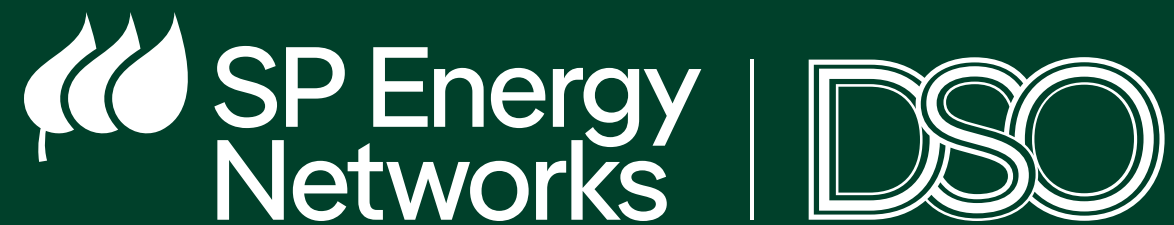


Distribution Flexibility Service

# 2024/25 Market Prospectus

November 2024



## Contents

Foreword	03
Why and when do we use flexibility?	04
Our journey so far	05
SPEN Flexibility Winter Outlook	06
SP Distribution Outlook	07
SP MANWEB Outlook	08
Future Flexibility Market Opportunities	09
What's next? Get in touch	10

## Foreword from Gerard Boyd

“At SP Energy Networks we are leading the way on facilitating the transition to Net Zero. We are also committed to doing so at the lowest overall cost to our customers, to achieve that goal we need to use all of the tools at our disposal, seeking innovative commercial and technical solutions alongside traditional reinforcement. Flexibility will play a key part, offering alternatives to conventional reinforcement or helping to manage the network ahead of being able to deploy reinforcement solutions.

“This year we moved to a monthly flexibility tender model allowing our Flexibility Service Providers (FSPs) more frequent opportunities to participate and also providing greater certainty over the expectation that they will be dispatched. Although I think this represents a positive step forward, monthly tenders also need to be supported by improved clarity on the future market opportunities within our licence areas to that end we are publishing this Market Prospectus document. The aim is to provide clear locational and monetary signals on the scale of our flexibility requirements.

“This document will also outline future market opportunities that we are developing, which we will seek to incorporate formally into our forward looking requirements they mature.

“I would like our Market Prospectus to develop into a useful and informative tool for existing and future market participants and to that end would welcome feedback on the content, scope and information that we have provided such that we can refine this offering with each iteration.”



**Gerard Boyd**  
*Head of Flexibility*

## Why and when do we use flexibility services?

As we transition to Net Zero, low-carbon technologies are revolutionizing the interaction between supply and demand on our network. This transformation requires a more dynamic approach to managing our electricity system, leading us to adopt real-time flexibility services to keep our network running smoothly.

Flexibility is when we ask customers to turn up or down their use or generation of electricity in return for an incentive so we can ensure customers have a continuous and reliable electricity supply. For example, electric vehicle owners may be asked to charge at a specific time of day or factories may be asked to operate at a specific time. We also work with power generators to use flexibility as a back-up during works on the network to minimise the risk of power outages for customers.

Flexibility services benefits us and our customers because they help maintain our distribution network within its current limits, preventing capacity constraints. They are crucial for supporting Net Zero growth, as they can be implemented faster than most reinforcement methods and help manage uncertainties. These services offer a smart, agile way to manage our network, and can help foster competition and democratise the energy sector.

We seek to utilise Flexibility first, where it represents the best value and lowest overall lifecycle cost for GB customers. Flexibility services are another tool we have to provide thermal and voltage capacity and we apply the following principles:

- We tender for flexibility services for all viable network constraints. We impartially assess its use compared to

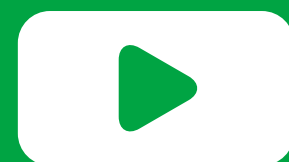
other intervention options. We use flexibility services where this assessment process shows it to be the best intervention option.

- We are neutral as to the source of the flexibility service (e.g. generation, storage, demand response etc.) providing it meets the requirements of managing the constraint.
- We are neutral as to whether customers contract directly with us or via an aggregator, providing it meets the requirements of managing the constraint and our interface requirements.

We are increasingly looking for new ways to stimulate the flexibility market, including through changing how we structure contracts, developing new market opportunities in conjunction with our customers and stakeholders, and understanding what data and information flexibility providers require from us. Given the role that flexibility services play in facilitating Net Zero, it's vital that we transparently demonstrate our estimated forecast on both long- and short-term flexibility requirements to enhance stimulation of the UK DSO flexibility market.

This Market Prospectus document will demonstrate the market opportunity for potential Flexibility Service Providers (FSPs) for the upcoming 24/25 Winter period as well as an estimated forecast for the entire ED2 period.

