



# Flexible Power

## Flexible Power 2020 Cycle 2 Procurement of Demand Response Services - Results

Nov 2020

## Background

Western Power Distribution (WPD) recognises that within its distribution area many electricity consumers have the potential to decrease import by shifting demand away from peak periods or the ability increase export by switching their consumption to on-site generation. Where WPD has a known constraint on its network, it wishes to enter into contract with these consumers which will allow WPD to utilise this demand and generation flexibility in return for a payment. This type of arrangement is widely referred to as demand response. Constraints on WPD's network are confined to specific geographical locations, WPD defines these locations as Constraint Management Zones (CMZs). WPD has been seeking to procure demand response services within CMZs it has identified and published on its Flexible Power website, [www.flexiblepower.co.uk](http://www.flexiblepower.co.uk).

## 2020 Procurement Cycle 2

WPD's 2020 Procurement Cycle 2 demand response requirements were across 45 CMZs, totalling 303.7MW. Requirements were published on 29<sup>th</sup> June and the tender window was open from 3<sup>rd</sup> August to 18<sup>th</sup> September.

This was WPD's six procurement exercise following the initial launch of Flexibility procurement in 2016. Building on learning from previous engagements, in 2019 we implemented new procurement & pricing methods which are described in the following sections.

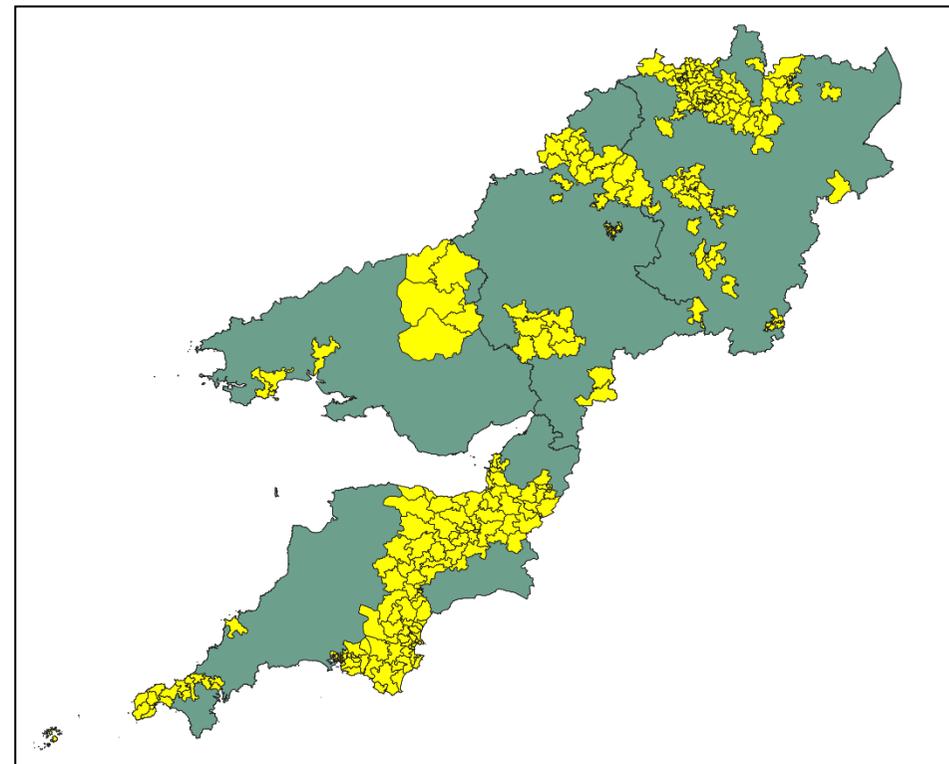


Image 1: Locations of the 45 CMZs identified in WPD's distribution

## Procurement

In 2019 WPD announced its decision to procure all flexibility through formal tender. To facilitate this WPD implemented a Dynamic Purchasing System (DPS) for its demand response requirements. The DPS holds records of all potential flexibility providers that would like the opportunity to respond to a current or future flexibility tender. DPS registration is enduring; therefore WPD will provide DPS registration to any party without restriction.

In order to join the DPS, interested parties are required to first register their interest via WPD's [Periodic Indicative Notice \(PIN\)](#). All parties who respond to the PIN and complete a Pre-Qualification Questionnaire (PQQ) are added to the DPS. The PQQ does not assess technical or commercial ability to provide services; requiring only the contact details of the potential provider and, if available, high-level information about their potential assets.

