



# Annex: summary of our review of competition in the electricity distribution connections market

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## **1. Executive summary**

- 1.1. As set out in our minded-to proposals document, published alongside this supporting annex, we have assessed the data submissions made to us by the Distribution Network Operators ('DNOs') in November 2021.<sup>1</sup>
- 1.2. The DNO submissions contained data for the 84 Relevant Market Segment ('RMS')<sup>2</sup> that either did not pass or apply for the DPCR5 Competition Test ('Competition Test').<sup>3</sup>
- 1.3. We have undertaken our assessment by following the assessment framework that we consulted and came to a decision on in October 2021. This included relying on a set of guiding principles and assessment dimensions that, jointly, allowed us to create a picture of the market dynamics occurring in each RMS and for each DNO.<sup>4</sup>
- 1.4. These guiding principles were based on the following key metrics:
  - Market shares number of connections. Two different market shares that capture DNOs' share of the total number of offered connections and accepted connections respectively. The same shares were computed to capture third party activity.<sup>5</sup>
  - Market shares capacity. Two different market shares that capture the DNO's share of the total capacity associated with offered and accepted connections. The same shares were computed to capture third party activity.
  - **Number of third parties**. Informing on the number of third parties active in each RMS each year.
  - **Total market size** consisting of the number of connections offers, the number of connections acceptances and the total associated capacity with each of these two

<sup>&</sup>lt;sup>1</sup> DNOs own and operate the electricity distribution networks that carry electricity from the high voltage, transmission networks to industrial, commercial, and domestic users, as well as distributing an increasing quantity of power from generation sources connected directly to the distribution networks.

<sup>&</sup>lt;sup>2</sup> The connections market consists of various segments which reflect the different type of customers and types of work. RMS refer to the market segments where we consider competition is viable. In this minded-to decision document we use the terms 'market' and 'markets' to refer to different segments of the energy sector. For the avoidance of doubt, these terms are not intended to describe or otherwise suggest the approach that may be taken by us for the purposes of market definition, for example in competition law investigations.

<sup>&</sup>lt;sup>3</sup> Distribution Price Control Review 5 was a price control that ran from 1 April 2010 until 31 March 2015. Between 2012 and 2014 we ran the Competition Test to assess levels of effective competition in each RMS in each licensee region. Where we saw evidence of effective competition – the DNO passed – and we permitted the DNO to charge an unregulated margin for contestable works <sup>4</sup> See <u>here</u> for our decision document published in October 2021

<sup>&</sup>lt;sup>5</sup> For the unmetered RMS these metrics are built based on units completed rather than total connections.

variables. The number of offered and accepted connections, irrespective of whether these are issued by DNOs or third parties, allows us to understand the total size of the market and the size of the sample available. The total capacity associated with these connections allows to understand connection size (MW).

- **The average value of DNO full acceptances**, gives high level information on the monetary value and scale of DNOs accepted work.<sup>6</sup>
- 1.5. These metrics have allowed us to assess market activity between DNOs and third parties and therefore understand the level of competition in the RMS submitted for this review. Where more information was required, we requested further clarification in the form of supplementary questions.
- 1.6. The assessment presented in this appendix has informed our decision on how the regulated margin would apply to contestable activities, as set out in the supporting minded-to proposals document.

<sup>&</sup>lt;sup>6</sup> In cases where DNOs did not complete any connections throughout the entire assessment period but issued offers we included the average value of DNO non acceptances.

## **2. Across DNO market view**

#### Section summary

This section discusses the common trends we have observed across all completed data submissions, and aims to provide context to this review and summarise our understanding of the different RMS..

2.1. For our review, we gathered data in relation to the following RMS, based on the outcome of the previous Competition Test. See table 1 below.

| Relevant Market Segments |   |
|--------------------------|---|
| Metered Demand           | Low Voltage (LV) Work - LV connection activities involving only LV    |
| Connections              | work, other than in respect of the Excluded Market Segments.          |
|                          | High Voltage (HV) Work: LV or HV connection activities involving HV   |
|                          | work (including where that work is required in respect of connection  |
|                          | activities within an Excluded Market Segment).                        |
|                          | HV and Extra High Voltage (EHV) Work: LV or HV connection             |
|                          | activities involving EHV work.  |
|                          | EHV work and above: extra high voltage and 132kV connection           |
|                          | activities.   |
| Metered Distributed      | LV work: low voltage connection activities involving only low voltage |
| Generation               | work.   |
|                          | HV and EHV work: any connection activities involving work at HV or    |
|                          | above.  |
| Unmetered                | Local Authority (LA) work: new connection activities in respect of LA |
| Connections              | premises.   |
|                          | Private finance initiatives (PFI) Work: new connection activities     |
|                          | under PFIs.   |
|                          | Other work: all other non-LA and non-PFI Unmetered connections        |
|                          | work.   |

#### Table 1: Relevant Market Segments:

- 2.2. While our analysis focused on assessing all RMS separately for each DNO, we have also investigated whether there are industry-wide trends irrespective of the Distribution Service Area ('DSA'). Evidence demonstrates that, for example:
  - The number of third parties active in a market segment tends to be associated with the total number of connections completed in the same market. All else equal, larger markets are more attractive than smaller ones.
  - The monetary value of connection work is primarily driven by the technical characteristics of the types of connections being undertaken, rather than by competitive behaviour between third parties and DNOs. The average value of DNO's full acceptances is, all else equal, higher for higher capacity connections and of higher voltage.

## **Metered Demand RMS**

- 2.3. The Metered Demand LV and Metered Demand HV RMS showed, on average, the largest number of connections and the highest number of third parties, across all RMS and DNOs. While there were a large number of connections and a significant number of third parties active in these markets, DNOs' market shares still accounted for the majority of all accepted connections.
- 2.4. As voltage increases, sample size becomes considerably smaller and variations across DNOs increase. Metered Demand HV and EHV and Metered Demand EHV and above generally had fewer connections that were of larger capacity and of higher monetary value. As the number of connections in these RMS decreased, the number of active third parties similarly declined.
- 2.5. Across all Metered Demand RMS, the cumulative value of all DNOs full acceptances was £1.07bn between 2018 and 2021.

## **Distributed Generation RMS**

2.6. The Distributed Generation RMS generally demonstrated a smaller number of connections and fewer third parties active in the market, when compared to the Metered Demand LV and HV RMS. However, evidence varied across RMS and DNO region, and as such, there are no market-specific trends that applied consistently to all DNOs.

- 2.7. Connections completed in the Distribution Generation LV RMS were of low capacity and of low value (as measured by average value of DNO acceptances), for most DNOs. However, the connections in the Distributed Generation HV and EHV RMS were of higher monetary value, due to their higher voltages.
- 2.8. Across all Distributed Generation RMS, the cumulative value of all DNOs full acceptances was £475m between 2018 and 2021.

## **Unmetered RMS**

- 2.9. For the Unmetered RMS, we collected data for 'units completed' as opposed to number of connections. As such, these RMS were not assessed using the same metrics as the RMS detailed above.
- 2.10. Market share evidence does not demonstrate a clear RMS-wide narrative as DNOs' market shares vary considerably by service area or type of Unmetered segment. There was no market activity in Unmetered PFI between 2018 and 2021 for any DNO.
- 2.11. Across all Unmetered RMS, the cumulative value of all DNOs completed units was £52m between 2018 and 2021.

## **3. Electricity North West**

3.1. The outcome of the previous Competition Test resulted in seven of Electricity North West's ('ENWL') RMS passing. The RMS in scope for this review are the Distributed Generation LV and Unmetered Other RMS, and our analysis is presented in the subsections below.

## **Distributed Generation LV**

#### Section summary

This RMS had a total of 12 accepted connections between 2018 and 2021, ten of which were made by ENWL.

- 3.2. As shown in Figure 1B, there was a total of 30 offers between 2018 and 2021 and 12 connections were accepted. Offered connections were associated with a total of 1.5MW of capacity, whilst accepted connections accounted for a total of 0.41MW of capacity. Market size decreased across all metrics between 2018 and 2021.
- 3.3. Figure 1A demonstrates that there was one third party making connections in 2019 and 2021 and none in 2018 and 2020. There was one third party issuing quotes in 2019 and 2020 and none in the other years.<sup>7</sup>

## Figure 1: ENWL Demand Generation LV - third parties and total market size Graph A: number of third parties (#) Graph B: market size (# connections, MW)



<sup>&</sup>lt;sup>7</sup> We note that the data submitted by the DNO for this RMS contains instances where the number of third parties making connections is higher than those issuing quotes.

- 3.4. ENWL made ten out of the 12 accepted connections in 2018 and 2021. Third parties made the remaining two in 2019 and 2021. Market share evidence reflects this trend.
- 3.5. As shown in Figure 2B, ENWL share of accepted connections and associated capacity was 100% in 2018 and 2020. In 2019 and 2021, the two connections carried out by third parties accounted for 29% and 82% of accepted capacity.
- 3.6. Figure 2A shows that third parties only issued quotes in 2019 and 2020 and accounted for 12% and 14% of offered connections in those years.

Graph B: accepted connections

## Figure 2: ENWL Distributed Generation LV - market shares (%)



### Graph A: offered connections

## **Unmetered Other**

#### Section summary

ENWL's share of completed units fluctuated yearly and followed a downward trajectory from 100% in 2018 to 21% in 2021. Over the same period, the number of third parties completing units ranged between zero and five, whilst the average number of units completed by either ENWL or third parties was 629 per year.

3.7. As shown in Figure 3, ENWL's share of units completed decreased from 100% in 2018 to 67% in 2019, increased to 77% in 2020 and ultimately decreased to 21% in 2021. Consistently, third parties' share of completed units was above ENWL's only in 2021, when it was 79%.



Figure 3: ENWL Unmetered Other market share, completed units (%)

- 3.8. Figure 4A shows that the number of third parties issuing quotes and completing units increased from zero in 2018 to five in 2019, decreased to two in 2020 and increased to three in 2021.
- 3.9. As shown in Figure 4B, variation in number of third parties aligns with variations in market size. Units completed increased in 2019 and 2021, when the number of third parties also increased. Notably, the number of units completed increased from 465 in 2018 to 1,276 in 2019, decreased to 368 in 2020 and then increased to 407 in 2021.

Figure 4: ENWL Unmetered Other – third parties and total market size Graph A: number of third parties (#) Graph B: market size (# units completed)

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## **4. Northern Powergrid Northeast**

- 4.1. The outcome of the last Competition Test resulted in Northern Powergrid's Northeast ('NPgN') DSA's Metered Demand HV RMS to pass the Competition Test whilst the other RMS were either not in scope or did not pass.
- 4.2. As such, all RMS except the Metered Demand HV are in scope for this review. The assessment of these RMS are presented in the sub-sections below, apart from the Unmetered PFI and Metered Demand EHV and above RMS, as there were no offered or accepted connections or units completed for either RMS, over the assessment period.

## **Metered Demand LV**

## Section summary

NPgN's average market share across all metrics was 77% between 2018 and 2021. Over the same period, there were on average 16 third parties making connections, whilst the total number of connections accepted by third parties or NPgN decreased from 589 to 474.

- 4.3. As shown in Figure 5, NPgN accounted for the majority of connections work every year between 2018 and 2021, with an average market share of 77% across all metrics. Figure 5A demonstrates how NPgN's share of offered connections increased from 68% to 76% and that of the associated offered capacity increased from 61% to 77% between 2018 and 2021.
- 4.4. Figure 5B shows that NPgN's share of accepted connections decreased over the same period, from 83% to 79% while that of the associated accepted capacity decreased from 81% to 79%.

## Figure 5: NPgN Metered Demand LV – market shares (%)

#### Graph A: offered connections

#### **Graph B: accepted connections**

Graph B: market size (# connections, MW)



- 4.5. Figure 6A demonstrates how the number of third parties fluctuated over time. There were 16 to 27 third parties issuing quotes and 11 to 19 third parties making connections over the assessment period. As shown in Figure 6B, the total size of the market decreased across most metrics between 2018 and 2021:
  - Offered connections decreased from 1,545 to 917;
  - Accepted connections decreased from 589 to 474;

Graph A: number of third parties (#)

- Offered capacity decreased from 107MW to 77MW; and
- Accepted capacity fluctuated around an average of 35MW per year.

#### Figure 6: NPgN Metered Demand LV – third parties and total market size



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## **Metered Demand HV and EHV**

#### Section summary

There were a total of six accepted connections between 2018 and 2021, four of which made by NPgN and two by third parties. Total capacity associated with accepted connections was 30MW.

- 4.6. As shown in Figure 7B, there was a total of 24 offers between 2018 and 2021, with six connections being accepted. The capacity associated with offered connections increased from 22MW in 2018 to 140MW in 2021, whilst accepted capacity increased from 2MW to 14MW in the same period.
- 4.7. Figure 7A shows that one third party carried out a connection in 2018 and another third party carried out a connection in 2021. No third parties made connections in the other years of the assessment, despite three third parties issuing quotes in 2020.

Figure 7: NPgN Metered Demand HV and EHV – third parties and total market size Graph A: number of third parties (#) Graph B: market size (# connections, MW)



- 4.8. Figure 8 shows demonstrates how market shares for offers and acceptances fluctuated throughout the assessment period. These fluctuations were driven by the limited market size.
  - In 2018, one third party had a 100% market share, issuing one quote and completing one connection.

- In 2019, the trend was opposite; NPgN had 100% of the market issuing all four quotes and completing the only accepted connection.
- In 2020, there were three third parties issuing quotes, but none made connections. Consistently, NPgN's share of offered connections was 40% and offered capacity was 42% whilst their share of acceptances was 100%.
- In 2021, NPgN carried out two of the three accepted connections and thus had a 67% market share.

**Graph B: accepted connections** 

## Figure 8: NPgN Metered Demand HV and EHV – market shares (%)



### **Graph A: offered connections**

## **Distributed Generation LV**

#### Section summary

NPgN average market share across all metrics was 93% between 2018 and 2021. Over the same period, there was one third party per year making connections, whilst the total number of connections accepted by third parties or NPgN averaged at 18 per year.

4.9. As shown in Figure 9, NPgN accounted for the majority of connections work every year between 2018 and 2021, with an average market share of 93% across all metrics. Figure 9A demonstrates that NPgN's share of offered connections varied between a minimum of 94% and a maximum of 100% between 2018 and 2021.

