advantage of the opportunities, we can create new businesses and jobs, empower consumers and help people save up to £40bn off their energy bills in the coming decades”

Value from neutral markets

DER connected should be able to service multiple markets. As a neutral market facilitator, we will:

- Make our products simple and transparent
- Ensure our products are stackable
- Promote accessibility of multiple markets



Product Strategy

Secure

Pre-Fault Constraint Management

The Secure service is used to manage peak demand loading on the network and pre-emptively reduce network loading. Comprises of a higher availability payment and lower utilisation payment.

Dynamic

Post-fault Constraint Management

The Dynamic service has been developed to support the network in the event of specific fault conditions, often during maintenance work. Comprises of a low availability payment and higher utilisation payment.

Restore

Restoration Support

The Restore service is intended to help with restoration following rare fault conditions. Comprises of a no availability payment and premium utilisation payment.

Facilitating Neutral Markets

Aligned with ENA Open Networks Output

Product Strategy

Secure

Pre-Fault Constraint Management

Arming:
£175/MW/h

Utilisation:
£125/MWh

Dynamic

Post-fault Constraint Management

Availability:
£5/MW/h

Utilisation:
£300/MWh

Restore

Restoration Support

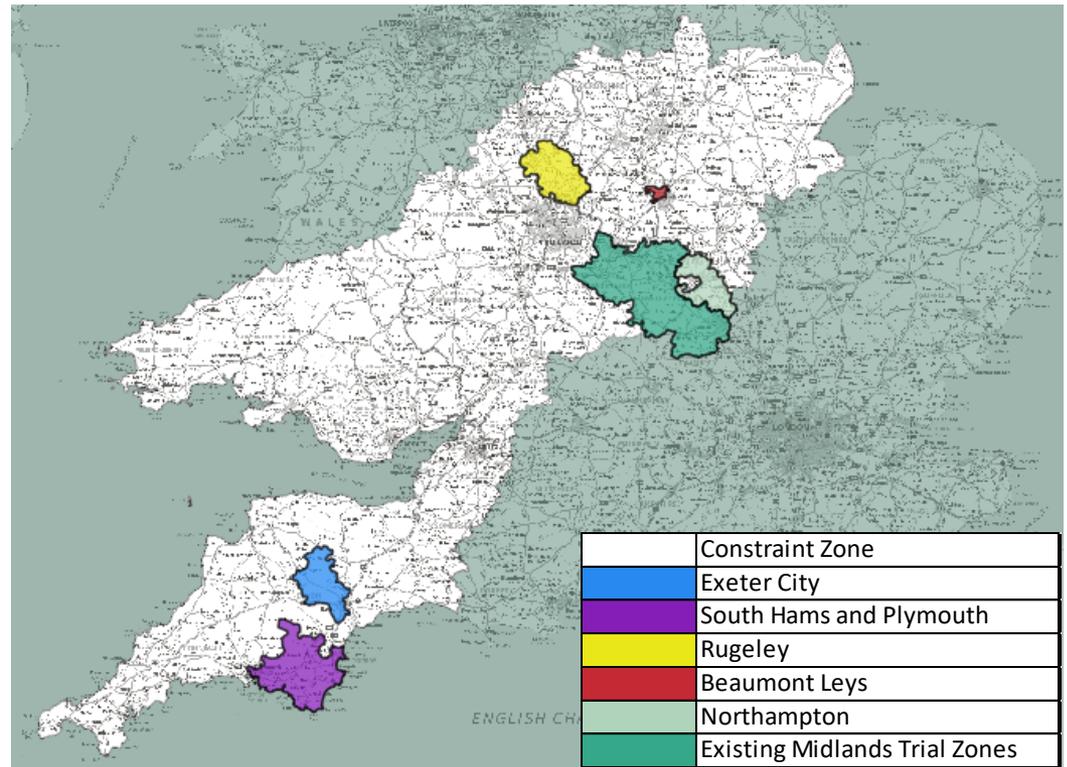
Availability:
£0/MW/h

Utilisation:
£600/MWh

Aligned with ENA Open Networks Output

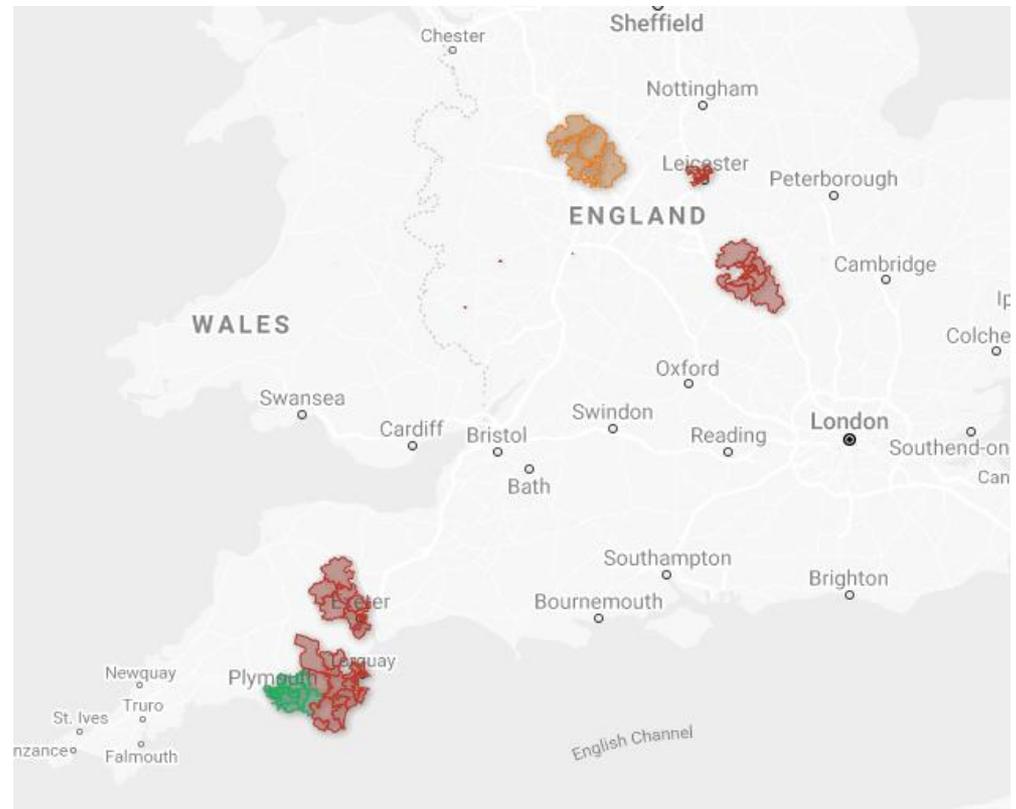
Procurement in 2018

- 5 new constraints in 18 zones
- To operate over the winter of 2018 and the summer of 2019
- Products agreed across Industry
- Requirements based on forecasting
- Roll out of BAU non-network alternatives to reinforcement



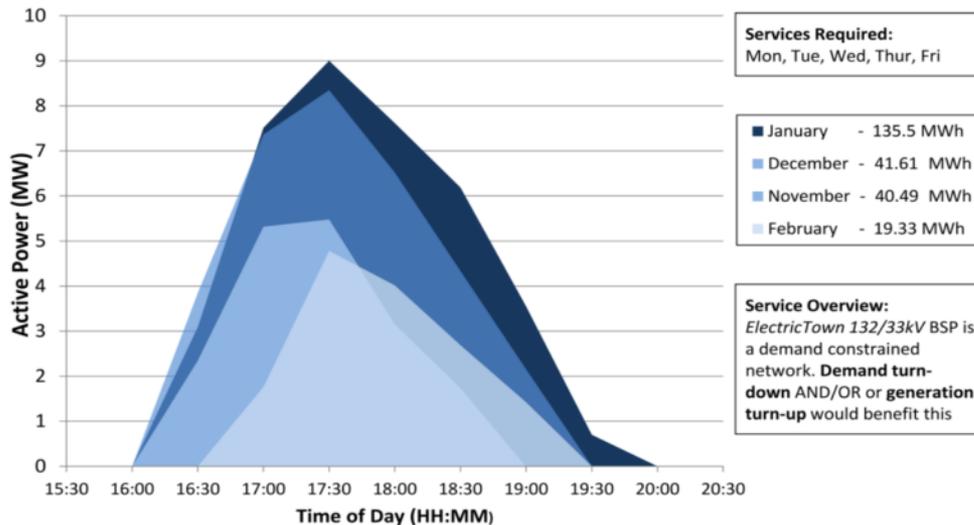
Procurement in 2019

- 12 constraints in 80 zones
- 100MW required
- ITTs out for March
- To operate over the summer and winter of 2019
- Additional zones signposted with future requirements over 5 years
- Second round in July/August