Parties registered onto the DPS will go on to receive a formal Invitation to Tender (ITT) to all of WPD's upcoming demand response requirements. DPS registrants have the choice to respond to each ITT should they consider they have potential assets within the locational boundary of any Constraint Management Zone (CMZ) open for tender at that time.

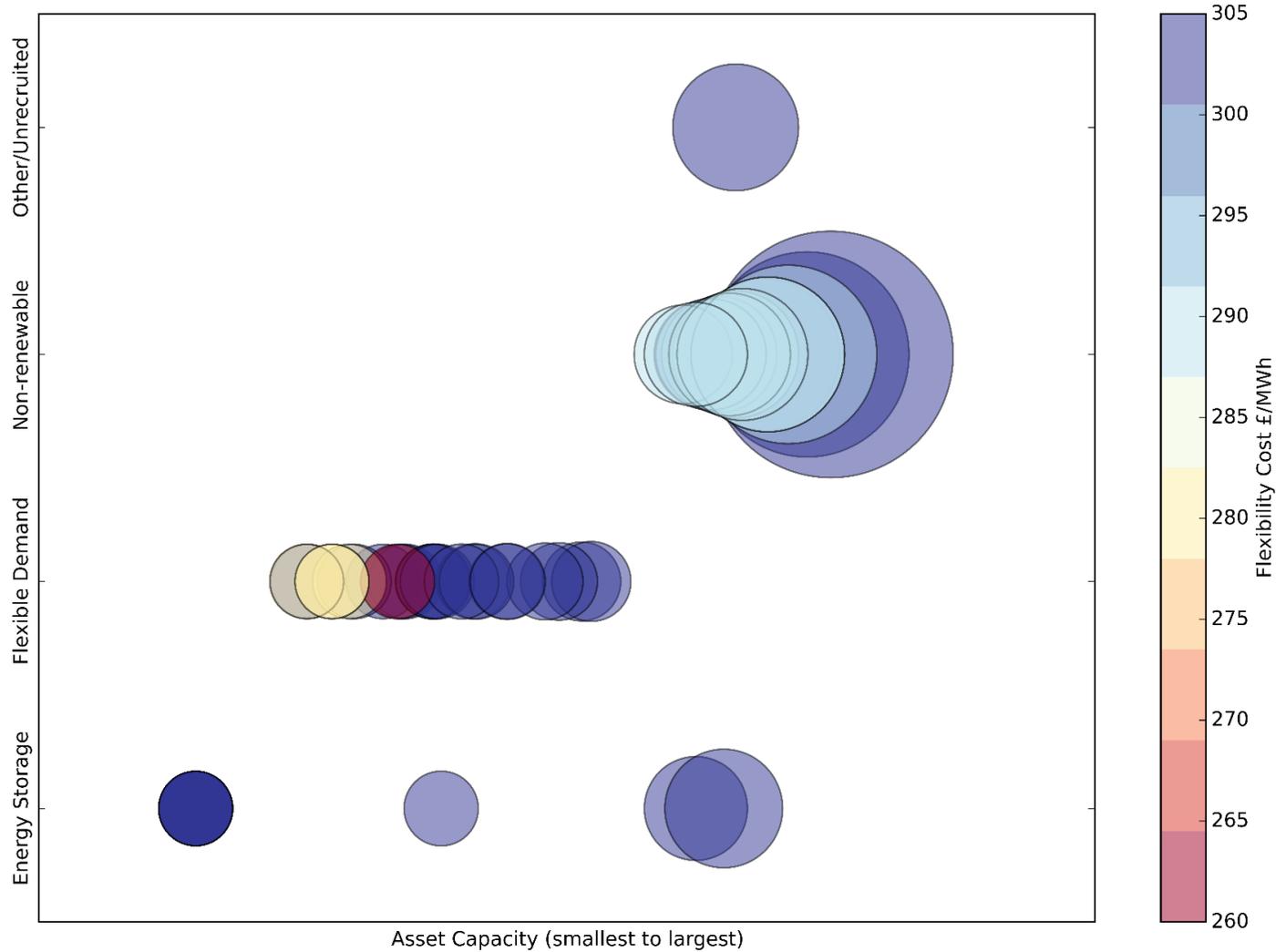
## Pricing

WPD has previously calculated a fixed price for flexibility within our CMZs based on cost efficiency set at around £300/MWh for the contract. From 2019 onwards, WPD has implemented a phased [pricing strategy](#), which will seek market led pricing where feasible;

- Where the procurement process finds there is not a sufficient amount of flexibility to provide a competitive market, then we will continue to use a fixed price in that zone.
- Where there is sufficient competition, the procurement process will derive a clearing price for the zone to be used in the contract.
- This will be based on the highest price submitted by the group of lowest priced participants that can meet the full amount of system needs, including redundancy.