[Click here to watch our Explainer video on why and when we use Flexibility Services](#)



### Leading the way in flexibility market development



We were able to use 550MW of flexibility services across 1,352 sites in our RII0-ED2 load-related expenditure plan, saving our customers £36m, potentially rising to £145m in our high scenario.



We were among the first to use flexibility services to provide additional network security during planned maintenance - providing supply security for our customers during outages, and creating further opportunity for FSPs.



We sought and responded to customer feedback, reducing our service windows from 5 years to 18 months to support FSPs in their service provision, to reduce barriers.



We were the first DNO to tender for reactive power, creating a new service opportunity for FSPs.



We were the first DNO to calculate and send site-specific pricing signals, helping FSPs to understand the opportunity value.

## Our journey so far

We began our Flexibility procurement in 2019. During 2020 and 2021 we tendered for flexibility services for all locations identified as requiring an intervention due to load growth during the RII0-ED2 period (2023 to 2028). Amounting to a total of 1.5GW at 1,557 locations. In 2023, we tendered for two 18-month periods in the Spring and the Autumn. To date, we have accepted bids for over 700MW.

Here's a summary of our Key Performance Indicators which provides a summary of our tendering activity to date:

### How to scale KPIs

KPIs	To Date (from 2019)	24/25 Performance		
		Q1	Q2	Q3 - October 2024*
Assets registered and pre-qualified on Piclo	6940	5980	5980	6940
Stakeholder/ Bilateral engagement events	100+	4	6	11
Flexibility Tendered (Peak in GWh) (Scheduled Utilisation)	1023	0.00	0.13	1.41
Flexibility Contracted in GWh (Scheduled Utilisation)	87	0.000	0.000	0.083

In recent years, we have observed that some providers faced challenges in meeting their contract commitments due to difficulties in recruiting the required assets that they initially forecasted. As a result, we have faced challenges in receiving the initially contracted capacity in real time which has significantly impacted the capacity available for dispatch. Additionally, participation in our 2023 tenders was lower than expected. However, stakeholders have provided valuable feedback, indicating a preference for shorter-term tenders. These shorter term tenders will allow for more accurate and competitive bid pricing and enable providers to explore a variety of market opportunities.

The transition to becoming a Distribution System Operator (DSO) is a long-term journey and transition will ultimately enable our Net Zero agenda and support the realisation of our Just Transition Strategy ensuring that no one is left behind in the energy transition.

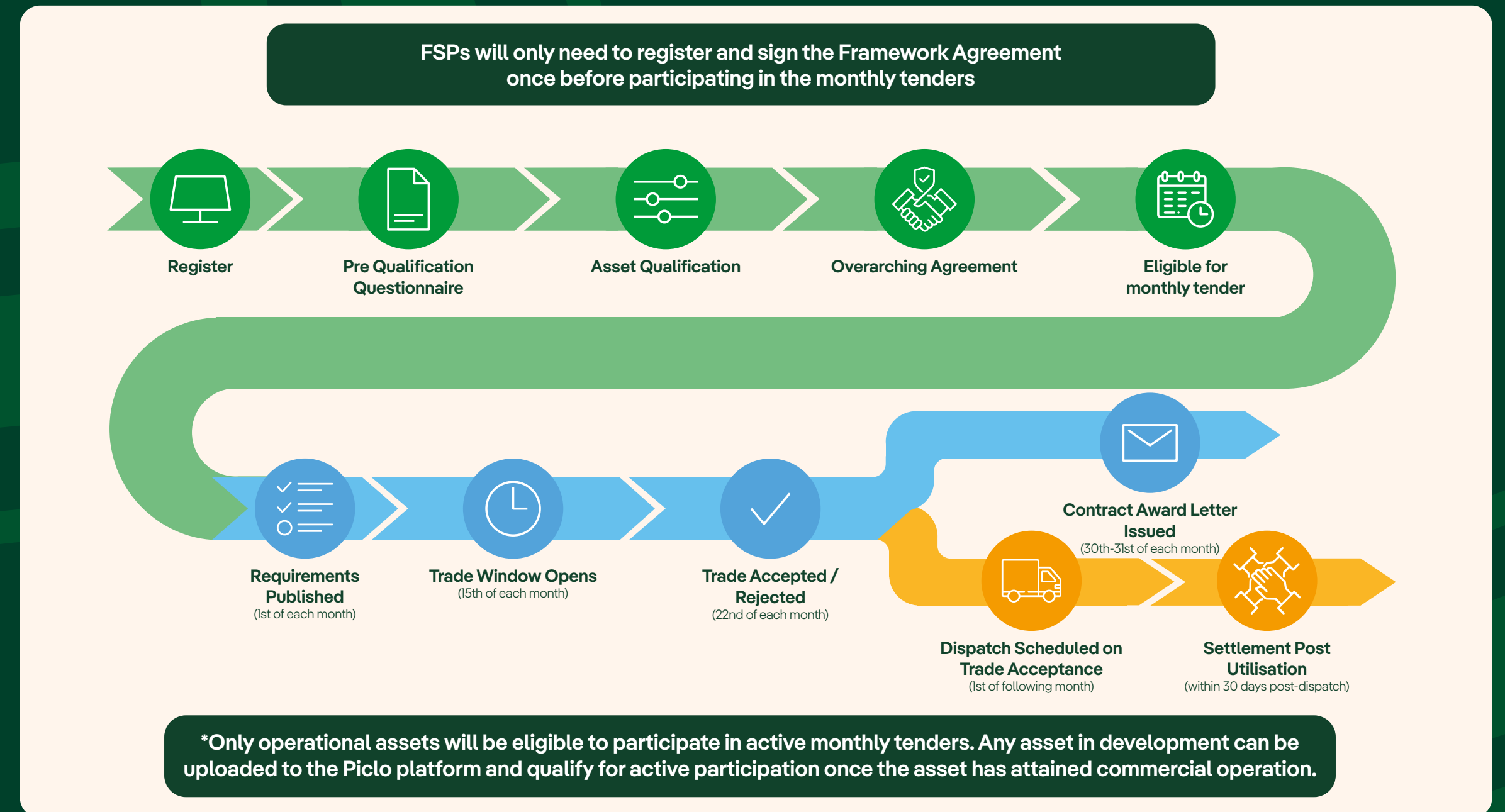
\*In July 2024 we moved to our new month ahead tendering model, only tendering for our flexibility requirements for the following month. These requirements have been low during the summer months but are now increasing as we move into winter months.