4.10. Figure 9B shows NPgN's share of accepted connections increased over the same period from 80% to 96% while that of associated accepted capacity increased from 82% to 98%, over the assessment period, reaching a low of 74% in 2020.

#### Figure 9: NPgN Distributed Generation LV – market shares (%)



- 4.11. Figure 10A shows that there was a single third party making connections in any given year between 2018 and 2021. A single quote was issued in 2018 and no quotes were issued by any third party between 2019 and 2021.<sup>8</sup>
- 4.12. As shown in Figure 10B, the total number of offers increased from 24 in 2018 to 34 in 2021, while the total number of acceptances increased from ten to 26 during that time. The capacity associated with accepted connections increased 0.6MW in 2018 to 0.8MW in 2021, peaking at 3MW in 2019.

## Figure 10: NPgN Demand Generation LV – third parties and total market size

Graph A: number of third parties (#)





<sup>&</sup>lt;sup>8</sup> We note that the data submitted by the DNO for this RMS contains instances where the number of third parties making connections is higher than those issuing quotes.

## **Distributed Generation HV and EHV**

#### Section summary

NPgN's market shares decreased across all metrics between 2018 and 2021. Their market shares in terms offers followed a downward trend and their market shares in terms of acceptances fluctuated yearly. Over the same period, the number of third parties making connections increased from one to seven, whilst the total number of connections accepted by third parties or NPgN averaged at 34 per year.

- 4.13. Figure 11 shows that market shares evidence is very different between offers and acceptances. As demonstrated in Figure 11A, NPgN made the majority of the offers and accounted for the majority of offered capacity every year between 2018 and 2021. NPgN's share of offered connections decreased from 94% in 2018 to 80% in 2021, while their share of offered capacity declined from 96% to 70% over the same period.
- 4.14. Figure 11B demonstrates how NPgN's share of accepted connections decreased from 89% in 2018 to 46% in 2019, increased to 72% in 2020 and decreased to 36% in 2021. Their share of accepted capacity followed a similar downward trend: 93% in 2018, 33% in 2019, 36% in 2020 and 18% in 2021.

## Figure 11: NPgN Distributed Generation HV and EHV – market shares (%) Graph A: offered connections Graph B: accepted connections



- 4.15. Figure 12A demonstrates that one third party was issuing quotes in 2018, two in 2019 and 2020 and none in 2021. There was one third party making connections in all years, except for 2019, when there were three third parties.<sup>9</sup>
- 4.16. As shown in Figure 12B, the market size reduced in terms of offers but increased in terms of acceptances between 2018 and 2021:
  - The number of offered connections decreased from 119 in 2018 to 81 in 2021, reaching a minimum of 58 in 2020.
  - Capacity associated with these offers decreased from 3,119MW in 2018 to 844MW in 2020 before increasing to 1,781MW in 2021.
  - The number of accepted connections increased from 19 in 2018 to 36 in 2021 but peaked at 52 in 2019.
  - Capacity associated with accepted connections increased from 183MW in 2018 to 731MW in 2021.

## Figure 12: NPgN Distributed Generation HV and EHV – third parties and total market size

Graph A: number of third parties (#)





Graph B: market size (# connections, MW)

<sup>&</sup>lt;sup>9</sup> We note that the data submitted by the DNO for this RMS contains instances where the number of third parties making connections is higher than those issuing quotes.

## **Unmetered LA**

#### Section summary

NPgN completed all five units between 2018 and 2021.

4.17. Figure 13 demonstrates that there was one unit completed in 2018, three in 2019, one in 2020 and none in 2021.



Figure 13: NPgN Unmetered LA – total size of the market (# completed units)

4.18. Figure 14 shows that NPgN completed all units in this market and thus had a 100% market share between 2018 and 2020. There was no market activity in 2021.

Figure 14: NPgN Unmetered LA – market share, completed units (%)



## **Unmetered Other**

#### Section summary

NPgN's market share was on average 99% per year between 2018 and 2021. third parties delivered four of the 582 units completed in this RMS between 2018 and 2021.

4.19. Figure 15 demonstrates that NPgN completed all the units in this market in 2018 and 2021 as well as 98% and 99% of them in 2019 and 2020.

Figure 15: NPgN Unmetered Other – market share, completed units (%)



4.20. As shown in Figure 16A, there was a single third party issuing quotes and completing four units in 2019 and 2020, and no third party activity in the other years. Figure 16B shows that the number of completed units decreased from 194 in 2018 to 127 in 2019, increased to 195 in 2020 but decreased to 66 in 2021.

## Figure 16: NPgN Unmetered Other – third parties and total market size Graph A: number of third parties (#) Graph B: market size (# units completed)



## **5. Northern Powergrid Yorkshire**

- 5.1. The outcome of the last Competition Test resulted in Northern Powergrid's Yorkshire ('NPgY') DSA's Metered Demand HV RMS passing. As a result, all RMS, except for the Metered Demand HV are in scope for this review.
- 5.2. The assessment of these RMS are presented in the sub-sections below, except for the Unmetered PFI and Metered Demand EHV and above RMS, as there were no offered or accepted connections or units completed for either RMS, over the assessment period.

## **Metered Demand LV**

#### Section summary

NPgY's average market share across all metrics was 75% between 2018 and 2021. Over the same period, there were on average 21 third parties making connections, whilst the total number of connections accepted by third parties or NPgY averaged at 820.

- 5.3. As shown in Figure 17, NPgY accounted for the majority of connections work every year between 2018 and 2021, with an average market share of 75% across all metrics.
- 5.4. Figure 17A demonstrates that NPgY's share of offered connections increased from 70% to 74% with the associated offered capacity increasing from 65% to 74% between 2018 and 2021.
- 5.5. Figure 17B shows NPgY's share of accepted work decreased from 81% to 73% before increased to 78% in 2021, while their share of the associated accepted capacity decreased from 78% to 72%, before increasing to 81% in 2021.

### Figure 17: NPgY Metered Demand LV – market shares (%)

### Graph A: offered connections

#### **Graph B: accepted connections**



- 5.6. Figure 18A shows that the number of third parties issuing quotes decreased over time, from 28 in 2018 to 24 in 2021, whilst the number of those making connections fluctuated around an average of 21. Additionally, as demonstrated in Figure 18B, the total size of the market decreased across all metrics between 2018 and 2021:
  - Offered connections decreased from 2,548 to 1,568;
  - Accepted connections decreased from 986 to 769;
  - Offered capacity decreased from 171MW to 120MW; and
  - Accepted capacity decreased from 65MW to 59MW.

### Figure 18: NPgY Metered Demand LV – third parties and total market size

Graph A: number of third parties (#) Graph B: market size (# connections, MW)



## **Metered Demand HV and EHV**

#### Section summary

There was a total of 15 accepted connections between 2018 and 2021, nine of which made by NPgY and six by third parties. The level of NPgY market shares varied substantially across years.

- 5.7. As shown in Figure 19B, this is an RMS with limited data. While there was a total of 48 offers between 2018 and 2021, only 15 connections were accepted. The capacity associated with offered connections increased from 24MW in 2018 to 147MW in 2021, whilst accepted capacity increased from 13MW to 84MW over the same period.
- 5.8. Figure 19A shows that there were one to four parties issuing quotes each year and on average a single third party per year making connections between 2018 and 2021.

Figure 19: NPgY Metered Demand HV and EHV - third parties and total market size Graph A: number of third parties (#) Graph B: market size (# connections, MW)



- 5.9. Figure 20A shows that NPgY's share of offered connections increased from 43% in 2018 to 57% in 2019 and decreased thereafter to reach 50% in 2021. NPgY's share of capacity associated with these offers followed a similar trend, increasing from 9% in 2018 to 49% in 2019 but declined to 40% in 2021.
- 5.10. Figure 20B demonstrates that market shares for accepted connections and associated capacity fluctuated throughout the assessment period. These fluctuations were driven by the limited market size.

- In 2018, there was a single accepted connection completed by a third party and thus NPgY's market share was null.
- In 2019 all five accepted connections were made by NPgY and thus they had a 100% market share
- In 2020, NPgY made one of the two accepted connections, resulting in a 50% market shares in terms of number of accepted connections but a 33% market share for associated capacity.
- In 2021, NPgY's share of accepted connections was 43% and that of accepted capacity was 22%.

#### Figure 20: NPgY Metered Demand HV and EHV - market shares (%)

#### **Graph A: offered connections**





**Graph B: accepted connections** 



## **Distributed Generation LV**

#### Section summary

NPgY increased their market shares for both offers and acceptances between 2018 and 2021, which averaged at 80%. Over the same period, there were on average two third parties per year making connections, whilst the total number of connections accepted by third parties or NPgY increased from eight to 31.

5.11. As shown in Figure 21, NPgY accounted for the majority of connections work every year between 2018 and 2021, except for offered capacity in 2018, with an average market share of 80% across all metrics. Figure 21A demonstrates that NPgY's share of offered connections increased from 62% to 90% and that of associated offered

capacity increased from 32% to 95% between 2018 and 2021. Figure 21B shows NPgY's share of accepted connections increased over the same period, from 88% to 90% while that of associated accepted capacity increased from 68% to 96%.



Figure 21: NPgY Demand Generation LV – market shares (%)

- 5.12. As shown in Figure 22A, the number of third parties issuing quotes decreased between 2018 and 2021: there were seven third parties issuing quotes in 2018, two in 2019, one in 2020 and four in 2021. There were one to three third parties making connections in any given year.<sup>10</sup>
- 5.13. Figure 22B shows that the total number of offers and acceptances increased over time, from 37 offers in 2018 to 60 in 2021 and from eight acceptances to 31 over the same period. Capacity associated with these offers and acceptances varied depending on the year, averaging at 4MW for offered capacity and 1MW for accepted capacity.

<sup>&</sup>lt;sup>10</sup> We note that the data submitted by the DNO for this RMS contains instances where the number of third parties making connections is higher than those issuing quotes.







## **Distributed Generation HV and EHV**

#### **Section summary**

NPgY's share of offered connections and offered capacity was on average 84% per year between 2018 and 2021. Their market share, in terms of acceptances, fluctuated yearly. The number of third parties making connections increased from one to seven, whilst the total number of connections accepted by third parties or NPgY averaged at 39 per year.

- 5.14. Figure 23 shows that market shares evidence is very different between offers and acceptances. As shown in Figure 23A, NPgY's share of offered connections remained stable around an average of 79% per year between 2018 and 2021, whilst their share of associated offered capacity increased from 87% in 2018 to 96% in 2020 and decreased to 78% in 2021.
- 5.15. Figure 23B demonstrates that NPgY's shares of accepted connections fluctuated yearly with a 61% market share in 2018, 27% in 2019, 78% in 2020 and 49% in 2021. NPgY's share of accepted capacity followed a similar trend; it decreased from 91% in 2018 to 17% in 2019, increased to 78% in 2020 and decreased in 2021 to 31%.



Figure 23: NPgY Distributed Generation HV and EHV – market shares (%)

- 5.16. Figure 24A shows that the number of third parties issuing quotes fluctuated between 2018 and 2021 but was five on average. The number of third parties making connections increased from one in 2018 to four in 2019 but declined to three in 2020 and increased to seven in 2021.<sup>11</sup>
- 5.17. Figure 24B shows that the total number of offers decreased from 131 in 2018 to 109 in 2021, whilst associated capacity increased from 1,213MW to 1,802MW. The number of accepted connections increased from 18 in 2018 to 47 in 2021, whilst associated capacity rose from 221MW to 856MW over the same period.

## Figure 24: NPgY Distributed Generation HV and EHV – third parties and total market size



Graph A: number of third parties (#) Graph B: market size (# connections, MW)

<sup>&</sup>lt;sup>11</sup> We note that the data submitted by the DNO for this RMS contains instances where the number of third parties making connections is higher than those issuing quotes

## **Unmetered LA**

#### Section summary

There were four units completed in 2018 and none in other years. Three units were completed by NPgY and one unit was completed by a third party.

5.18. As shown in Figure 25, this is an RMS with limited data. There were only four units completed in 2018 and none in other years.

Figure 25: NPgY Unmetered LA – total market size (# units completed)



5.19. NPgY completed three of the four units. Accordingly, Figure 26 shows they had a 75% market share in 2018.

### Figure 26: NPgY Unmetered LA – market share, completed units (%)



## **Unmetered Other**

#### Section summary

NPgN's market share was on average 99.9% between 2018 and 2021. Over the same period, third parties delivered one of the 1,349 units completed in this RMS.

5.20. As shown in Figure 27, NPgY completed all units in this market in 2018, 2019 and 2021 and 99.6% of them in 2020.



Figure 27: NPgY Unmetered Other – market share, completed units (%)

5.21. Figure 28A shows that there was one third party issuing quotes in 2018 and 2020, and one third party completing a unit in 2020. Figure 28B shows there was a substantial decrease in the number of units completed over the assessment period; from 652 in 2018 to 119 in 2021.

## Figure 28: NPgY Unmetered Other – third parties and total market size

Graph A: number of third parties (#) Graph B: market size (# units completed)



## 6. Western Power Distribution West Midlands

- 6.1. The outcome of the last Competition Test resulted in Western Power Distribution's West Midlands ('WMID') DSA's Metered Demand HV EHV, Metered Demand EHV and above, Unmetered LA and Unmetered PFI to pass the Competition Test whilst the other RMS did not pass.
- 6.2. As such, RMS in scope for this review are: Metered Demand LV, Metered Demand HV, Distributed Generation LV, Distributed Generation HV EHV, Unmetered LA and Unmetered Other. We present our RMS assessment in the sub-sections below.

## Metered Demand LV

## Section summary

WMID average market share across all metrics was 80% between 2018 and 2021. Over the same period, the number of third parties making connections increased from 19 to 22, whilst the total number of connections accepted by third parties or WMID decreased from 1,253 to 1,114.

- 6.3. As shown in Figure29, WMID accounted for the majority of connections work every year between 2018 and 2021. While EMID's average market share across all metrics was 80%, their share of accepted work was consistently larger than their share of offers.
- 6.4. Figure 29A demonstrates that WMID's share of offered connections decreased from 77% to 70% and that of associated capacity decreased from 79% to 73% between 2018 and 2021. Figure29B shows WMID's share of accepted connections decreased over the same period from 90% to 81% whilst associated capacity also decreased from 92% to 84%.