Within the tender, WPD asked all bidders to acknowledge their understanding of the pricing strategy and provide a market price offer, which may be higher or lower than WPD's fixed prices, should the CMZ go to [clearing](#).

In an effort to promote transparency of DSO flexibility services, we have requested permission to publish counterparty names, capacity allocation, asset technology classification and pricing information from successful flexibility providers awarded contracts in this procurement cycle. As we did not receive universal permission to do so, this information remains un-disclosed.



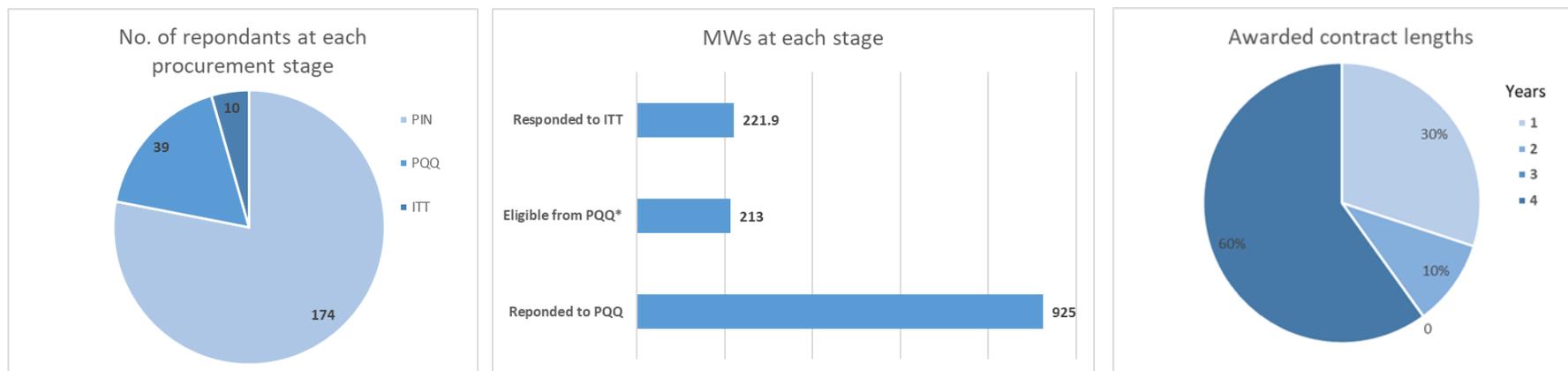
We have collated the asset level details of all awarded contracts on an anonymised basis by capacity, technology type and the best and final offer price submitted.

The aggregated results from the tender show that flexible demand is beginning to lead in price, but the capacity volumes tendered are still much smaller than non-renewable flexibility.

## Results

Following completion of the tender, WPD awarded 10 contracts totalling 221.9MW.

### Response data



### Contracted Asset Mix

| Asset type               | No.       | MW           |
|--------------------------|-----------|--------------|
| Non-Renewable Generation | 20        | 200.8        |
| Renewable Generation     | 0         | 0            |
| Storage                  | 13        | 10.5865      |
| Flexible Demand          | 60        | 2.5444       |
| Other                    | 0         | 0            |
| Un-recruited/unknown     | 0         | 8            |
| <b>Total</b>             | <b>93</b> | <b>221.9</b> |

### Summary

- 10 ITT responses received, which include a total of 26 bids.
- 13 out of the 45 CMZs received bids.
- No CMZs had required level of competition to proceed to clearing.
- All contracts were awarded on a fixed price basis, 10 in total.

\*PQQ eligibility does not require submission of asset details.