## Our new month ahead operating model:

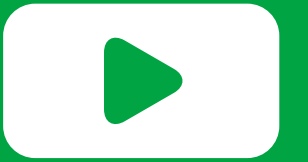
In July 2024, we launched our shorter-term month ahead market which enables Providers to tender more frequently. We will continue to tender on a monthly basis throughout the Winter period to understand whether shorter term month ahead tenders improves market liquidity following stakeholder feedback on previous tenders that demonstrated a preference to change our tendering model to more frequent and shorter term contracts.

We will be assessing whether our new tender process reduces market barriers to entry by giving FSPs the opportunity to offer more robust bid prices that reflect current market prices and the assets that they have available. From from July to October, we have tendered for over 32.8MW in 17 locations across both our licence areas. We are ramping up our tenders during the Winter period and will be conducting more engagement activities during this period to engage and seek feedback on our new operating model.

The process, steps and timeline of our new month-ahead tendering model is shown below:



Click here to watch our SP Energy Networks Flexibility Explainer video.



For more information on our Month Ahead Market, please [visit our website](#).

## SPEN Flexibility Winter Outlook 2024-25

The overall value of our SPEN Month ahead market from 2024 to the end of the ED2 period in 2028 is estimated to be £11.3m.

Through the procurement of flexibility we can defer the need for £36m of reinforcement, potentially rising to £145m depending on the Net Zero scenario that transpires.

**Operational Flexibility** – This Flexibility offering is used to manage operational network events such as planned or unplanned outages. Our Operational Flexibility offering consists of the following standardised ENA products; Operational Utilisation or Operational Utilisation and Scheduled Availability. We will update the market on any Operational Flexibility requirements that arises following a review of outage planning activities throughout the year. Our supporting data document contains a list of our firm Operational Flexibility requirements which currently includes Ayr, Cupar and Braehead Park in the SP Distribution Licence area.

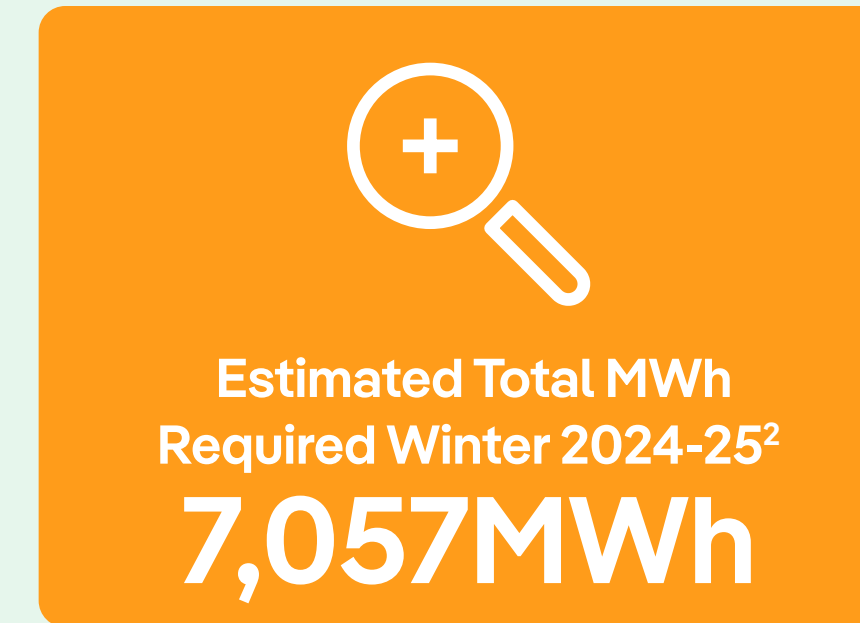
**Deferred Reinforcement** – Our Month Ahead Market is now set up to fulfil our upcoming requirements to alleviate constraints on our network which will manage uncertainty and offer an optionality benefit to defer reinforcement. Our Deferred Reinforcement solution mainly consists of the Scheduled Availability ENA standardised product. These full requirements are published alongside associated Guide Prices in our **Market Prospectus Supporting Data Document**.