#### Figure 29: WMID Metered Demand LV - market shares (%)

- 6.5. Figure 30A shows that the number of third parties issuing quotes increased from 44 to48 between 2018 and 2021, whilst the number of those making connections increasedfrom 19 to 24 over the same period.
- 6.6. As shown in Figure30B, there were 3,292 offers and 1,174 acceptances on average per year between 2018 and 2021. Capacity associated with offers increased from 294 in 2018 to 304 in 2019 and decreased to 260 in 2021, while capacity associated with acceptances decreased from 111MW to 87MW over the assessment period.

### Figure 30: WMID Metered Demand LV - third parties and total market size



## **Metered Demand HV**

#### Section summary

WMID accounted on average for 80% of accepted connections between 2018 and 2021. Third parties' share of accepted connections was 20% on average and their share of accepted capacity was at least 50% in three out of four years. Over the same period, there were on average 21 third parties per year making connections, whilst the total number of connections accepted by third parties or WMID averaged at 762.

- 6.7. Figure 31 demonstrates the differences in trends between offers and acceptances. As shown in Figure **329**31A, WMID's share of offered connections decreased from 59% in 2018 to 56% in 2020 but increased to 62% in 2021, whilst their share of associated offered capacity declined slightly from 38% in 2018 to 37% in 2020 before increasing to 40% in 2021.
- 6.8. Figure 31B demonstrates how WMID's share of accepted connections decreased from 84% in 2018 to 76% in 2020 but increased to 81% in 2021. Their share of associated accepted capacity declined from 63% in 2018 to 43% in 2020, but increased to 50% in 2021.
- 6.9. Overall, market share evidence shows that WMID issued on average 58% of offers and made 80% of connections, however, third parties completed larger capacity projects. Thus, third parties covered, on average, 63% of offered capacity and 48% of accepted capacity over the assessment period.

### Figure 3291: WMID Metered Demand HV – market shares (%)

**Graph A: offered connections** 



## Graph B: accepted connections

- 6.10. Figure 32A shows that the number of third parties issuing quotes increased from 42 in 2018 to 55 in 2020 but decreased to 45 in 2021. The number of third parties making connections increased from 14 in 2018 to 28 in 2020 but decreased to 21 in 2021.
- 6.11. As shown in Figure 32B, there were on average 2,828 offers and 762 accepted connections per year between 2018 and 2021. Offered capacity was 1,410MW per year on average but reached a minimum of 1,216MW in 2021, whilst accepted capacity was 289MW per year on average.

Figure 32: WMID Metered Demand HV – third parties and total market size



## **Distributed Generation LV**

#### Section summary

There were five accepted connections per year on average between 2018 and 2021, with WMID making all offers and connections throughout the assessment period.

6.12. Figure 33 demonstrates that there were five accepted connections per year on average. However, the market was larger, in terms of offered connections, with 13 offers on average per year. Offered connections amounted to a total and 3MW of capacity and accepted connections amount to a total of 1MW between 2018 and 2021.





6.13. As shown in Figure 34, WMID had a 100% market share across all metrics from 2018 to 2021, except for 2020 when no connections were accepted. There were no third parties issuing quotes or making connections in any year.

#### Figure 34: WMID Distributed Generation LV – market shares (%)

**Graph A: offered connections** 



#### Graph B: accepted connections

## Distributed Generation HV and EHV

#### Section summary

WMID's share of offered connections and offered capacity was on average 89% per year between 2018 and 2021 but their shares of acceptances were lower at an average of 37% for accepted connections and 10% for associated capacity. Over the same period, there were one to four third parties per year making connections, whilst the total number of connections accepted by third parties or WMID averaged at 57 per year.

- 6.14. Figure 35 shows that, on average, WMID's share of offered connections and offered capacity was 89% per year over the assessment period but their shares of acceptances were lower at an average of 37% for accepted connections and 10% for associated capacity. This implies that third parties issued fewer offers than WMID but made the majority of the connections and associated capacity.
- 6.15. As shown in Figure 35A, WMID's share of offered connections decreased from 92% in 2018 to 89% in 2021, whilst their share of associated capacity declined from 94% to 85% over the same period. Figure 35B demonstrates how WMID's share of accepted connections increased from 26% in 2018 to 42% 2021, whilst that of associated capacity rose from 10% in 2018 to 17% in 2020 and declined back to 5% in 2021.





6.16. Figure 36A shows that the number of third parties issuing guotes declined from six to one over the assessment period. The number of third parties making connections increased from one in 2018 to four in 2019 but decreased again to three in 2020 and
to one in 2021.<sup>12</sup> Figure 36B shows that the number of accepted connections increased from 61 to 66 over the assessment period, but all other metrics indicated a decline in market size:

Graph B: market size (# connections, MW)

- Offered capacity declined from 7,300MW in 2018 to 1,570MW in 2021 while accepted capacity declined from 1,242MW to 653MW over the same period.
- The numbers of offers also decreased from 369 in 2018 to 132 in 2021

# Figure 36: WMID Distributed Generation HV and EHV – third parties and total market size



Graph A: number of third parties (#)

# **Unmetered Other**

#### Section summary

WMID's share of units completed decreased from 45% in 2018 to 35% in 2021. Over the same period, there were on average 13 third parties per year completing units, whilst the number of units completed by either WMID or third parties decreased from 1,901 to 1,185.

<sup>&</sup>lt;sup>12</sup> We note that the data submitted by the DNO for this RMS contains instances where the number of third parties making connections is higher than those issuing quotes.

6.17. As shown in Figure 37, WMID's market share of units completed decreased from 45% in 2018 to 31% in 2020 and rose to 35% in 2021. Third parties increased their market share from 55% to 65% between 2018 and 2021.

Figure 37: WMID Unmetered Other – market share, completed units (%)



6.18. Figure 38A shows that the number of third parties completing units increased from 11 in 2018 to 15 in 2020 but decreased to 12 in 2021. As shown in Figure 38B, the number of units completed decreased from 1,901 in 2018 to 1,213 in 2019 and then was relatively stable with an average of 1,223 units completed in 2020 and 2021.

#### Figure 38: WMID Unmetered Other – third parties and total market size

Graph A: number of third parties (#) Graph B: market size (# units completed) <sup>13</sup>



<sup>&</sup>lt;sup>13</sup> For WPD unmetered segments, the number of third parties issuing quotes is always zero. For this reason, we do not include it in the third parties chart.

# **7. Western Power Distribution East Midlands**

- 7.1. The outcome of the last Competition Test resulted in Western Power Distribution's East Midlands (`EMID') DSA's Metered Demand HV EHV, Metered Demand EHV and above, Unmetered LA and Unmetered PFI to pass the Competition Test.
- 7.2. As such, the RMS in scope for this review are: Metered Demand LV, Metered Demand HV, Distributed Generation LV, Distributed Generation HV EHV, Unmetered LA and Unmetered Other. We present our RMS assessment in the sub-sections below.

## Metered Demand LV

#### Section summary

EMID average market share across all metrics was 81% between 2018 and 2021. Over the same period, the number of third parties making connections increased from 18 to 22, whilst the total number of connections accepted by third parties or EMID averaged at 1,340 per year.

- 7.3. As shown in Figure 39, EMID accounted for the majority of connections work every year between 2018 and 2021. While EMID's average market share across all metrics was 81%, their share of accepted work was consistently larger than their share of offers.
- 7.4. Figure 39A demonstrates that EMID's share of offered connections decreased from 76% to 72% and that of associated capacity decreased from 78% to 70% between 2018 and 2021. Figure 39B shows their share of accepted connections decreased over the same period, from 92% to 84%, whilst associated capacity also decreased from 92% to 85%.



#### Figure 39: EMID Metered Demand LV - market shares (%)

- 7.5. Figure 40A shows that the number of third parties issuing quotes increased from 44 to 47 between 2018 and 2021, whilst the number of those making connections increased from 18 in 2018 to 27 in 2019 before decreasing to 22 in 2021.
- 7.6. Additionally, as shown in Figure 40B, there were 3,927 offers and 1,340 acceptances on average per year between 2018 and 2021. Capacity associated with offers ranged between 324MW and 350MW, while capacity associated with acceptances ranged between 107MW and 117MW.

#### Figure 40: EMID Metered Demand LV - third parties and total market size



#### Graph B: market size (# connections,



# **Metered Demand HV**

#### Section summary

EMID accounted on average for 74% of accepted connections between 2018 and 2021. Third parties' share of accepted connections was 26% on average and their share of accepted capacity accounted for an average of 47%. Over the same period, there were on average 21 third parties per year making connections, whilst the total number of connections accepted by third parties or EMID averaged at 627.

- 7.7. Figure 41 shows the differences in trends between offers and acceptances. In particular:
  - Figure 41A shows that EMID's share of offered connections was similar to third parties' and increased from 47% in 2018 to 50% in 2021, whilst EMID's share of associated capacity was consistently lower but increased from 32% in 2018 to 41% in 2021.
  - Figure 41B shows that EMID's share of accepted connections was consistently higher than third parties' and remained stable over time around an average of 74%, whilst their share of accepted capacity was lower and stable at 53%
- 7.8. Overall, market share evidence shows that third parties make fewer connections than EMID but cover a similar portion of market capacity.





- 7.9. As shown in Figure 42A, the number of third parties issuing quotes increased from 48 in 2018 to 53 in 2020 but decreased to 45 in 2021. The number of third parties making connections also increased from 17 in 2018 to 26 in 2020 but decreased to 23 in 2021.
- 7.10. Figure 42B shows that there were on average 2,957 offers and 627 accepted connections per year between 2018 and 2021. Offered capacity was 1,594MW per year on average, whilst accepted capacity was 310MW per year on average.

Figure 42: EMID Metered Demand HV - third parties and total market size

Graph A: number of third parties (#) Graph B: market size (# connections, MW)



# **Distributed Generation LV**

#### Section summary

There were three accepted connections per year on average between 2018 and 2021. EMID made all connections between 2018 and 2021 but there was a third party issuing quotes in 2018. As such EMID's average market share across all metrics was 99%.

7.11. Figure 43 demonstrates that there were three accepted connections a year on average. While the market was larger in terms of offers, these decreased from 20 in 2018 to ten in 2021. Additionally offered connections amounted to a total of 3MW of capacity and accepted connections amounted to a total of 0.6MW between 2018 and 2021.

# Figure 43: EMID Distributed Generation LV- total size of the market (# connections, MW)



7.12. As shown in Figure 44, EMID had a 100% market share between 2019 and 2021, across all metrics. In 2018 there was a single third party issuing quotes with a market share accounting for 5% of offered connections and 8% of associated capacity. There was no third party activity in any other year.

#### Figure 44: EMID Distributed Generation LV - market shares (%)



#### Graph A: offered connections

#### **Graph B: accepted connections**

**Distributed Generation HV and EHV** 

#### Section summary

EMID's share of offered connections and offered capacity was on average 83% per year between 2018 and 2021. Their shares of accepted connections and associated capacity were, on average, at 34% and 18% respectively. Over the same period, there were on average six third parties per year making connections, whilst the total number of connections accepted by third parties or EMID averaged at 74 per year.

- 7.13. Figure 45 shows that, on average, EMID's share of offered connections and offered capacity was 83% per year over the assessment period but their share of acceptances was lower at 34% and 18%, on average, for accepted connections and associated capacity respectively. This implies that third parties issued fewer offers than EMID but made the majority of the connections and associated capacity.
- 7.14. As shown in Figure 45A, EMID's share of offered connections decreased from 97% in 2018 to 75% in 2021, whilst their share of associated offered capacity declined from 99% to 71% over the same period. Figure 45B demonstrates that EMID's share of accepted connections increased from 30% in 2018 to 42% in 2020, but decreased to 23% in 2021, whilst that of associated capacity rose from 10% in 2018 to 37% in 2020 and declined back to 10% in 2021.

Figure 45: EMID Distributed Generation HV and EHV - market shares (%)



Graph B: accepted connections



- 7.15. Figure 46A shows that the number of third parties issuing quotes rose from two in 2018 to eight in 2020 and decreased to seven in 2021, while the number of third parties making connections declined from five in 2018 to two in 2020 but increased again in 2021 to seven.<sup>14</sup>
- 7.16. As shown in Figure 46B, the total size of the market in terms of capacity declined over the assessment period. Capacity offered declined from 3,600 MW in 2018 to 1,000 MW in 2021. Capacity accepted decreased from 1,300 MW to 598MW over the period. The total number of offers also decreased, from 239 in 2018 to 147 in 2021, whilst acceptances increased from 67 to 81 over the same period.

<sup>&</sup>lt;sup>14</sup> We note that the data submitted by the DNO for this RMS contains instances where the number of third parties making connections is higher than those issuing quotes.

# Figure 46: EMID Distributed Generation HV and EHV- third parties and total market size



Graph A: number of third parties (#) Graph B: market size (# connections, MW)

## **Unmetered Other**

#### Section summary

EMID's share of units completed decreased from 53% in 2018 to 29% in 2021. Over the same period, the number of third parties completing units increased from seven to 12, whilst the number of units completed by either EMID or third parties followed a downward trend but averaged at 1,639 per year.

7.17. As shown in Figure 47, EMID's market share of units completed decreased from 53% in 2018 to 26% in 2020 and rose to 29% in 2021. Consistently, third parties increased their market share from 47% to 71% between 2018 and 2021.

#### Figure 47: EMID - Unmetered Other – market share, completed units (%)



7.18. Figure 48A shows that there were between seven and 12 third parties active in the market during 2018 to 2021. As shown in Figure 48B, the number of unis completed increased from 1,655 in 2018 1,781 in 2019, before decreasing to 1,463 by 2021.

#### Figure 48: EMID Unmetered Other - third parties and total market size

Graph A: number of third parties (#) Graph B: market size (# units completed)<sup>15</sup>



<sup>&</sup>lt;sup>15</sup> For WPD unmetered segments, the number of third parties issuing quotes is always zero. For this reason, we do not include it in the third parties chart.

# **8. Western Power Distribution South Wales**

8.1. The outcome of the last Competition Test resulted in Western Power Distribution's South Wales ('SWALES') DSA's Unmetered LA and Unmetered PFI to pass the Competition Test, whilst the other RMS did not pass. As such, all RMS except for the two RMS mentioned above are in scope for this review. We present our RMS assessment in the sub-sections below.

# **Metered Demand LV**

#### Section summary

SWALES' average market share across all metrics was 93%, and on average, there were five third parties making connections over the assessment period. The total number of connections accepted by third parties or SWALES averaged at 512 per year.