## Procurement results by zone

| CMZ Name                | Service Requirement | Services          | Zones MW Peak | Number of bids received | MW Total of bids received | Flexibility Needs Met? | Clearing Test Capacity* | Fixed pricing or clearing | Price | MW awarded in previous rounds | Unfulfilled MW |
|-------------------------|---------------------|-------------------|---------------|-------------------------|---------------------------|------------------------|-------------------------|---------------------------|-------|-------------------------------|----------------|
| <b>East Midlands</b>    |                     |                   |               |                         |                           |                        |                         |                           |       |                               |                |
| Alfreton                | Summer              | Secure & Restore  | 4.33          | 0                       | 0.00                      |                        | 0.00                    | Fixed                     | £300  | 0.79                          | 3.544          |
| Ashby/Willesley         | Winter              | Secure & Restore  | 1.40          | 0                       | 0.00                      |                        | 0.00                    | Fixed                     | £300  | 0.32                          | 1.082          |
| Apollo - Tamworth       | Winter              | Secure & Restore  | 2.16          | 0                       | 0.00                      |                        | 0.00                    | Fixed                     | £300  | 0.87                          | 1.294          |
| Chesterfield Main       | Winter              | Secure & Restore  | 1.40          | 0                       | 0.00                      |                        | 0.00                    | Fixed                     | £300  | 0.25                          | 1.154          |
| Chesterfield GSP        | Winter              | Dynamic & Restore | 23.53         | 4                       | 77.92                     | ✓                      | 2.32                    | Fixed                     | £305  | 0.00                          | -              |
| Clowne                  | Winter              | Dynamic & Restore | 0.95          | 0                       | 0.00                      |                        | 0.00                    | Fixed                     | £305  | 0.16                          | 0.788          |
| Coalville               | Winter/Summer       | Dynamic & Restore | 26.71         | 0                       | 0.00                      |                        | 0.00                    | Fixed                     | £305  | 4.31                          | 22.398         |
| Grassmoor               | Winter/Summer       | Secure & Restore  | 2.27          | 0                       | 0.00                      |                        | 0.00                    | Fixed                     | £300  | 0.39                          | 1.882          |
| Hawton                  | Summer              | Dynamic & Restore | 5.06          | 1                       | 7.00                      | ✓                      | 0.00                    | Fixed                     | £305  | 0.00                          | -              |
| Hinckley                | Winter/Summer       | Dynamic & Restore | 5.65          | 0                       | 0.00                      | ✓                      | 0.00                    | Fixed                     | £305  | 17.28                         | -              |
| Lincoln - Anderson Lane | Winter              | Secure & Restore  | 6.28          | 0                       | 0.00                      |                        | 0.00                    | Fixed                     | £300  | 0.00                          | 6.28           |
| Lincoln - Beevor Street | Winter/Summer       | Dynamic & Restore | 3.03          | 0                       | 0.00                      |                        | 0.00                    | Fixed                     | £305  | 1.25                          | 1.78           |
| Lincoln - North Hykeham | Winter              | Dynamic & Restore | 7.92          | 1                       | 0.01                      |                        | 0.00                    | Fixed                     | £305  | 1.57                          | 6.3425         |