Full definitions of the ENA standardised products is available in our [Participation Guidance](#) on our [Flexibility website](#).

The graph on the right displays the estimated growth of our flexibility market across both our licence areas during the full ED2 period in forecasted MWh volume.



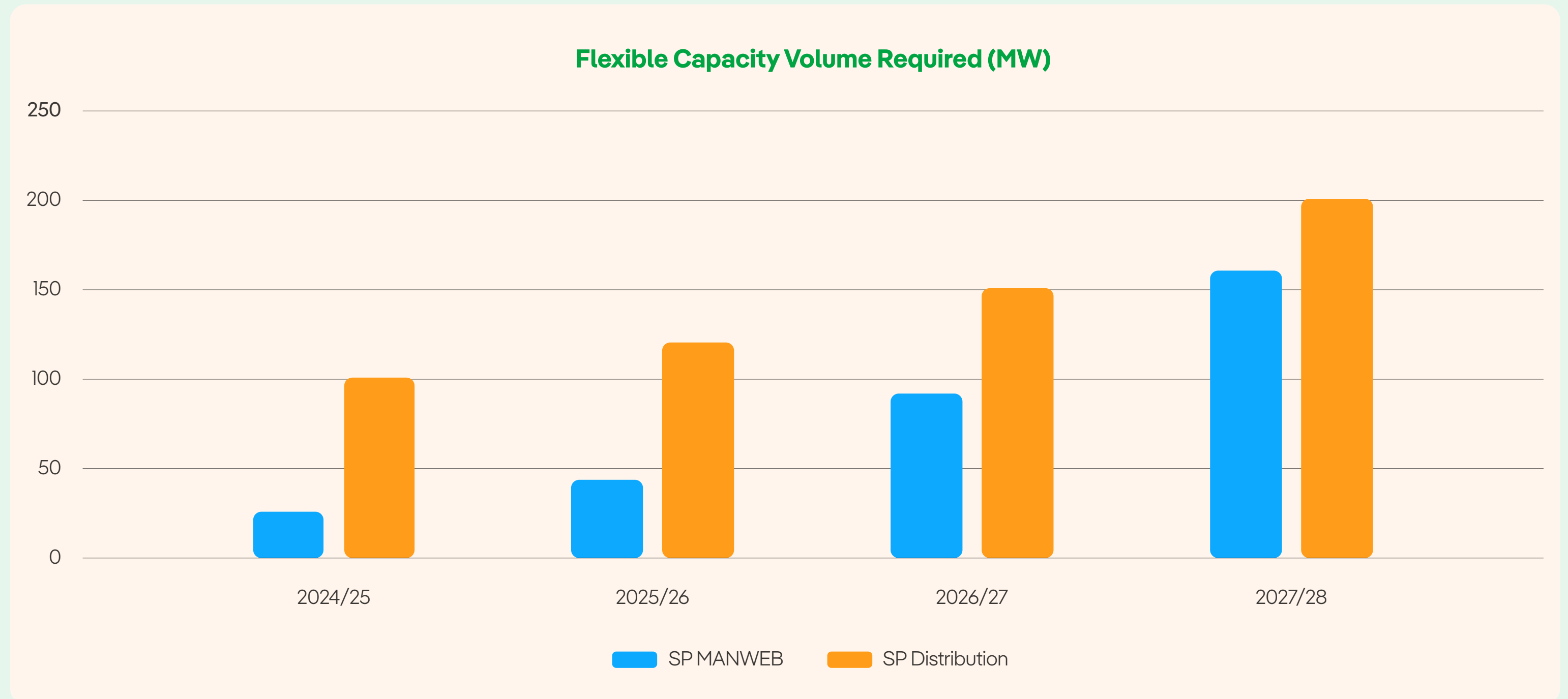
**Flexibility Contracts Procured to Date<sup>1</sup>**  
**711MW**



**Estimated Total MWh Required Winter 2024-25<sup>2</sup>**  
**7,057MWh**



**Estimated FSP Revenue Winter 2024-25<sup>3</sup>**  
**£389k**



Note: The potential revenue displayed is based on our current Distribution Future Energy Scenarios (DFES), which drive our forecast reinforcement requirements and an estimated level of utilisation. Changes to our underlying assumptions informed by a range of factors out with our control, including the uptake of low carbon technologies may result in material changes to the potential revenue available as part of our flexibility tenders.