- 8.2. As shown in Figure49, SWALES accounted for the majority of connections work every year between 2018 and 2021, with an average market share of 93% across all metrics. Figure 49A demonstrates that SWALES' share of offered connections decreased from 92% to 89% and that of associated capacity decreased from 93% to 86% between 2018 and 2021.
- 8.3. Figure 49B shows their share of accepted connections decreased over the same period from 98% to 95% while their share of associated capacity decreased from 99% to 95%.

#### Figure 49: SWALES Metered Demand LV – market shares (%)





#### Graph B: accepted connections



- 8.4. Figure 50A demonstrates how the number of third parties issuing quotes fluctuated over time between 12 and 17. The number of third parties making connections increased from three to seven between 2018 and 2020 but decreased to four in 2021.
- 8.5. Figure 50B shows that total size of the market fluctuated between 2018 and 2021. On average, there were 1,033 offers and 512 acceptances for an average associated capacity of 95MW for offers and 47MW for acceptances.

Graph A: number of third parties (#) Graph B: market size (# connections, MW) 18 1,200 120 16 1.000 100 14 connections 800 80 12 10 600 60 ≷ # 8 400 40 6 20 200 4 2 0 0 2018 2019 2020 2021 2018 2019 2020 2021 Offers Acceptance Making Connections Issuing Quotes Acceptance - Capacity (MW) ---- Offers - Capacity (MW)

#### Figure 50: SWALES Metered Demand LV – third parties and total market size

### **Metered Demand HV**

#### Section summary

SWALES' share of accepted connections was on average 92% per year, and also accounted for the majority of offered and accepted capacity, albeit with lower market shares. There were on average eight third parties per making connections per year and the total number of connections accepted by third parties or SWALES averaged at 361.

- 8.6. Figure 51 shows that SWALES accounted for the majority of the market across all market share metrics. SWALES average market share was 80% for offered connections and 92% for accepted connections, whilst it was 61% for offered capacity and 80% for accepted capacity. SWALES' lower share in terms of capacity implies that third party activity relates to connections of larger capacity.
- 8.7. As shown in Figure 51A, SWALES' share of offered connections increased from 78% in 2018 to 86% in 2021, whilst their share of associated offered capacity increased from

60% in 2018 to 66% in 2021. Figure 51B shows that SWALES' share of accepted connections increased from 92% in 2018 to 94% in 2021, whilst their share of associated capacity declined from 84% in 2018 to 75% in 2020, but increased to 87% in 2021.







- 8.8. As shown in Figure 52A the number of third parties issuing quotes increased from 19 in 2018 to 23 in 2019, but decreased to 20 in 2020 and 17 in 2021. The number of third parties making connections increased from eight to 11 between 2018 and 2020 but decreased to five in 2021.
- 8.9. Figure 52B shows that between 2018 and 2021 the number of offered connections increased from 876 to 986 and accepted connections increased from 318 to 422. Capacity associated with offered and accepted connections was on average 321MW and 108MW per year between 2018 and 2021.

# Figure 52: SWALES Metered Demand HV - third parties and total market size Graph A: number of third parties (#) Graph B: market size (# connections, MW)



# **Metered Demand HV and EHV**

#### Section summary

There were a total of four accepted connections between 2018 and 2021, all of which were made by SWALES. Although third parties did not make any connections during that time, there were two to four third parties issuing quotes between 2018 and 2021.

8.10. As shown in Figure 53B, this RMS has limited data. While there was a total of 19 offers between 2018 and 2021, only four connections were accepted. The capacity associated with offered connections decreased from 27MW in 2018 to 10MW in 2020 and increased to 70MW in 2021. Accepted capacity increased from 5MW in 2019 to 12MW in 2021. Figure 53A demonstrates how all four connections were made by SWALES. There were two third parties issuing quotes in 2018 and four in 2021.

# Figure 53: SWALES Metered Demand HV and EHV - third parties and total market size



Graph A: number of third parties (#) Graph B: market size (# connections, MW)

- 8.11. Figure **5430**54A shows that SWALES issued all five quotes in 2019 and 2020 and thus had a 100% market share. In 2018 and 2021 however, third parties also made offers and thus SWALES' share of offers was 33% and accounted for 27% of capacity.
- 8.12. Figure 5430Figure 54B shows that SWALES made all four accepted connections in this RMS and thus had a 100% market share in 2019, 2020 and 2021. No connections were accepted in 2018.

#### Figure 5430: SWALES Metered Demand HV and EHV – market shares (%)







### **Metered Demand EHV and above**

#### Section summary

There were a total of two connections were made by a single third party in 2019 and there was no activity in 2020. In 2018 and 2021, there was some activity in terms of offers. SWALES made no offers in 2020.

8.13. Figure 55 demonstrates that there were only two accepted connections over the assessment period, both made in 2019 by a single third party and amounted to 40MW of capacity. A total of seven offers were made between 2018 and 2021, five of which were in 2019, for an associated capacity of 163MW.

# Figure 55: SWALES Metered Demand EHV and above – third parties and total market size

Graph A: number of third parties (#) Graph B: market size (# connections, MW)



- 8.14. SWALES issued all offers in 2018 and 2021, as well as four of the five offers of 2019.As shown in Figure56A, this implies that SWALES market shares in terms of offers was 100% in 2018 and 2021 and 80% in 2019.
- 8.15. There was no activity in this RMS in 2020. A single third party made both accepted connections in 2019, thus third parties share of accepted connections is 100%, as shown in Figure 56B.

## Figure 56: SWALES Metered Demand EHV and above – market shares (%)



**Graph B: accepted connections** 

# Graph A: offered connections

# **Distributed Generation LV**

#### Section summary

There were five accepted connections per year on average between 2018 and 2021. SWALES completed all connections, except for in 2020 when a single connection was completed by a third party. As such, SWALES market share was 100% every year except for 2020.

- 8.16. Figure 57B demonstrates that there were only five accepted connections per year on average, ten of these occurred in 2021. The market was larger in terms of offers, increasing from seven offers in 2018 to 22 in 2021. Offered connections amounted to a total of 3MW of capacity and accepted connections amounted to a total of 1MW between 2018 and 2021.
- 8.17. Figure 57A shows that there was a single third party making connections as well as issuing quotes in 2020 and no third party activity in any other year.

#### Figure 57: SWALES Distributed Generation LV - third parties and total market size Graph A: number of third parties (#) Graph B: market size (# connections, MW) 25 2.0 1.8 20 1.6 connections 1.4 15 1.2 1.0 ≩ # 10 0.8 0.6 # 5 0.4 0.2 0 0 2018 2019 2020 2021 2018 2019 2020 2021 - Making Connections Issuing Quotes Offers Acceptance Acceptance - Capacity (MW) Offers - Capacity (MW)

8.18. Figure 58 demonstrates that SWALES had a 100% market share across all metrics, except for in 2020, when a single third party accounted for 22% of offers and 50% of acceptances. These third party connections accounted for 73% of offered capacity and 85% of accepted capacity in that year.



Figure 58: SWALES Distributed Generation LV - market shares (%)

# **Distributed Generation HV and EHV**

### Section summary

SWALES' share of offered connections and capacity was on average 95% per year. Their shares of accepted connections and capacity were 64% and 22% respectively. There were one to two third parties per year making connections, and the total number of connections accepted by third parties or SWALES averaged at 35 per year.

- 8.19. Figure 59 shows that, on average, SWALES' share of offered connections and offered capacity was 95% per year over the assessment period but their shares of acceptances were lower at 64% and 22% on average for accepted connections and associated capacity respectively.
- 8.20. As shown in Figure 59A, SWALES' share of offered connections remained stable around an average of 96% per year between 2018 and 2021, whilst their share of associated capacity also remained stable around an average of 94%.
- 8.21. Figure 59B demonstrates that SWALES' share of accepted connections decreased from 77% in 2018 to 50% 2021, whilst that of associated capacity declined from 30% in 2018 to 8% in 2021.
- 8.22. Overall, market share evidence shows that, while SWALES issued more offers and historically made the majority of connections, third parties always accounted for the majority of the capacity and have steadily increased the number of connections they make.

#### Figure 59: SWALES Distributed Generation HV and EHV - market shares (%)



**Graph B: accepted connections** 

Graph A: offered connections

8.23. Figure 60A shows that there was one third party per year issuing quotes between 2018 and 2021, whilst one to two third parties making connections over the same period.<sup>16</sup> Figure60B demonstrates the different trends in market size in terms of offers or acceptances:

<sup>&</sup>lt;sup>16</sup> We note that the data submitted by the DNO for this RMS contains instances where the number of third parties making connections is higher than those issuing quotes.

- Offered connections decreased from 251 to 98 and offered capacity decreased • from 1,373MW to 348MW over the assessment period.
- Accepted connections increased from 35 in 2018 to 46 in 2021, whilst associated • capacity increased from 181MW in 2018 to 474MW in 2020 but decreased to 125 in 2021.

#### Figure 60: SWALES Distributed Generation HV and EHV – third parties and total market size



# Graph A: number of third parties (#) Graph B: market size (# connections, MW)

# **Unmetered Other**

#### Section summary

SWALES' market share decreased from 100% in 2018 to 32% in 2019 but increased to 44% in 2020 and 62% in 2021. Over the same period, there were on average four third parties completing units each year, whilst the number of units completed by either WMID or third parties fluctuated yearly but averaged at 856 per year.

8.24. As shown in Figure 61, SWALES's share of units completed decreased from 100% in 2018 to 32% in 2019 but increased to 44% in 2020 and 62% in 2021. Consistently, third parties market share increased from zero in 2018 to 68% in 2019 but decreased to 56% in 2020 and to 38% in 2021.

Figure 61: SWALES Unmetered Other – market share, completed units (%)



- 8.25. Figure 62A shows that the number of third parties completing units increased from two in 2018 to nine in 2020 but dropped again to three in 2021.
- 8.26. As shown in Figure 62B, fluctuations in third party activity coincided with fluctuations in market size. Total units completed increased from 726 in 2018 to 1,158 in 2019 when third parties market share increased but decreased to 775 in 2020 and 764 in 2021 when third parties market share also declined.

Figure 62: SWALES Unmetered Other - third parties and total market size

Graph A: number of third parties (#)

Graph B: market size (# units completed)<sup>17</sup>



<sup>&</sup>lt;sup>17</sup> For WPD unmetered segments, the number of third parties issuing quotes is always zero. For this reason, we do not include it in the third parties chart.

# **9. Western Power Distribution South West**

- 9.1. The outcome of the last Competition Test resulted in Western Power Distribution's South West ('SWEST) DSA's Distributed Generation HV EHV, Unmetered LA and Unmetered PFI to pass the Competition Test, whilst the other RMS did not pass.
- 9.2. As such, all RMS except for the three RMS mentioned above are in scope for this review. We present our RMS assessment in the sub-sections below.

# **Metered Demand LV**

#### Section summary

SWEST's average market share across all metrics was 90% between 2018 and 2021. Over the same period, the number of third parties making connections increased from two to seven, whilst the total number of connections accepted by third parties or SWEST averaged at 818 per year.

9.3. As shown in Figure 63, SWEST accounted for the majority of connections work every year between 2018 and 2021, with an average market share of 90% across all metrics.

- 9.4. Figure Figure 63A demonstrates that SWEST's share of offered connections decreased from 89% to 83% and that of associated capacity decreased from 88% to 82% between 2018 and 2021.
- 9.5. Figure 63B shows their share of accepted connections and associated capacity decreased over the same period, from 96% to 92% in both cases.

#### Figure 63: SWEST Metered Demand LV - market shares (%)

Graph A: offered connections

**Graph B: accepted connections** 



- 9.6. Figure 64A shows that the number of third parties issuing quotes increased from 13 in 2018 to 22 in 2021, while the number of third parties making connections increased from two in 2018 to seven in 2019 and remained stable since.
- 9.7. As shown in Figure 64B, the total market size decreased across all metrics between 2018 and 2021:
  - Offered connections decreased from 1,810 to 1,695;
  - Accepted connections decreased from 870 to 745;
  - Offered capacity decreased from 184MW to 158MW; and
  - Accepted capacity decreased from 89MW to 65MW.

#### Figure 64: SWEST Metered Demand LV - third parties and total market size

Graph A: number of third parties (#)

Graph B: market size (# connections, MW)



# Metered Demand HV

#### Section summary

SWEST accounted on average for 92% of accepted connections between 2018 and 2021. Their share of accepted capacity was 68% on average. Third parties' share of acceptances and associated capacity was, on average, 8% and 32%, signalling third party connections tended to be larger in terms of capacity. There were on average nine third parties making connections and the total number of connections accepted by third parties or SWEST averaged at 828 per year.

- 9.8. Figure 65 shows that SWEST accounted for the majority of offered connections, accepted connections as well as, to a lower extent, accepted capacity. In particular:
  - As shown in Figure 65A, SWEST's share of offered connections increased from • 75% in 2018 to 79% in 2021, whilst their share of associated capacity decreased from 49% in 2018 to 45% in 2020 but increased to 53% in 2021.
  - Figure 65B shows that SWEST's share of accepted connections increased from 92% in 2018 to 93% in 2021, whilst their share of associated capacity declined from 75% in 2018 to 63% in 2019 but increased to 64% in 2020 and increased further to 69% in 2021.

#### Figure 65: SWEST Metered Demand HV – market shares (%)



#### Graph B: accepted connections

- 9.9. As shown in Figure 66A, the number of third parties issuing quotes increased from 23 in 2018 to 29 in 2020 but decreased to 25 in 2021. The number of third parties making connections increased from eight in 2018 to ten in 2021.
- 9.10. Figure 66B shows that there were on average 1,940 offers and 776 accepted connections per year between 2018 and 2020 but these increased to 2,320 and 981 in 2021. Offered capacity was 685MW per year on average, whilst accepted capacity was 191MW per year on average.

Figure 66: SWEST Metered Demand HV - third parties and total market size



**Metered Demand HV and EHV** 

#### Section summary

There were, on average, five accepted connections per year between 2018 and 2021. SWEST's market shares in terms of acceptances decreased from 100% in 2018 to 0% in 2020. In 2021 however, their market share increased to 33% for accepted connections and 87% for accepted capacity.

9.11. Figure 67B demonstrates that there was a total of 21 accepted connections over the assessment period, ten of which occurred in 2019. These connections amounted to a total of 90MW of capacity. In 2021, SWEST completed one of the three connections that covered 12MW out of a total of 15MW of accepted capacity in the market that year. Offer numbers were larger, with a total of 78 offers that amounted to a total of 366MW of capacity between 2018 and 2021.