|                                   |               |                   |      |   |             |   |      |       |      |      |       |
|-----------------------------------|---------------|-------------------|------|---|-------------|---|------|-------|------|------|-------|
| <b>Mantle Lane</b>                | Winter/Summer | Dynamic & Restore | 5.58 | 0 | <b>0.00</b> |   | 0.00 | Fixed | £305 | 1.00 | 4.58  |
| <b>Nailstone</b>                  | Winter/Summer | Dynamic & Restore | 4.44 | 0 | <b>0.00</b> |   | 0.00 | Fixed | £305 | 0.87 | 3.572 |
| <b>Tamworth Main</b>              | Winter        | Secure & Restore  | 2.04 | 0 | <b>0.00</b> |   | 0.00 | Fixed | £300 | 0.00 | 2.04  |
| <b>Union Street - Rugby</b>       | Winter        | Secure & Restore  | 0.83 | 0 | <b>0.00</b> |   | 0.00 | Fixed | £300 | 0.00 | 0.83  |
| <b>Weedon</b>                     | Winter        | Secure & Restore  | 1.29 | 0 | <b>0.00</b> |   | 0.00 | Fixed | £300 | 0.33 | 0.96  |
| <b>Woodbeck</b>                   | Winter/Summer | Dynamic & Restore | 1.64 | 0 | <b>0.00</b> |   | 0.00 | Fixed | £305 | 0.31 | 1.326 |
| <b>Woodhall Spa</b>               | Winter        | Dynamic & Restore | 0.97 | 0 | <b>0.00</b> | ✓ | 0.00 | Fixed | £305 | 1.25 | -     |
| <b>West Midlands</b>              |               |                   |      |   |             |   |      |       |      |      |       |
| <b>Brimmscombe</b>                | Winter        | Dynamic & Restore | 5.10 | 1 | <b>0.01</b> |   | 0.00 | Fixed | £305 | 1.68 | 3.417 |
| <b>Hereford - Ledbury Ring</b>    | Winter        | Secure & Restore  | 7.39 | 0 | <b>0.00</b> |   | 0.00 | Fixed | £300 | 0.00 | 7.39  |
| <b>Oldbury</b>                    | Winter        | Dynamic & Restore | 3.52 | 2 | <b>8.01</b> | ✓ | 0.00 | Fixed | £305 | 2.67 | -     |
| <b>South Wales</b>                |               |                   |      |   |             |   |      |       |      |      |       |
| <b>Abergavenny - Builth Wells</b> | Winter/Summer | Dynamic & Restore | 4.70 | 0 | <b>0.00</b> |   | 0.00 | Fixed | £305 | 1.14 | 3.556 |
| <b>Abergavenny - Brecon</b>       | Winter/Summer | Dynamic & Restore | 9.37 | 0 | <b>0.00</b> |   | 0.00 | Fixed | £305 | 2.05 | 7.32  |
| <b>Abergavenny - Glasbury</b>     | Winter/Summer | Dynamic & Restore | 3.06 | 0 | <b>0.00</b> |   | 0.00 | Fixed | £305 | 0.82 | 2.238 |
| <b>Llandrindod - Rhayader</b>     | Winter/Summer | Dynamic & Restore | 0.92 | 0 | <b>0.00</b> |   | 0.00 | Fixed | £305 | 0.18 | 0.736 |
| <b>Pembroke - BroadField</b>      | Winter/Summer | Dynamic & Restore | 2.32 | 0 | <b>0.00</b> |   | 0.00 | Fixed | £305 | 0.67 | 1.65  |
| <b>Pembroke - St Florence</b>     | Winter/Summer | Dynamic & Restore | 1.21 | 0 | <b>0.00</b> |   | 0.00 | Fixed | £305 | 0.48 | 0.733 |

|                            |               |                   |               |           |               |   |      |       |      |               |               |
|----------------------------|---------------|-------------------|---------------|-----------|---------------|---|------|-------|------|---------------|---------------|
| <b>Pembroke - Tenby</b>    | Winter/Summer | Dynamic & Restore | 1.95          | 0         | <b>0.00</b>   |   | 0.00 | Fixed | £305 | 0.61          | 1.336         |
| <b>Trevaughan</b>          | Winter        | Secure & Restore  | 2.13          | 0         | <b>0.00</b>   |   | 0.00 | Fixed | £300 | 0.24          | 1.892         |
| South West                 |               |                   |               |           |               |   |      |       |      |               |               |
| <b>Bridgwater/Street</b>   | Summer        | Dynamic & Restore | 11.82         | 3         | <b>13.31</b>  | ✓ | 0.01 | Fixed | £305 | 8.01          | -             |
| <b>Exeter City</b>         | Winter        | Dynamic & Restore | 10.41         | 1         | <b>27.80</b>  |   | 0.00 | Fixed | £305 | 62.50         | -             |
| <b>Hayle - Camborne</b>    | Winter        | Secure & Restore  | 12.10         | 1         | <b>0.01</b>   |   | 0.00 | Fixed | £300 | 1.02          | 11.0741       |
| <b>Isles of Scilly</b>     | Winter        | Secure & Restore  | 0.54          | 0         | <b>0.00</b>   |   | 0.00 | Fixed | £300 | 1.59          | -             |
| <b>Moretonhampstead</b>    | Winter        | Dynamic & Restore | 1.08          | 0         | <b>0.00</b>   |   | 0.00 | Fixed | £305 | 0.40          | 0.677         |
| <b>Newton Abbot</b>        | Winter        | Dynamic & Restore | 10.69         | 0         | <b>0.00</b>   |   | 0.00 | Fixed | £305 | 2.04          | 8.6522        |
| <b>Padstow</b>             | Winter/Summer | Dynamic & Restore | 2.29          | 1         | <b>4.00</b>   |   | 0.00 | Fixed | £305 | 0.00          | -             |
| <b>Plymouth/South Hams</b> | Summer        | Dynamic & Restore | 43.21         | 4         | <b>62.02</b>  | ✓ | 0.02 | Fixed | £305 | 24.20         | -             |
| <b>Radstock</b>            | Winter/Summer | Dynamic & Restore | 3.46          | 0         | <b>0.00</b>   |   | 0.00 | Fixed | £305 | 3.29          | 0.173         |
| <b>Stokenham</b>           | Winter        | Secure & Restore  | 0.98          | 0         | <b>0.00</b>   |   | 0.00 | Fixed | £300 | 0.16          | 0.824         |
| <b>Taunton GSP</b>         | Winter        | Dynamic & Restore | 43.58         | 2         | <b>7.35</b>   | ✓ | 0.00 | Fixed | £305 | 36.18         | 0.047         |
| <b>Tiverton</b>            | Winter/Summer | Dynamic & Restore | 10.27         | 1         | <b>6.50</b>   |   | 0.00 | Fixed | £305 | 2.98          | 0.794         |
| <b>Weston Super Mare</b>   | Winter        | Secure & Restore  | 3.86          | 1         | <b>8.00</b>   |   | 0.00 | Fixed | £300 | 1.43          | -             |
| <b>Witheridge</b>          | Winter        | Secure & Restore  | 0.27          | 0         | <b>0.00</b>   |   | 0.00 | Fixed | £300 | 0.33          | -             |
| <b>Totals Cycle 2</b>      |               |                   | <b>303.71</b> | <b>23</b> | <b>221.93</b> |   |      |       |      | <b>185.59</b> | <b>112.36</b> |