<sup>1</sup> Flexibility Contracts Procured to Date means the amount of MWs accepted as part of a successful tender bid.

<sup>2</sup> Estimated Total MWh Required Winter 2024-25 refers to the MWh volume required between November 2024 and March 2025.

<sup>3</sup> Estimated Total Value of Winter 2024-25 Flexibility Contract refers to the total estimated value available between October 2024 and March 2025.

## SP Distribution (SPD) Outlook

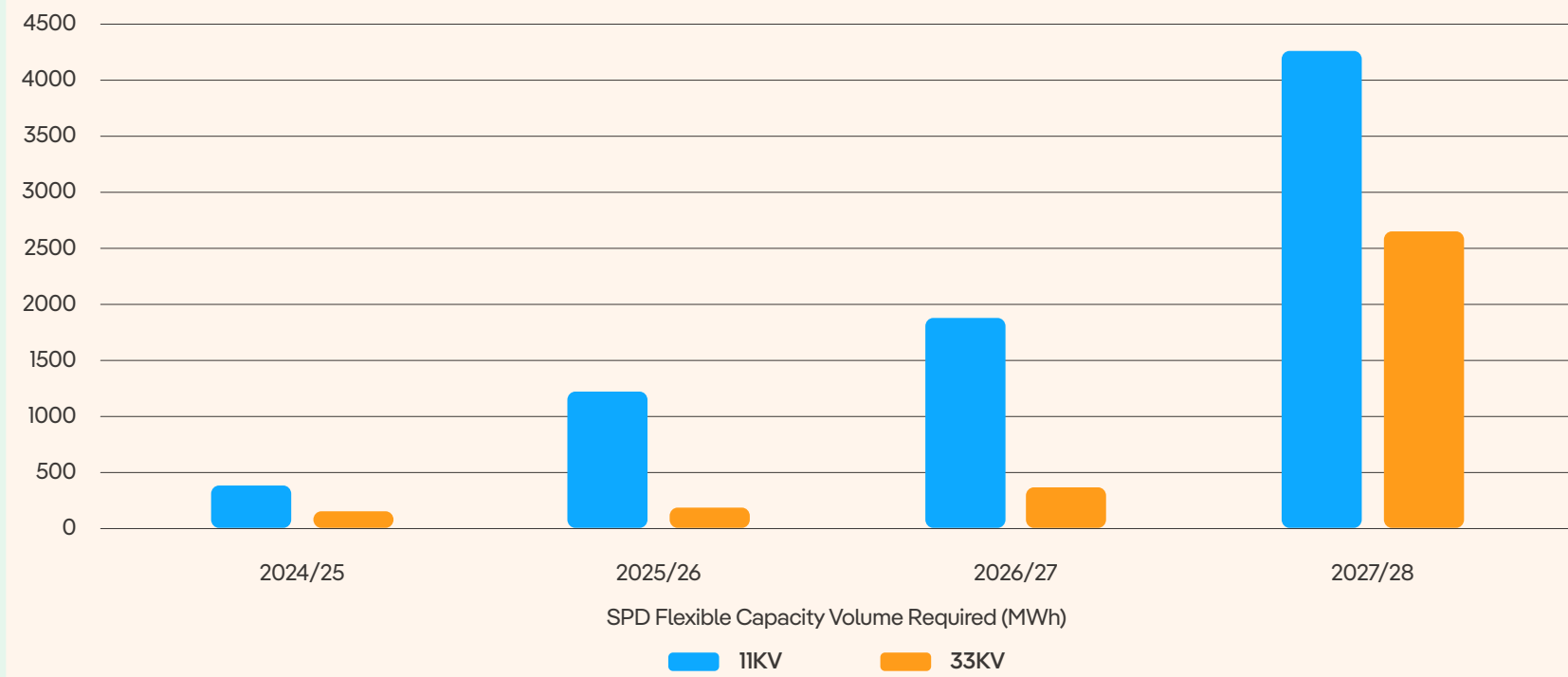
This section highlights our full requirements for the SP Distribution Licence area.

The heat map highlights the locational requirements across our SPD Licence area over the next 4 years. A longer-term view of estimated flexibility requirements and associated location information is available on our [Open Data Portal](#).

By 2028 our flexibility market in our SP Distribution Licence Area is estimated to grow by **472MW**<sup>1</sup> from Winter 2024 with the estimated value of the SPD market to be **£3.8m**.

A full list of our sites' requirements and estimated value of flexibility in each location is available in our [Market Prospectus Supporting Data](#) document as well on our [Open Data Portal Flexibility Page](#).

Estimated Total Flexible Capacity Volume Required (MWh) in SPD



Note: The potential revenue displayed is based on our current Distribution Future Energy Scenarios (DFES), which drive our forecast reinforcement requirements and an estimated level of utilisation. Changes to our underlying assumptions informed by a range of factors out with our control, including the uptake of low carbon technologies may result in material changes to the potential revenue available as part of our flexibility tenders.