9.12. As shown in Figure 67A, the number of third parties issuing quotes decreased from eight in 2018 to two in 2021. There were no third parties making connections in 2018 but there was one third party making connections in each year thereafter.

Figure 67: SWEST Metered Demand HV and EHV- third parties and total market size



- 9.13. Figure 68A shows that SWEST's consistently issued fewer quotes than third parties until 2021, with market shares covering 27% to 40% of offers and associated capacity between 2018 and 2020. In 2021, SWEST's share of offers and associated capacity increased to 60% and 63% respectively.
- 9.14. As shown in Figure 68B, SWEST's share of acceptances followed a different trend. In 2018, SWEST completed all connections and thus had a 100% share of accepted connections and accepted capacity.
- 9.15. In 2019, their share decreased and accounted for 60% of accepted connections and 27% of associated capacity and reached zero in 2020. In 2021, SWEST market shares increased again and covered 33% of accepted connections and 83% of associated capacity.





# **Metered Demand EHV and above**

#### Section summary

There was no activity in 2018 and 2019 whilst in 2020 one offer was issued but none accepted. In 2021, two connections were accepted; one was completed by SWEST and the other by a third party for a total capacity of 37MW.

9.16. Figure **6**69 demonstrates that there were five offers and two acceptances over the assessment period: one was made by SWEST and the other by a third party, both in 2021. These two connections amounted to 37MW of capacity.

# Figure 69: SWALES Metered Demand EHV and above – third parties and total market size



Graph A: number of third parties (#) Graph B: market size (# connections, MW)

9.17. SWEST made two offers and one connection in 2021 and, as shown in Figure 70 below, had a 50% share of both offered and accepted connections. Four third parties accounted for all offers in 2020, thus their market share was 100%.



#### Figure 70: SWEST Metered Demand EHV and above - market shares (%)

### **Distributed Generation LV**

#### Section summary

There were five accepted connections per year on average between 2018 and 2021. SWEST made all connections, except for 2019 when a third party made a single connection. As such, SWEST average market share across all metrics was 98%.

9.18. Figure 71 demonstrates that there were only five accepted connections per year on average. The market was larger in terms of offers, with 13 offers on average per year.

Offered connections amounted to a total of 2.7MW and accepted connections amounted to a total of 0.9MW of capacity between 2018 and 2021.<sup>18</sup>

9.19. Figure 71A shows that there was a single third party making connections in 2019 and no third party activity in any other year.

Figure 7311: SWEST Distributed Generation LV - third parties and total market size Graph A: number of third parties (#) Graph B: market size (# connections, MW)



9.20. Figure 72 shows that SWEST had a 100% market share between 2018 and 2021, across all metrics. The only exception was 2019, when a third party had a 12.5% market share in terms of acceptances.

<sup>&</sup>lt;sup>18</sup> We note that the data submitted by the DNO for this RMS contains instances where the number of third parties making connections is higher than those issuing quotes.

#### Figure 7232: SWEST Distributed Generation LV - market shares (%)



## **Unmetered Other**

#### Section summary

SWEST's share of units completed decreased from 98% to 65% between 2018 and 2021. Over the same period, the number of third parties completing units increased from five to nine, whilst the number of units completed by either WMID or third parties decreased from 1,141 to 944.

9.21. As shown in Figure 73, SWEST's share of units completed decreased from 98% in 2018 to 57% in 2020 but increased to 65% in 2021. Consistently, third parties increased their market share from 2% in 2018 to 43% in 2020 but decreased to 35% in 2021.



Figure 73: SWEST Unmetered Other – market share, completed units (%)

9.22. Figure 74A shows that the number of third parties completing units increased from five in 2018 to nine in 2021. As shown in Figure 74B, this RMS experienced growth in third parties' numbers despite a decrease in the total number of units completed from 1,141 in 2018 to 944 in 2021.

#### Figure 74: SWEST Unmetered Other – third parties and total market size

#### Graph A: number of third parties (#) Graph B: market size (# units completed)<sup>19</sup>



<sup>&</sup>lt;sup>19</sup> For WPD unmetered segments, the number of third parties issuing quotes is always zero. For this reason, we do not include it in the third parties chart.

# **10. UK Power Networks London Power Networks**

- 10.1. The outcome of the last Competition Test resulted in UK Power Network's London Power Networks ('LPN') DSA's Metered Demand HV EHV, Metered Demand EHV and above, Distributed Generation HV EHV, and Unmetered PFI to pass the Competition Test, whilst the other RMS did not pass.
- 10.2. As such, the RMS in scope for this review are: Metered Demand LV, Metered Demand HV, Distributed Generation LV, Unmetered LA and Unmetered Other. We present our RMS assessment in the sub-sections below.

# **Metered Demand LV**

#### Section summary

LPN's average market share across all metrics was 91% between 2018 and 2021. Over the same period, there were on average six third parties making connections, whilst the total number of connections accepted by third parties or LPN decreased from 987 to 783.

- 10.3. As shown in Figure 75, LPN accounted for the majority of connections work every year between 2018 and 2021, with an average market share of 91% across all metrics.
  Figure 75A demonstrates how LPN's share of offered connections decreased from 92% to 90% and that of associated capacity decreased from 89% to 87% between 2018 and 2021.
- Similarly, Figure 75B shows LPN's share of accepted connections decreased over the same period from 95% to 92% and that of associated capacity decreased from 94% to 88%.

#### Figure 75: LPN Metered Demand LV - market shares (%)



- 10.5. Figure 76A shows that the number of third parties issuing quotes increased from 29 in 2018 to 51 in 2021. The number of third parties making connections remained stable at around six over the same period.
- 10.6. As shown in Figure 76B, there were 2,092 offers and 885 accepted connections on average per year between 2018 and 2021. Capacity associated with offers fluctuated between 159MW and 192MW, while capacity associated with acceptances declined from 77MW in 2018 to 62MW in 2021.

#### Figure 76: LPN Metered Demand LV - third parties and total market size



# Metered Demand HV

#### Section summary

LPN accounted for 69%, on average, of offered and accepted connections. Over the assessment period, there were on average 12 third parties per year making connections and the total number of connections accepted by third parties or LPN averaged at 387.

- 10.7. Figure 77 demonstrates that while LPN's share accounted on average for 69% of offered and accepted connections per year, third parties' connections tended to be larger in terms of capacity. As a result, third parties accounted on average for 49% of accepted capacity between 2018 and 2021, despite accounting for only 28% of accepted connections.
- 10.8. As shown in Figure 77A, LPN's share of offered connections increased from 64% in 2018 to 70% in 2021, whilst their share of associated capacity declined from 54% in 2018 to 49% in 2020 but increased to 65% in 2021. Figure 77B shows that LPN's share of accepted connections decreased from 76% in 2018 to 64% in 2021. Their share of associated capacity increased from 53% in 2018 to 57% in 2019 but subsequently decreased to 51% in 2020 and to 43% in 2021.

Graph B: accepted connections

### Figure 77: LPN Metered Demand HV – market shares (%)

**Graph A: offered connections** 



10.9. Figure 78A shows that third parties issuing quotes decreased from 46 in 2018 to 39 in 2019 but increased to 66 in 2020 and increased further to 76 in 2021. third parties making connections averaged at 12 per year.

10.10. Figure 78B shows that there were on average 1,491 offers and 387 accepted connections per year between 2018 and 2021. Offered capacity was 1,635MW per year on average but peaked at 1,829MW in 2020, whilst accepted capacity was 350MW per year on average.

#### Figure 78: LPN Metered Demand HV - third parties and total market size

Graph A: number of third parties (#) Graph B: market size (# connections, MW)



# **Distributed Generation LV**

10.11. This RMS maintained low levels of activity throughout the assessment period, with a total of two connection offers, both coming in 2021.

### **Unmetered LA**

#### Section summary

LPN's share of completed units was on average 3% per year between 2018 and 2021. Over the same period, there were on average 13 third parties completing units whilst the number of units completed by either LPN or third parties was on average 3,334 per year.

10.12. Figure 79 shows that LPN's market share fluctuated between 1% and 4% between 2018 and 2021. Accordingly, third parties share of completed units was between a 96% and 99%.



Figure 79: LPN Unmetered LA – market share, completed units (%)

10.13. Figure 80A shows that there were between 12 and 14 third parties completing units and 22 to 27 issuing quotes between 2018 and 2021. Figure 80B shows that the number of units completed decreased from 3,503 in 2018 to 2,888 in 2019 but increased to 3,213 in 2020 and reached 3,732 in 2021.



Figure 80: LPN Unmetered LA - third parties and total market size

### **Unmetered Other**

#### Section summary

LPN's share of units completed decreased from 45% in 2018 to 7% in 2021. Over the same period, there were on average six third parties completing units, whilst the number of units completed by either LPN or third parties increased from 272 to 762.

10.14. As shown in Figure 81, LPN's market share decreased from 45% in 2018 to 7% in 2021. Consistently, third parties increased their market share from 55% to 93% between 2018 and 2021.

Figure 81: LPN Unmetered Other – market share, completed units (%)



- 10.15. Figure 82A shows that there were four third parties issuing quotes in 2018 and six each year since, whilst the number of third parties completing units increased from 4 in 2018 to 7 in 2019 and 2020 but decreased to 5 in 2021.
- 10.16. As shown in Figure 82B, the number of completed units increased from 272 units in 2018 to 762 units in 2021.

#### Figure 82: LPN Unmetered Other - third parties and total market size




## **11. UK Power Networks South Eastern Power Networks**

- 11.1. The outcome of the last Competition Test resulted in UK Power Network's South Eastern ('SPN') DSA's Metered Demand HV EHV, Metered Demand EHV and above, Distributed Generation HV EHV, Unmetered LA and Unmetered PFI to pass the Competition Test, whilst the other RMS did not pass. As such, the RMS in scope for this review are: Metered Demand LV, Metered Demand HV, Distributed Generation LV and Unmetered Other.
- 11.2. For the Distributed Generation LV, the data submission indicated that there was only one connection was accepted for this RMS between 2018 and 2021.<sup>20</sup> We present our RMS assessment in the sub-sections below.

## **Metered Demand LV**

#### Section summary

SPN average market share across all metrics was 89% between 2018 and 2021. Over the same period, the number of third parties making connections increased from six to 12, whilst the total number of connections accepted by third parties or SPN averaged at 1,042 per year.

- 11.3. As shown in Figure 83, SPN accounted for the majority of connections work every year between 2018 and 2021, with an average market share of 89% across all metrics.
  Figure 83A demonstrates that SPN's share of offered connections increased from 88% to 89% and the associated offered capacity increased from 82% to 88% between 2018 and 2021.
- 11.4. On the other, Figure 83B shows that SPN's share of accepted connections work decreased from 93% to 89% between 2018 to 2021, and the associated accepted capacity decreased from 90% to 86% during that time.

<sup>&</sup>lt;sup>20</sup> There were also five connections offered over the assessment period.

#### Figure 83: SPN Metered Demand LV – market shares (%)



- 11.5. Figure 84A shows that the number of third parties issuing quotes increased from 46 in 2018 to 65 in 2021, and the number of those making connections increased from six in 2018 to 12 in 2021.
- 11.6. Figure 84B shows that between 2018 and 2021:
  - Offered connections increased from 2,395 to 2,468 but peaked at 2,845 in 2020.
  - Accepted connections decreased from 1,055 to 994.
  - Offered capacity increased from 182MW to 198MW, peaking at 219MW in 2020.
  - Accepted capacity increased from 76MW to 77MW.

#### Figure 84: SPN Metered Demand LV – third parties and total market size

Graph A: number of third parties (#) Graph B: market size (# connections, MW)



## **Metered Demand HV**

#### Section summary

SPN accounted on average for 72% of offered and accepted connections between 2018 to 2021. Third parties' shares of offered and accepted capacity accounted for 50% of the market on average. Over the assessment period, there were on average 13 third parties making connections per year, whilst the total number of connections accepted by third parties or SPN averaged at 373.

- 11.7. Figure 85 shows that, while SPN's share accounted on average for 72% of offered and accepted connections per year, third parties' connections tended to be larger in terms of capacity. As a result, third parties accounted on average for 50% of offered or accepted capacity between 2018 and 2021, despite accounting for only 28% of offered and accepted connections.
- 11.8. As shown in Figure 85A, SPN's share of offered connections increased from 60% in 2018 to 71% in 2020 but decreased to 66% in 2021, whilst their share of associated capacity rose from 32% in 2018 to 60% in 2020 but decreased to 49% in 2021.
- 11.9. Figure 85B shows that SPN's share of accepted connections remained stable around an average of 78% between 2018 and 2021. Their share of associated capacity decreased from 58% in 2018 to 51% in 2019, increased to 56% in 2020 but decreased again to 45% in 2021.

#### Figure 85: SPN Metered Demand HV – market shares (%)

#### **Graph A: offered connections**



#### Graph B: accepted connections

- 11.10. Figure 86A shows that the number of third parties issuing quotes increased from 57 in 2018 to 103 in 2021 whilst the number of third parties making connections was relatively stable at around 13.
- 11.11. Figure 86B shows that there were on average 1,534 offers and 373 accepted connections per year between 2018 and 2021. Offered capacity was 982MW per year on average, whilst accepted capacity was, on average, 161MW per year.

Figure 86: SPN Metered Demand HV - third parties and total market size

Graph A: number of third parties (#) Graph B: market size (# connections, MW)



## **Unmetered Other**

#### Section summary

SPN's share of units completed decreased from 82% in 2018 to 41% in 2021. The number of third parties completing units increased from three to eight, whilst the number of units completed by either SPN or third parties increased from 316 to 532.

11.12. As shown in Figure 87, SPN's market share decreased from 82% in 2018 to 31% in 2019 but increased to 33% in 2020 and to 41% in 2021. As a result, third parties increased their market share from 18% to 59% between 2018 and 2021.

Figure 87: SPN Unmetered Other – market share, completed units (%)



11.13. Figure 88A shows that the number of third parties issuing quotes or completing units increased from three to eight between 2018 and 2021. Figure88B, the total number of completed units increased from 316 in 2018 to 636 in 2020 before decreasing to 532 in 2021.