|                                    |               |
|------------------------------------|---------------|
| <b>Awarded in Cycle 2</b>          | <b>221.93</b> |
| <b>Awarded in previous rounds</b>  | <b>185.59</b> |
| <b>Awarded in previous zones**</b> | <b>32.14</b>  |
| <b>Grand Total</b>                 | <b>439.66</b> |

\* To test if a zone should proceed to clearing the two zonal bids with the largest capacity are subtracted, if remaining capacity can meet the peak of the zone then all bids will proceed to clearing.

\*\*In earlier procurement rounds, WPD have sought to procure services in the following 9 zones which were not included in 2020 cycle 2 procurement; Banbury, Bletchley, Donnington, Meaford, Rugby, Rugeley, Smethwick, Tamworth Main and Union Street - Rugby. To date, these zones have total a contracted response of 32.14MW.

**This latest round of procurement brings WPDs total amount of contracted Flexibility to 440MW across a total of 54 CMZs.**

## Procurement cycles

WPD will continue to formally procure flexibility in CMZs which are unfulfilled in MW capacity contracted and/or have insufficient market competition, while also identifying new CMZ locations across the network. New CMZ locations will be announced on the 11<sup>th</sup> January 2021.

WPD will continue to run biannual procurement cycles, the timetables for 2021 and 2022 procurement windows are detailed below. WPD also reserves the right to withdraw or add procurement at any time throughout the year.

### 2021 Procurement dates

#### Procurement cycle 1

11<sup>th</sup> January 2021 – Proposed CMZs published  
8<sup>th</sup> February 2021 – ITT issued to all participants accepted onto the DPS  
19<sup>th</sup> March 2021 – ITT Deadline  
9<sup>th</sup> April 2021 – Procurement results

#### Procurement Cycle 2

28<sup>th</sup> June 2021 – Proposed CMZs published  
2<sup>nd</sup> August 2021 – ITT issued to all participants accepted onto the DPS  
10<sup>th</sup> September 2021 – ITT Deadline  
1<sup>st</sup> October 2021 – Procurement results

### 2022 Procurement dates

#### Procurement cycle 1

10<sup>th</sup> January 2022 – Proposed CMZs published  
7<sup>th</sup> February 2022 – ITT issued to all participants accepted onto the DPS  
18<sup>th</sup> March 2022 – ITT Deadline  
8<sup>th</sup> April 2021 – Procurement results

#### Procurement Cycle 2

27<sup>th</sup> June 2022 – Proposed CMZs published  
1<sup>st</sup> August 2022 – ITT issued to all participants accepted onto the DPS  
9<sup>th</sup> September 2022 – ITT Deadline  
30<sup>th</sup> September 2022 – Procurement results

### Find out more

The Flexible Power website is dedicated to providing visibility of the services WPD is looking to procure, it contains detailed information about active CMZs and supporting documentation. The website can be viewed at [www.flexiblepower.co.uk](http://www.flexiblepower.co.uk).

Any parties wishing to participate in the next cycle of procurement should first respond to the [Periodic Indicative Notice \(PIN\)](#). Alternatively, please contact the Flexible Power team: [WPDFlexiblePower@westernpower.co.uk](mailto:WPDFlexiblePower@westernpower.co.uk).