<sup>1</sup> Flexibility Contracts Procured to Date means the amount of MWs accepted as part of a successful tender bid.

<sup>2</sup> Estimated Total MWh Required Winter 2024-25 refers to the MWh volume required between November 2024 and March 2025.

<sup>3</sup> Estimated Total Value of Winter 2024-25 Flexibility Contract refers to the total estimated value available between October 2024 and March 2025.

## SP Distribution PLC (SPD) Total



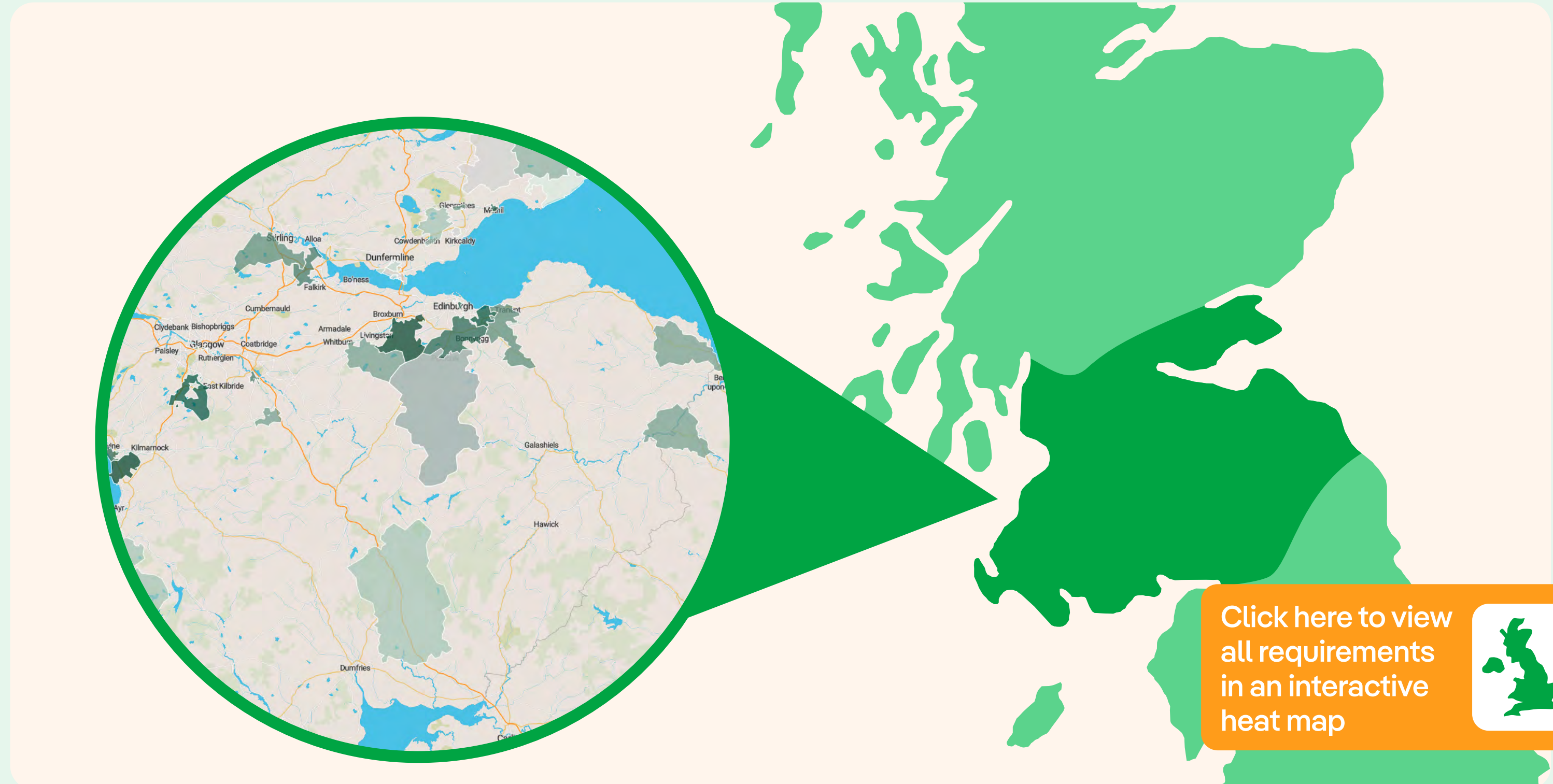
Flexibility Contracts Procured to Date<sup>1</sup>  
**242MW**



Estimated Total MWh Required Winter 2024-25<sup>2</sup>  
**514MWh**



Estimated Total Value of Winter 2024-25 Flexibility Contracts<sup>3</sup>  
**£240k**