#### Figure 88: SPN Unmetered Other - third parties and total market size



Graph A: number of third parties (#) Graph B: market size (# units completed)

## **12. UK Power Networks East of England**

- 12.1. The outcome of the last Competition Test resulted in UK Power Network's East of England ('EPN') DSA's Metered Demand HV EHV, Metered Demand EHV and above, Distributed Generation HV EHV, Unmetered LA and Unmetered PFI to pass the competition test, whilst the other RMS did not pass.
- 12.2. As such, the RMS in scope for this review are: Metered Demand LV, Metered Demand HV, Distributed Generation LV and Unmetered Other. We present our RMS assessment in the sub-sections below.

## **Metered Demand LV**

#### Section summary

EPN's average market share across all metrics was 89% between 2018 and 2021. Over the same period, the number of third parties making connections increased from ten to 21, whilst the total number of connections accepted by third parties or EPN averaged at 1,334 per year.

- 12.3. As shown in Figure 89, EPN accounted for the majority of connections work every year between 2018 and 2021, with an average market share of 89% across all metrics. Figure 89A demonstrates that EPN's share of offered connections increased from 86% to 88% and the associated offered capacity increased from 84% to 88% between 2018 and 2021.
- 12.4. Figure 89B shows EPN's share of accepted connections decreased over the same period from 94% to 91% while that of associated capacity decreased from 93% to 89%.

#### Figure 89: EPN Metered Demand LV - market shares (%)



- 12.5. Figure 90A shows that the number of third parties issuing quotes increased over time, from 12 in 2018 to 21 in 2021, and the number of those making connections increased from 61 in 2018 to 94 in 2021.
- 12.6. As shown in Figure 90B, 3,096 offers were made and 1,334 were accepted on average every year between 2018 and 2021, for an average offered capacity of 240MW and average accepted capacity of 99MW.

#### Figure 90: EPN Metered Demand LV- third parties and total market size



#### **Graph B: accepted connections**

## Metered Demand HV

#### Section summary

EPN accounted on, average, for 74% of offered and accepted connections between 2018 to 2021. Third parties' shares of offered and accepted capacity accounted for more than 50% of the market in 2018 and 2021. Over the assessment period, there were on average 22 third parties per year making connections, whilst the total number of connections accepted by third parties or EPN averaged at 851.

- 12.7. Figure 91 demonstrates that, while EPN's share accounted on average for 74% of offered and accepted connections per year, third parties' connections tended to be larger in terms of capacity. As a result, third parties accounted for more than half of total offered or accepted capacity in 2018 and 2021, despite accounting for only 26% of offered and accepted connections on average over the assessment period.
- 12.8. As shown in Figure 91A, EPN's share of offered connections increased from 63% in 2018 to 70% in 2021, whilst their share of associated capacity increased from 36% in 2018 to 56% in 2020 but decreased to 45% in 2021.
- 12.9. Figure 91B shows that EPN's share of accepted connections decreased from 82% in 2018 to 77% in 2021, whilst their share of associated capacity increased from 47% in 2018 to 74% in 2019 but decreased to 59% in 2020 and 41% in 2021.

#### Figure 91: EPN Metered Demand HV – market shares (%)

**Graph A: offered connections** 



#### **Graph B: accepted connections**

- 12.10. Figure 92A shows that the number of third parties issuing quotes increased from 89 to121 between 2018 and 2021, whilst those making connections averaged at 22 per year.
- 12.11. Figure 92B shows that there were on average 3,077 offers and 851 accepted connections per year between 2018 and 2021. Offered capacity was 1,795MW per year on average and accepted capacity was 346MW per year on average.

Figure 92: EPN Metered Demand HV - third parties and total market size



## **Distributed Generation LV**

#### Section summary

There were a total of seven accepted connections between 2018 and 2021, all of which were made by EPN.

12.12. As shown in Figure 93 this RMS has limited data. There were a total of 27 offers between 2018 and 2021 and seven acceptances. Offered connections were associated with a total of 1.5MW of capacity, whilst accepted ones accounted for a total of 0.36MW of capacity.

Figure 93: EPN Demand Generation LV - total size of the market (# connections, MW)



- 12.13. Throughout 2018 to 2021, there were no third parties making connections in the market.
- 12.14. However, as shown in the Figure 94 below, EPN's market share was 50% in 2019. EPN explained that this relates to a single connection that had a demand and a generation component. We understand that this is due to a difference in categorisation of the connection components between Metered Demand LV and Distributed Generation LV.

Figure 94: EPN Demand Generation LV – market shares (%)



## **Unmetered Other**

#### Section summary

EPN's share of units completed fluctuated yearly but followed a downward trend, decreasing from 93% in 2018 to 32% in 2021. Over the same period, the number of third parties completing units increased from five to ten, whilst the number of units completed by either EPN or third parties decreased from 1,153 to 684.

12.15. As shown in Figure 95, EPN's market share in terms of units completed decreased from 93% in 2018 to 32% 2019, increased to 47% in 2020 and decreased back to 32% in 2021. Consistently, third parties' share of completed units increased from 7% to 68% over the assessment period.





- 12.16. Figure 96A shows that the number of third parties issuing quotes increased from five to ten between 2018 and 2021, whilst the number of third parties completing units increased from five to 11 over the same period.
- 12.17. Figure 96B shows that the total number of units completed decreased from 1,153 in 2018 to 684 in2021.

#### Figure 96: EPN Unmetered Other – third parties and total market size

#### Graph A: number of third parties (#) Graph B: market size (# units completed)



## **13. Scottish Power Energy Networks Scottish Power** Distribution

- 13.1. The outcome of the last Competition Test resulted in Scottish Power Network's Scottish Power Distribution ('SPD') DSA's Metered Demand LV and Metered Demand HV to pass the Competition Test, whilst the other did not pass. As such, all RMS except for the two RMS mentioned above are in scope for this review.
- 13.2. However, there was insufficient data to review the Metered Demand EHV and above as no connection work was carried out between 2018 and 2021 and the Unmetered PFI as no units were completed over the same period. We present our RMS assessment in the sub-sections below.

## **Metered Demand HV and EHV**

#### Section summary

This RMS is relatively smaller in terms of connections activity, with a total of five accepted connections between 2018 and 2021, three of which made by SPD and two by third parties. The capacity associated with these five connections was 42MW.

- 13.3. As shown in Figure 97B, this RMS is relatively smaller in terms of connections activity. While there was a total of 49 offers between 2018 and 2021, only five connections were accepted. Total capacity associated with offers amounted to 306MW and capacity associated with acceptances to 42MW.
- 13.4. Figure 97A shows that there were five to nine third parties issuing quotes but only one to two third parties making connections.



- 13.5. Figure 98 shows that market shares were very different in terms of acceptances and offers and vary substantially year on year. In particular:
  - Figure 98A shows that SPD share of offered connections increased from 11% in 2018 to 73% in 2021. In terms of capacity, SPD's market share increased from 19% to 84% over the same period.
  - Figure 98B shows SPD carried out all two connections in 2019 and one of the two connections in 2020. Consistently, SPD's share of accepted connections was 100% in 2019 and 50% 2020. third parties carried out the single connection in 2018 and one of the two connections in 2020.

#### Figure 98: SPD Metered Demand HV and EHV - market shares (%)



#### Graph B: accepted connections



## **Distributed Generation LV**

#### Section summary

SPD's average market share across all metrics was 28 % between 2018 and 2021. third parties accounted for the majority of connections work, with an average market share of 72% per year across all metrics over the same period. There was a total of 383 connections accepted by third parties or SPD between 2018 and 2021.

- 13.6. As shown in Figure 99, third parties accounted for the majority of connections work every year between 2018 and 2021, with an average market share of 72% across all metrics.
- 13.7. Figure 99A demonstrates that SPD's share of offered connection work never exceeded 40%. Their share of offered connections, increased from 19% in 2018 to 24% in 2021, whilst that of capacity associated with these offers decreased from 40% in 2018 to 27% in 2021.
- 13.8. Additionally, Figure 99B shows that SPD's share of accepted connections varied over time; decreasing from 35% in 2018 to 19% in 2020 but increasing to 38% by 2021. The share of SPD's accepted capacity decreased from 54% in 2018 to 31% in 2021.



#### Figure 99: SPD Distributed Generation LV - market shares (%)

**Graph A: offered connections Graph B: accepted connections** 

13.9. Figure 100A shows that there were between 12 and 23 third parties making connections and ten to 16 issuing quotes per year throughout 2018 to 2021.

- 13.10. Figure 100B shows that market size increased and decreased as the number of third parties fluctuated:
  - The number of offers increased from 455 in 2018 to 690 in 2019 and to 764 in 2020, but then decreased to 455 in 2021.
  - The number of accepted connections increased from 65 in 2018 to 102 in 2019 decreased thereafter to reach 95 in 2021.

Figure 100: SPD Distributed Generation LV - third parties and total market size



Graph A: number of third parties (#) Graph B: market size (# connections, MW)

## **Distributed Generation HV and EHV**

#### Section summary

SPD's share of accepted connections was 27% on average between 2018 and 2021 whilst their share of accepted capacity, offered capacity and offered connections averaged at 39%, 88% and 26% respectively. There were on average 11 third parties per year making connections, whilst the total number of connections accepted by third parties or SPD averaged at 92 per year.

13.11. Figure 101 demonstrates that SPD's share of offered capacity is considerably higher than their share of offered connections. Their share of offered connections decreased from a maximum of 43% in 2018 to a minimum of 12% but increased to 20% in 2021, while their share of offered capacity decreased from 97% in 2018 to 79% in 2020 before increasing to 89% in 2021. This implies that SPD issued fewer offers than third parties but focused on larger capacity projects.

- 13.12. As shown in Figure 101B, SPD's share of accepted connections decreased from 30% in 2018 to 24% in 2021, while the associated capacity rose from 37% in 2018 to 65% in 2019 but decreased back to 36% in 2020 and to 20% in 2021.
- 13.13. Overall, market share evidence shows that third parties issued more quotes than SPD and made the majority of connections every year. They accounted for the majority of capacity as well, except for 2019.

Figure 101: SPD Distributed Generation HV and EHV - market shares (%)



- 13.14. Figure 3302A shows that the number of third parties issuing quotes increased from 16 in 2018 to 23 in 2019 but decreased to 22 in 2020 and 16 in 2021. The number of third parties making connections increased from seven in 2018 to 15 in 2020 but decreased to ten in 2021.
- 13.15. Figure 3302B shows that the size of the market decreased in terms of offers but remained relatively stable in terms of acceptances. Notably:
  - The number of offers decreased from 823 in 2018 to 513 in 2021, whilst associated capacity decreased from 4,804MW in 2018 to 1,670MW in 2021.
  - There were on average 92 accepted connections a year for an average associated capacity of 786MW per year.

## Figure 3302: SPD Distributed Generation HV and EHV – third parties and total market size



#### Graph A: number of third parties (#) Graph B: market size (# connections, MW)

## **Unmetered LA**

#### **Section summary**

SPD's share of completed units was on average 75% throughout the assessment period, except in 2019 when their share dropped to 29%. Over the assessment period, there were between one to four third parties completing units, whilst the total number of units completed by SPD or third parties decreased from 3,750 to 1,915.

13.16. As shown in Figure 103, SPD's share of units completed decreased from 69% in 2018 to 29% in 2019 but increased to 76% in 2020 and to 79% in 2021. Consistently, third parties' market share exceeded SPD's only in 2019 when it was 71%.

#### Figure 13403: SPD Unmetered LA – market share, completed units (%)



13.17. Figure 104A shows that the number of third parties issuing quotes was stable at four every year except for 2021 where it was five. The number of third parties completing units fluctuated over time but ranged between one and four. As shown in Figure 104B, the total number of completed units in the market decreased from 3,750 in 2018 to 1,915 in 2021.

## Figure 104: SPD Unmetered LA – third parties and total market size Graph A: number of third parties (#) Graph B: market size (# units completed)



## **Unmetered Other**

#### Section summary

SPD's share of completed units varied substantially between 2018 and 2021; it decreased from 69% in 2018 to 7% in 2019 but increased to 36% in 2020 and to 80% by 2021.Over the same period, the number of third parties completing units increased from two to four, whilst the average number of units completed by either SPD or third parties decreased from 937 in 2018 to 313 in 2021.

- 13.18. Figure 105 shows that SPD's share of completed units varied substantially between2018 and 2021; it decreased from 69% in 2018 to 7% in 2019 but then increased to36% in 2020 and to 80% by 2021.
- 13.19. Consistently, third parties' share of completed units increased from 31% in 2018 to 93% in 2019, before decreasing to 64% and to 20% by 2021.

Figure 105: SPD Unmetered Other – market share, completed units (%)



- 13.20. Figure 106A shows that the number of third parties issuing quotes remained stable around an average of four between 2018 and 2021, whilst that of those completing units increased from two to four.
- 13.21. As shown in **Figure** Figure 106B the number of units completed decreased from 937 in 2018 to 313 in 2021, reaching a minimum of 181 in 2020.

#### Figure 106: SPD Unmetered Other - third parties and total market size

Graph A: number of third parties (#) Graph B: market size (# units completed)



## **14. Scottish Power Energy Networks Manweb**

- 14.1. The outcome of the last Competition Test resulted in Scottish Power Energy Network's Manweb ('SPMW') DSA's Unmetered LA and Unmetered PFI to pass the Competition Test, whilst the other RMS did not pass. As such, all RMS except for the two RMS mentioned above are in scope for this review.
- 14.2. However, there was insufficient data to review Metered Demand EHV and above as no connection work was carried out between 2018 and 2021. We present our RMS assessment in the sub-sections below.

## **Metered Demand LV**

#### Section summary

SPMW average market share across all metrics was 86% between 2018 and 2021. Over the same period, there were on average 30 third parties making connections, whilst the total number of connections accepted by third parties or SPMW averaged at 339 per year.

- 14.3. As shown in Figure 107, SPMW accounted for the majority of connections work every year between 2018 and 2021, with an average market share of 86% across all metrics.
- 14.4. Figure 107A demonstrates that SPMW's share of offered connections increased from 76% to 89% and the associated capacity increased from 83% to 90% between 2018 and 2021.
- 14.5. Figure 107B demonstrates their share of accepted connections fluctuated between87% and 91% over the same period, whilst that of associated capacity decreased from94% to 90%.



#### Figure 107: SPMW Metered Demand LV - market shares

- 14.6. Figure 108A shows that the number of third parties issuing quotes decreased from 53 in 2018 to 19 in 2021, while those making connections fluctuated over the same period, with 26 third parties in 2018, 40 in 2019, 30 in 2020 and 25 in 2021.<sup>21</sup>
- 14.7. As shown in Figure 108B, the total size of the market decreased between 2018 and 2021; offered connections decreased from 1,171 to 888, accepted connections decreased from 345 to 328, offered capacity declined from 155MW to 99MW; and accepted capacity declined from 43MW to 37MW.