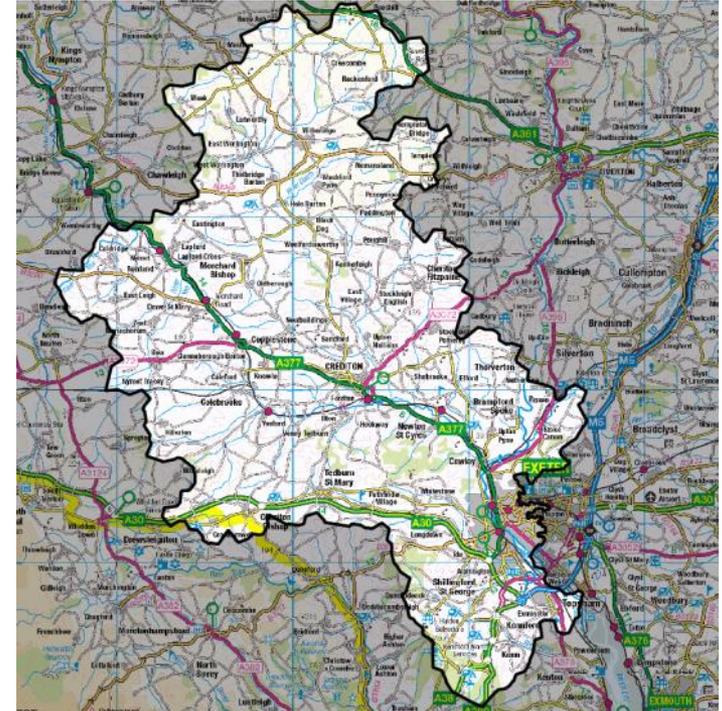
Signposting for flexibility

ElectricTown 132/33kV BSP - MW Service Availability Windows



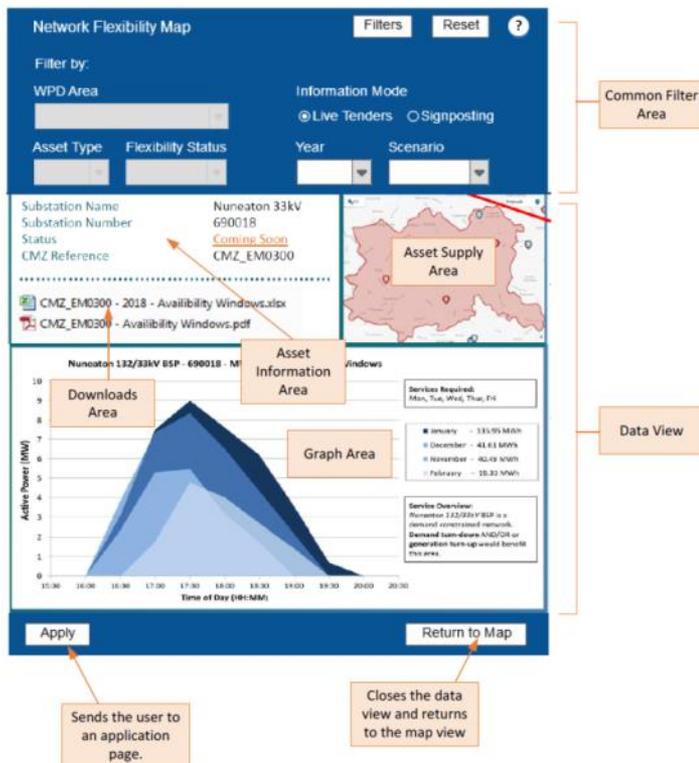
Signposting information will be provided for a 5 year window and cover the four future energy scenarios used within WPD Strategic Investment Options reports.

Facilitating Neutral Markets



For each area on our network with forecasted constraints, we will provide signposting information ahead of those networks becoming constrained.

Where is this information published?



Using a similar functionality to our network capacity map, our network flexibility map is publically available on our website:

www.westernpower.co.uk/network-flexibility-map

This displays information on:

- Geographic supply area
- MW peak and length for availability
- Estimated MWh utilisation
- Months applicable
- Days applicable
- Raw data downloads

**One Year initial term
forming into rolling contracts**

Timeline



Expression of Interest

Early February
2019



Procure

Mid February to
March 2019



Build and Test

April to May
2019



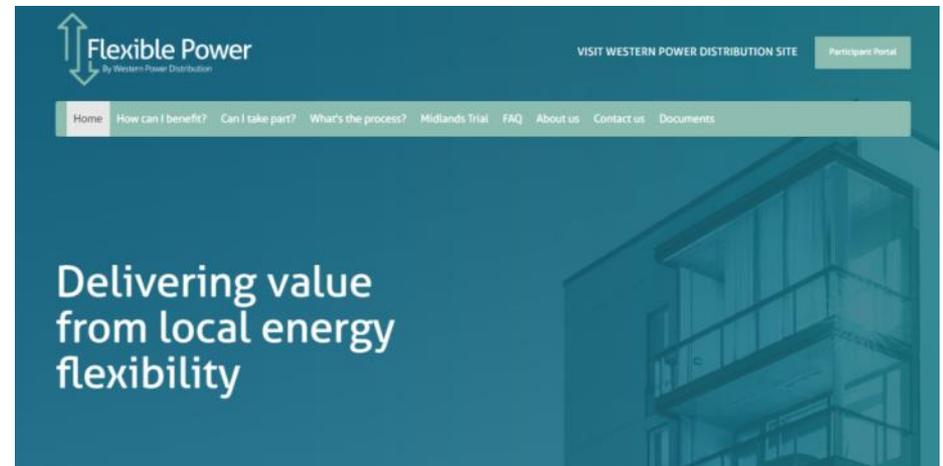
Operate

June 2019 to
May 2021

We will follow a 6 monthly procurement cycle, bringing on new flexibility zones and ensuring we meet all our system needs

How we procure

- Through Flexible Power, a WPD customer-facing brand
- Full information on website:
www.flexiblepower.co.uk
- Previous Expression of Interest documents and results
- API for interfacing with available for download
- Contractual frameworks published



THANKS FOR LISTENING



Further Collaboration

If you have any questions in relation to WPD's Flexible Power work, please contact WPD on the details below:

Email: wpdflexiblepower@westernpower.co.uk

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