Click here to view all requirements in an interactive heat map

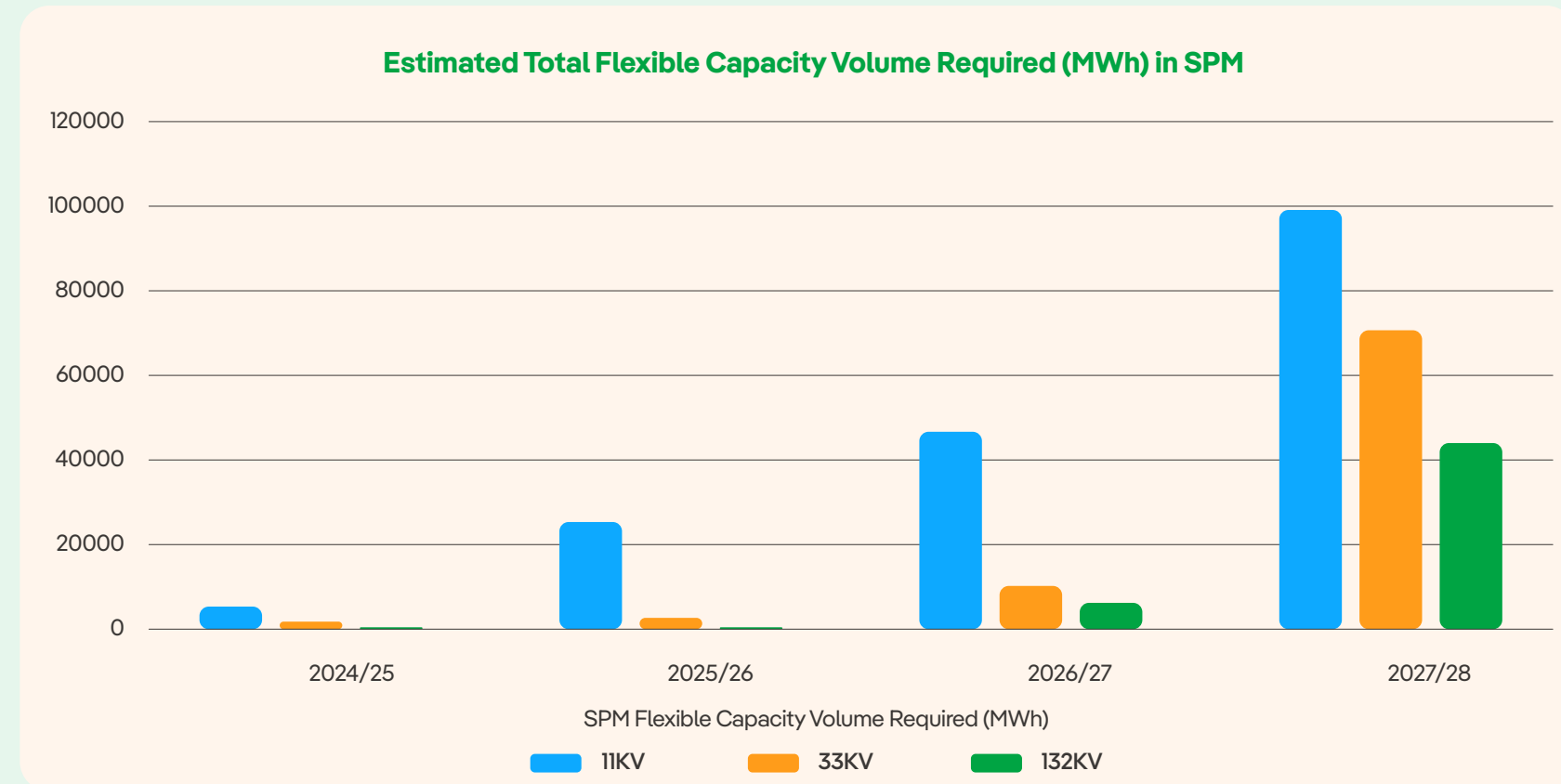
## SP MANWEB (SPM) Outlook

This section highlights our full requirements for the SP MANWEB Licence area.

The heat map highlights the locational requirements across our SPM Licence area over the next 4 years. A longer-term view of estimated flexibility requirements and associated location information is available on our [Open Data Portal](#).

By 2028 our flexibility market in our SP MANWEB Licence Area is estimated to grow by **296MW<sup>1</sup>** from Winter 2024 with the estimated value of the SPM market to be **£7.5m**.

A full list of our sites' requirements and estimated value of flexibility in each location is available in our [Market Prospectus Supporting Data](#) document as well on our [Open Data Portal Flexibility Page](#).



Note: The potential revenue displayed is based on our current Distribution Future Energy Scenarios (DFES), which drive our forecast reinforcement requirements and an estimated level of utilisation. Changes to our underlying assumptions informed by a range of factors out with our control, including the uptake of low carbon technologies may result in material changes to the potential revenue available as part of our flexibility tenders.

<sup>1</sup> Flexibility Contracts Procured to Date means the amount of MWs accepted as part of a successful tender bid.