#### Figure 108: SPMW Metered Demand LV - third parties and total market size



<sup>&</sup>lt;sup>21</sup> We note that the data submitted by the DNO for this RMS contains instances where the number of third parties making connections is higher than those issuing quotes.

## **Metered Demand HV**

#### Section summary

SPMW's share of accepted connections was on average 86% per year and their share of accepted capacity was 68%. SPMW's lower share in terms of capacity acceptances implies that third party activity related to connections of larger capacity. Over the same period, third parties making connections increased from 20 to 42, whilst the total number of connections accepted by third parties or SPMW averaged at 379.

- 14.8. Figure 109 demonstrates the differences in trends between offers and acceptances and how SPMW's shares in terms of number of connections offered and accepted were consistently higher than their shares in terms of capacity offered and accepted.
- 14.9. As shown in Figure 109A, SPMW's share of offered connections increased from 67% in 2018 to 72% in 2019 but decreased to 67% in 2020 and to 63% in 2021; whilst their share of associated offered capacity decreased from 47% in 2018 to 42% in 2021.
- 14.10. Figure 109B demonstrates how SPMW's share of accepted connections decreased from 90% in 2018 to 84% in 2021; whilst their share of associated capacity declined from 80% to 61% over the same period.

#### Figure 109: SPMW Metered Demand HV - market shares (%)

Graph A: offered connections



#### Graph B: accepted connections

- 14.11. As shown in Figure 110A, the number of third parties issuing quotes decreased from 73 to 55 between 2018 and 2021, whilst those making connections increased from 17 to 23 over the same period.
- 14.12. Figure 110B shows that the number of offers decreasing from 1,608 in 2018 to 1,311 in 2020 but increased to 1,610 in 2021, whilst accepted connections was on average 379 per year between 2018 and 2021. Offered capacity decreased from 525MW in 2018 to 429MW in 2020 but increased to 521MW in 2021, whilst accepted capacity was 79MW per year on average.

### Figure 110: SPMW Metered Demand HV – third parties and total market size Graph A: number of third parties (#)

## Graph B: market size (# connections, MW)



#### Metered Demand HV and EHV

#### Section summary

This RMS is relatively smaller in terms of connections activity, with a total of 13 accepted connections between 2018 and 2021, eight of which made by SPMW and four by third parties. SPMW's market shares varied substantially across years and metrics.

- 14.13. As shown in **Figure** Figure 111B, this RMS is relatively small in terms of connections activity. While there were a total of 172 offers between 2018 and 2021, only 13 connections were accepted over the same period. The average capacity associated with offered connections was 136MW per year, whilst the average capacity of acceptances was 20MW over the same period.
- 14.14. Figure 111A shows there were between 15 and 19 third parties issuing quotes, but only one to two third parties making connections between 2018 and 2021.

## Figure 111: SPMW Metered Demand HV and EHV – third parties and total market size



Graph A: number of third parties (#)

Graph B: market size (# connections, MW)

- 14.15. As shown in Figure , market shares were different in terms of acceptances and offers and varied substantially year on year. In particular:
  - Figure 112A shows that SPMW share of offered connections decreased from 38% in 2018 to 23% in 2021 and reached a minimum of 13% in 2020, whilst that of associated capacity did so from 55% to 50% over the same period with a minimum of 41% in 2020;
  - **Figure** Figure 112B shows that SPMW had a 50% of accepted connections each year until 2021, when it increased to 80%. SPMW acceptances accounted on average for 93% of accepted capacity in all years, except for 2019, when their market share was 57%.

Figure 112: SPMW Metered Demand HV and EHV - market shares (%)







## **Distributed Generation LV**

**Graph A: offered connections** 

#### Section summary

There were a total of 30 accepted connections between 2018 and 2021, 29 of which made by SPMW. As such, their market share was 100% across all metrics, except for 2019, when a third party completed a single connection.

14.16. Figure 113Figure shows that SPMW's market share covered the entire market across all metrics, except for 2019, when a single connection was completed by a third party. There were no third parties active in the market in any year other than 2019.

Figure 113: SPMW Distributed Generation LV - market shares (%)



14.17. Figure 114Figure shows that throughout the assessment period, there were a total 30 accepted connections, 15 of which occurred in 2019. These connections amounted to a total of 1.4MW of capacity. The market was larger in terms of offers, with on average nine offered connections a year for a total of 26MW of associated capacity.

Graph B: accepted connections

## Figure 114: SPMW Demand Generation LV – total size of the market (# connections, MW)



## **Distributed Generation HV and EHV**

#### Section summary

SPMW's average market share was 90% across all metrics between 2018 and 2021, except for 2020. In 2020 a third party completed a single 25MW connection resulting in a 52% market share in terms of accepted capacity. Over the assessment period, there from two to seven third parties making connections, whilst the total number of connections accepted by third parties or SPMW averaged at 26.

- 14.18. As shown in Figure 11535, SPMW accounted for the majority of connections work every year between 2018 and 2021 with an average market share of 90% across all metrics. In 2020 SPMW's share of accepted capacity was lower at 49%.
- 14.19. Figure *11535*115A shows that SPMW's share of offered connections decreased from 99% to 92% and that of associated capacity declined from 99% to 95% between 2018 and 2021.
- 14.20. Figure **11535**115B demonstrates that their share of accepted connections fluctuated slightly but was on average 86%. SPMW's share of capacity associated with these connections was 81% on average in 2018, 2019 and 2021 but only 49% in 2020. This drop was due to a third party carrying out a particularly large connection of 25MW compared to the other 14 accepted connections carried out by SPMW that amounted to a total of 24MW.

#### Figure 11535: SPMW Distributed Generation HV and EHV - market shares (%)



#### Graph B: accepted connections



- 14.21. Figure 116A shows that the number of third parties issuing quotes varied between one and three depending on the year, while third parties making connections increased from two in 2018 to seven in 2019, decreased to one in 2020 and increased to five in 2021<sup>22</sup>
- 14.22. Figure 116B shows that offers decreased substantially over time, whilst acceptances fluctuated yearly. Notably:
  - Offered connections decreased from 172 in 2018 to 50 in 2021, whilst associated capacity decreased from 2,262MW in 2018 to 562MW in 2021.
  - Accepted connections increased from 18 to 28 between 2018 and 2021 and peaked at 43 in 2019.
  - Accepted capacity varied year on year; it was 233MW in 2018, 179MW in 2019, 48 in 2020 and 318 in 2021.

<sup>&</sup>lt;sup>22</sup> We note that the data submitted by the DNO for this RMS contains instances where the number of third parties making connections is higher than those issuing quotes.

## Figure 11636: SPMW Distributed Generation HV and EHV- third parties and total market size



Graph B: market size (# connections,



## **Unmetered Other**

#### Section summary

SPMW's completed all units and thus had a 100% market share over the assessment period. The total size of the market varied over time; 212 units were completed in 2018, eight in 2019, 100 in 2020 and seven in 2021.

14.23. As shown in Figure 117, SPMW completed all units in this market from 2018 to 2021 and thus had a 100% market share.

#### Figure 117: SPMW Unmetered Other – market share, completed units (%)



14.24. There were no third parties issuing quotes or completing units between 2018 and2021. As shown in Figure 118, the total size of the market followed a downward trend

and fluctuated substantially year on year; 212 units were completed in 2018, eight in 2019, 100 in 2020 and seven in 2021.





## 15. Scottish and Southern Energy Networks Scottish Hydro Electric Power Distribution

- 15.1. Scottish and Southern Energy Network's Scottish Hydro Electric Power Distribution ('SSEH') DSA did not pass any RMS in the previous Competition Test, and thus submitted data for all RMS through this competition review.
- 15.2. However, there was limited data to review the Metered Demand EHV and above and Unmetered PFI RMS, as no connection work was carried out between 2018 and 2021. We present our RMS assessment in the sub-sections below.

## **Metered Demand LV**

#### Section summary

SSEH's average market share across all metrics was 90% between 2018 and 2021. Over the same period, there were on average eight third parties making connections, whilst the total number of connections accepted by third parties or SSEH decreased from 489 to 347.

- 15.3. As shown in Figure 119 below, SSEH accounted for the majority of connections work every year between 2018 and 2021, with an average market share of 90% across all metrics.
- 15.4. Figure 119A demonstrates that SSEH's share of offered connections decreased from 91% to 81% and that of associated capacity decreased from 87% to 76% between 2018 and 2021.
- 15.5. Figure 119B demonstrates how the share of accepted connections decreased over the same period from 96% to 88% and their share of associated capacity decreased from 95% to 88%.

## Figure 119: SSEH Metered Demand LV - market shares (%) Graph A: offered connections Graph B: accepted connections



- 15.6. Figure 120A shows that the number of third parties making connections remained stable between 2018 and 2021 with an average of eight, whilst the number of third parties issuing quotes fluctuated over the same period with 17 third parties in 2018, ten in 2019, 16 in 2020 and 14 in 2021.
- 15.7. As shown in Figure 120B, the total size of the market decreased between 2018 and 2021. In particular:
  - Offered connections decreased from 962 to 692;
  - Accepted connections decreased from 489 to 343;
  - Offered capacity declined from 51MW to 42MW; and
  - Accepted capacity declined from 22MW to 18MW.

#### Figure 120: SSEH Metered Demand LV – third parties and total market size

#### Graph A: number of third parties (#) Graph B: market size (# connections, MW)



## **Metered Demand HV**

#### Section summary

SSEH's share of offered and accepted connections was on average 95% per year between 2018 and 2021, whilst their share of offered and accepted capacity was 71%. Over the same period, there were on average 13 third parties making connections, whilst the total number of connections accepted by third parties or SPMW averaged at 741.

- 15.8. Figure 121 demonstrates that, on average, SSEH's share of offered and accepted connections was 95% over the assessment period, whilst that of associated capacity was 71%. Consistently, third parties' share of offered and accepted connections was 5% however, their share of associated capacity was larger at 19% on average per year.
- 15.9. Figure 121A demonstrates how SSEH's share of offered connections was stable, averaging at approximately 95%, whilst their share of associated capacity was 70% every year except for 2020 when it was 80%. Figure 121B illustrates how SSEH's share of accepted connections decreased from 97% in 2018 to 94% in 2021, whilst their share of associated capacity declined from 72% to 66%.



## Figure 121: SSEH Metered Demand HV - market shares (%) Graph A: offered connections Graph B: accepted connections

15.10. Figure 122A shows that number of third parties issuing quotes decreased from 25 in 2018 to 12 in 2019 but increased to 19 in 2020 and 23 in 2021. The number of third

parties making connections fluctuated over time. There were 11 third parties in in 2018, eight in 2019, 16 in 2020 and 15 in 2021.

- 15.11. Figure 122B shows that the total size of the market decreased throughout the assessment period. In particular:
  - the number of offered connections decreased from 2,165 in 2018 to 1,489 in 2021, whilst associated capacity decreased from 228MW in 2018 to 151MW in 2021 and,
  - the number of accepted connections decreased from 897 in 2018 to 622 in 2021, whilst associated capacity decreased from 68MW in 2018 to 60MW in 2021.

Figure 122: SSEH Metered Demand HV – third parties and total market size





#### Metered Demand HV and EHV

#### Section summary

Between 2018 and 2021, SSEH's share of accepted connections was on average 88% per year. However, connections completed by third parties were of higher capacity than those completed by SSEH and accounted for 70% of accepted capacity, except for 2021. In 2021, SSEH accounted for over 90% of the market in terms of acceptances and associated capacity.

15.12. Figure 123A demonstrates that SSEH issued consistently more quotes than third parties between 2018 and 2021. SSEH's share of offered connections increased from

86% in 2018 to 96% in 2021, whilst that of associated capacity increased from 31% to 73% over the same period.

15.13. The trend observed in SSEH's offers is largely reflected in acceptances as well. As shown in Figure 123B SSEH's market shared accounted for 79% to 97% of all accepted connections between 2018 and 2021. However, until 2020, these connections were relatively small, accounting for 18% to 35% of accepted capacity, in 2021 accepted capacity increased to 91%.



Figure 123: SSEH Metered Demand HV and EHV - market shares (%) Graph A: offered connections Graph B: accepted connections

15.14. Figure 124A shows that, while the number of third parties issuing quotes decreased from 14 in 2018 to four in 2021, third parties making connections increased from two in 2018 to six in 2021.<sup>23</sup>

15.15. Figure 124B shows that the size of the market decreased over time:

- The number of offers decreased from 250 in 2018 to 140 in 2021, whilst associated capacity decreased from 258MW to 133MW over the same period.
- The number of acceptances declined from 72 in 2018 to 49 in 2021 whilst associated capacity decreased from 133MW to 16MW over the same period.

<sup>&</sup>lt;sup>23</sup> We note that the data submitted by the DNO for this RMS contains instances where the number of third parties making connections is higher than those issuing quotes.

# Figure 124: SSEH Metered Demand HV and EHV - third parties and total market size Graph A: number of third parties (#) Graph B: market size (# connections, MW)



## **Distributed Generation LV**

#### Section summary

SSEH market share accounted on average for 73% of acceptances between 2018 and 2021 and 50% of offers over the same period. Additionally, SSES the number of third parties making connections increased from three to seven, whilst the total number of connections accepted by third parties or SSEH increased from 17 to 47.

- 15.16. Figure 125 demonstrates the variance in market shares depending on how it is defined. Figure 125A shows there was a balanced split of offers between third parties and SSEH while Figure 125B demonstrates that SSEH accounted for the majority of acceptances. In particular:
  - SSEH's share of offered connections increased from 45% in 2018 to 60% in 2021 and associated capacity increased from 42% to 52%.
  - SSEH's share of accepted connections increased from 71% in 2018 to 86% in 2019 but decreased to 70% by 2021. Accepted capacity followed a similar trend, increasing from 71% in 2018 to 80% in 2019 and declined to 64% in 2021.


#### Figure 125: SSEH Distributed Generation LV - market shares (%)

- 15.17. Figure 126A shows an increase in the number of third parties making connections, from three in 2018 to seven in 2021, and an average of nine third parties issuing quotes over the same period. In both cases there was a drop in 2019, when third parties issuing quotes declined to six and those making connections to zero.
- 15.18. Figure 126B shows that the market expanded over time. Offers increased from 65 in 2018 to 93 in 2021 while accepted connections increased from 17 to 47 over the same period. The capacity associated with accepted connections amounted to a total of 3.3MW in four years.





## **Distributed Generation HV and EHV**

#### Section summary

SSEH's share of offered connections and offered capacity was on average 86% per year between 2018 and 2021 but their share of accepted connections and accepted capacity was lower at 52% on average. Over the same period, there were on average nine third parties per year making connections, whilst the total number of connections accepted by third parties or SSEH averaged at 98 per year.

- 15.19. Figure 127 shows that, on average, SSEH's share of offered connections and offered capacity was 86% per year over the assessment period but their share of accepted connections and accepted capacity was lower at 52%. This implies that the difference in market shares between SSEH and third parties is smaller when shares are based on acceptances rather than offers.
- 15.20. As shown in Figure 127A, SSEH's share of offered connections decreased from 91% in 2018 to 73% in 2021, whilst their share of associated capacity increased from 86% in 2018 to 95% in 2019 but then decreased to 89% in 2020 and 2021.
- 15.21. Figure 127B shows that SSEH's share of accepted connections increased from 51% in 2018 to 67% in 2019 but decreased to 57% in 2020 and 55% in 2021. Their share of associated capacity rose from 30% in 2018 to 60% in 2019 but decreased to 41% in 2020 and increased to 53% in 2021.





Graph B: accepted connections



- 15.22. As shown in Figure 128A that the number of third parties making connections increased from eight in 2018 to 15 in 2020 but decreased to seven in 2021. The number of third parties issuing quotes fluctuated over time. There were 21 third parties in 2018, 12 in 2019, 22 in 2020 and 19 in 2021.
- 15.23. Figure 128B shows that between 2018 and 2021 the number of offered connections decreased from 618 to 151, whilst accepted connections increased from 85 in 2018 to 130 in 2020 but then decreased to 74 in 2021.
- 15.24. It also shows that capacity associated with offered connections increased from 1,871MW in 2018 to 3,394MW in 2019 but decreased to 2,109MW in 2020 and to 1,025MW in 2021. Capacity associated with accepted connections averaged at 1,157MW per year.

## Figure 128: SSEH Distributed Generation HV and EHV - third parties and total market size



## Unmetered LA

#### Section summary

SSEH completed all units in this market every year, except for 2018 when SSEH completed 95% of all units and a single third party completed 5% of units. There were on average of 1,700 completed units a year.

15.25. As shown in Figure 129, SSEH completed almost all units in the market across the assessment period. SSEH market share dropped below 100% only in 2018 when it

was 95%. Accordingly, there were no third parties in the market except for 2018 when a single third party completed 5% of units.



Figure 129: SSEH Unmetered LA – market share, completed units (%)

15.26. Figure 130 shows that the number of units completed decreased from 2,245 in 2018 to 669 in 2020 before increasing to 2,639 in 2021.

#### Figure 130: SSEH Unmetered LA – total number of completed units (#)



#### **Unmetered Other**

#### **Overall assessment:**

SSEH's share of units completed decreased from 75% in 2018 to 46% in 2019 but increased to 56% in 2020 and to 67% by 2021. Over the assessment period, there were between two to four third parties completing units, whilst the number of units completed by either SSEH or third parties decreased from 975 to 265.

15.27. As shown in Figure 131, SSEH's share of units completed decreased from 75% in 2018 to 46% in 2019 but increased 56% in 2020 and then to 67% in 2021. Consistently, third parties' share of completed units was never above SSEH's except for 2019, when it was 54%.



Figure 131: SSEH Unmetered Other - market share (%)

15.28. Figure 132A shows there were two to four third parties issuing quotes and two to three third parties completing units between 2018 and 2021. As shown Figure 132B, the number of units completed decreased from 975 in 2018 to 265 in 2021.

Figure 132: SSEH Unmetered Other - third parties and total market size

Graph A: number of third parties (#) Graph B: market size (# units completed)



## **16. Scottish and Southern Energy Networks Southern** Electric Power Distribution

- 16.1. The outcome of the last Competition Test resulted in Scottish and Southern Energy Network's Southern Electric Power Distribution ('SSES') DSA's Distributed Generation HV EHV and Unmetered PFI to pass the Competition Test, whilst the other RMS either did not apply or did not pass.
- 16.2. As such, all RMS except for the two RMS mentioned above, are in scope for this review. We present our RMS assessment in the sub-sections below.

#### **Metered Demand LV**

#### Section summary

SSES's average market share across all metrics was 84% between 2018 and 2021. Over the same period, the number of third parties making connections increased from 22 to 35, whilst the total number of connections accepted by third parties or SSES decreased from 1,677 to 1,121.

- 16.3. As shown in Figure 133 SSES accounted for the majority of connections work every year between 2018 and 2021, with an average market share of 84% across all metrics.
- 16.4. Figure 133A demonstrates how SSES's share of offered connections decreased from 88% to 80%, and the associated capacity offered decreased from 84% to 76% between 2018 and 2021.
- 16.5. Figure 133B demonstrates how SSES's share of accepted connections decreased over the same period from 93% to 84% and their share of associated capacity decreased from 92% to 80%.



#### Figure 133: SSES Metered Demand LV - market shares (%)

- 16.6. Figure 134A shows that the number of third parties issuing quotes increased from 49 in 2018 to 64 in 2021, reaching a maximum of 71 in 2020. Similarly, third parties making connections increased from 22 in 2018 to 35 in 2021, peaking at 42 in 2020.
- 16.7. As shown in Figure 134B shows, the total size of the market decreased between 2018 and 2021. In particular:
  - Offered connections decreased from 3,645 to 2,832;
  - Accepted connections decreased from 1,677 to 1,121;
  - Offered capacity declined from 238MW to 200MW; and
  - Accepted capacity declined from 98MW to 73MW.

## Figure 134: SSES Metered Demand LV – third parties and total market size

Graph A: number of third parties (#) Graph B: market size (# connections, MW)



## **Metered Demand HV**

#### Section summary

SSES's share of offered and accepted connections was on average 75% per year between 2018 and 2021, whilst their share of offered and accepted capacity was lower at 53%. third parties completed fewer connections but of higher capacity. Their share of accepted capacity increased from 40% to 57% between 2018 and 2021. Over the same period, the number of third parties making connections increased from 25 to 53, whilst the total number of connections accepted by third parties or SSES' averaged at 1,060.

- 16.8. Figure 135 shows the differences in trends between offers and acceptances. SSES's share, in terms of number of connections, was substantially larger than their share in terms of capacity. Although SSES's share of offers increased over time, their share of acceptances decreased. In particular:
  - As shown in Figure 135A, SSES's share of offered connections increased from 67% in 2018 to 76% in 2021, whilst their share of associated offered capacity increased from 47% in 2018, to 62% in 2020 and decreased to 56% in 2021.
  - Figure 135B shows that SSES's share of accepted connections decreased from 81% in 2018 to 73% in 2021, whilst their share of associated capacity also declined from 60% in 2018 to 43% in 2021.

# Figure 135: SSES Metered Demand HV – market shares: (%)Graph A: offered connectionsGraph B: accepted connections



- 16.9. Figure 136A shows that the number of third parties both issuing quotes and completing connections increased from 67 to 114, and 25 to 53 respectively, over the assessment period.
- 16.10. Figure 136B demonstrates that the number of offers decreased from 4,266 in 2018 to 3,191 in 2021, whilst associated capacity declined from 1,530MW to 972MW over the same period. There were on average 1,060 accepted connections per year for an average associated capacity of 342MW.

Figure 136: SSES Metered Demand HV – third parties and total market size





#### **Metered Demand HV and EHV**

#### Section summary

SSES's share of offers increased between 2018 and 2021 but that of accepted connections decreased from 53% to 40% over the assessment period and that of accepted capacity declined from 50% to 9% over the same period. Over the same period, the number of third parties making connections increased from six to 16, whilst the average number of connections accepted by third parties or SSES averaged at 32 per year.

- 16.11. Figure 137 shows that SSES's share of offered work increased steadily over the assessment period but that of acceptances declined.
- 16.12. Figure 137A demonstrates that SSES's share of offered connections increased from 36% in 2018 to 65% in 2021, whilst that of associated capacity offered increased from 40% to 62% over the same period.

16.13. Figure 137B shows that SSES's share of accepted connections decreased from 53% in 2018 to 35% in 2019, increased back to 50% in 2020 but declined to 40% in 2021. Associated capacity accepted followed a similar trend; SSES's market share decreased from 50% in 2018 to 4% in 2019, increased to 30% in 2020 but decreased again to 9% in 2021.

**Graph B: accepted connections** 

#### Figure 137: SSES Metered Demand HV and EHV - market shares (%)



#### Graph A: offered connections

- 16.14. Figure 138A shows that the number of third parties making offers increased from 24 to 45 over the assessment period, and the number of third parties making connections also increased from six to 18 over the same time period.
- 16.15. Figure 138B shows that there were 170 offered connections on average per year for an average associated capacity of 769MW. In terms of acceptances, there was an average of 32 accepted connections per year and associated capacity ranged between 82MW and 295MW over the assessment period.





## **Metered Demand EHV and above**

#### Section summary

SSES's average market share across all metrics was 28% between 2018 and 2021. third parties accounted for the majority of connections work, with average market shares of 83% of accepted connections and of 91% of accepted capacity per year. There was a total of 44 connections accepted by third parties or SSES between 2018 and 2021.

- 16.16. SSES's market share was on average 28% per year across all metrics. Figure 139A shows SSES's share of offers followed an overall upward trend over the assessment period.SSES's share of offers decreased from 36% in 2018 to 27% in 2019, increased to 54% in 2020 but decreased slightly to 51% in 2021. Their share of offered capacity increased from 26% in 2018 to 29% in 2019 and reached 64% in 2021.
- 16.17. Figure 139B demonstrates that SSES's share of accepted work was consistently below 30% over the assessment period. SSES's share of accepted connections decreased from 29% in 2018 to zero in 2020 but increased back to 29% in 2021, and their share of accepted capacity increased from 9% in 2018 to 14% in 2019 but decreased to zero in 2020 before increasing back to 14% in 2021.

#### Figure 139: SSES Metered Demand EHV and above - market shares (%)

#### Graph A: offered connections

#### **Graph B: accepted connections**



- 16.18. Figure 140A shows that the number of third parties issuing quotes and making connections increased over time. There were on average 14 third parties issuing quotes between 2018 and 2020 but these increased 46 in 2021 as well as two third parties making connections in 2018 and 14 in 2021.
- 16.19. As shown in Figure 140B, the market also expanded over time across all metrics except for accepted capacity. In 2021, there were 80 offers and 21 acceptances for 2,389MW and 526MW of total capacity respectively, compared to 33 offers and seven acceptances for 1,230 MW and 538MW of total capacity respectively in 2018.





## **Distributed Generation LV**

#### Section summary

SSES's average market share across all metrics was 76% between 2018 to 2021. There were on average three third parties making connections throughout the assessment period. The total number of connections accepted by third parties or SSES averaged at 20 per year over the same period.

- 16.20. Figure 141A shows that SSES consistently issued more offers than third parties between 2018 to 2021. SSES's market share, in terms of the number of offers, increased from 77% to 94% over the assessment period, while associated capacity offered followed a similar pattern and increased from 73% to 92%.
- 16.21. Figure 141B shows SSES' market share in terms of acceptances accounted for the majority of the market every year except for 2019. Notably:
  - SSES's share of accepted connections decreased from 75% in 2018 to 53% in 2019 but increased again to reach 87% in 2021.
  - Their share of capacity associated with accepted connections decreased from 86% in 2018 to 37% in 2019, it then increased to 85% in 2020 but declined to 82% in 2021.

#### Figure 141: SSES Demand Generation LV – market shares (%)



**Graph A: offered connections** 

#### **Graph B: accepted connections**



- 16.22. As shown in Figure 142A, there were between one to three third parties per year making connections, whilst third parties issuing quotes decreased from seven in 2018 to three in 2021.
- 16.23. Figure 142B shows that there were on average 35 offers and 16 acceptances between 2018 and 2020. In 2021 though, there were 64 offers and 31 acceptances. Capacity associated with offered connections amounted to a total of 7MW and for accepted connections it amounted to a total of 3MW.

Figure 142: SSES Distributed Generation LV - third parties and total market size



## Unmetered LA

#### Section summary

SSES's share of units completed increased from 3% in 2018 to 33% in 2020 but decreased to 2% in 2021. Over the assessment period, the number of third parties completing units increased from ten to 25, whilst the total number of units completed by SSES or third parties decreased from 11,999 to 4,916.

16.24. Figure 143 shows that SSES's market share increased from 3% in 2018 to 33% in 2020 but decreased to 2% in 2021. Consistently, third parties' share of completed units decreased from 97% in 2018 to 67% in 2020 but increased to 98% in 2021.



Figure 143: SSES Unmetered LA - market share, completed units (%)

16.25. Figure 144A shows that the number of third parties issuing quotes increased from 12 to 28 between 2018 and 2021. Similarly, the number of third parties completing units also increased from ten to 25. As shown in Figure 144B, the total number of units completed decreased from 11,999 in 2018 to 4,916 in 2021.

Figure 144: SSES Unmetered LA - third parties and total market size





#### **Unmetered Other**

#### Section summary

SSES's market share was on average 84% per year between 2018 and 2020 but decreased to 71% in 2021. The number of third parties completing units increased from seven to 26 over the assessment period. The number of units completed increased from 2,360 in 2018 to 9,982 in 2020 but decreased to 3,135 in 2021.

16.26. As shown in Figure 145, SSES's market share varied between 82% and 85% from2018 to 2020 but decreased to 71% in 2021. Consistently, third parties' market sharevaried between 15% and 20% from 2018 to 2020 but increased to 29% in 2021.



Figure 145: SSES Unmetered Other - market share, completed units (%)

- 16.27. Figure 146A shows that the number of third parties issuing quotes was relatively stable with around 16 or 17 third parties between 2018 and 2020 and increased to 26 in 2021. The number of third parties completing units followed a similar pattern with around nine to ten third parties between 2018 and 2019 and increased to 16 in 2020 and to 26 in 2021.
- 16.28. As shown in Figure 146B, the number of units completed increased from 2,360 in 2018 to 9,982 in 2020 but decreased to 3,135 in 2021.



#### Figure 146: SSES Unmetered Other - third parties and total market size