<sup>2</sup> Estimated Total MWh Required Winter 2024-25 refers to the MWh volume required between November 2024 and March 2025.

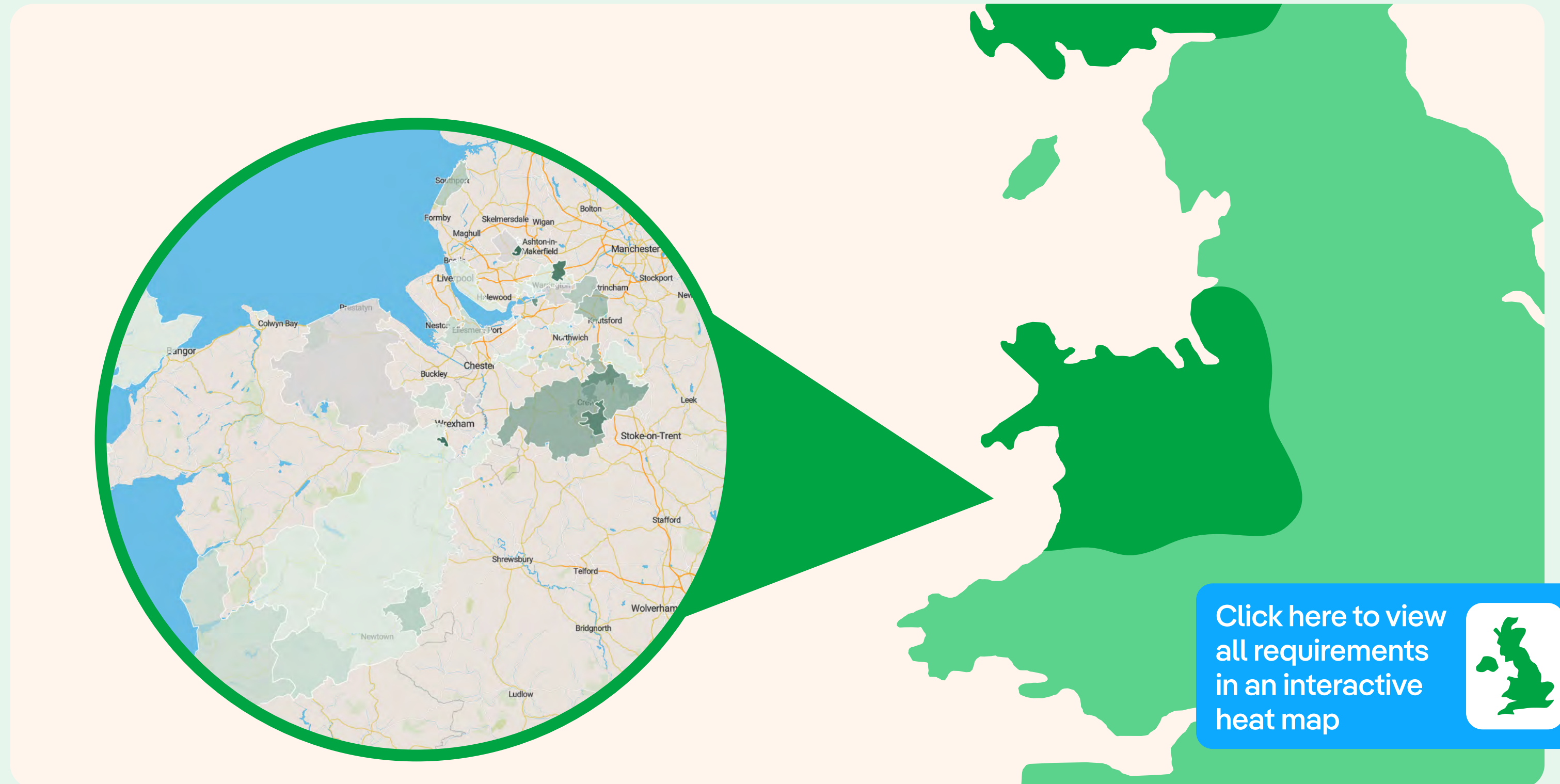
<sup>3</sup> Estimated Total Value of Winter 2024-25 Flexibility Contract refers to the total estimated value available between October 2024 and March 2025.

## SP MANWEB PLC (SPM)

**Flexibility Contracts Procured to Date<sup>1</sup>**  
**469MW**

**Estimated Total MWh Required Winter 2024-25<sup>2</sup>**  
**6,543MWh**

**Estimated Total Value of Winter 2024-25 Flexibility Contracts<sup>3</sup>**  
**£148k**



[Click here to view all requirements in an interactive heat map](#)



## Future Flexibility Market Opportunities

During the early years of distributed flexibility we have been focused on using flexibility to manage the long term requirements of our network, informed by our [Distribution Future Energy Scenarios \(DFES\)](#), however we are committed to creating new opportunities for FSPs. These new opportunities will still be tendered within the framework of the standard flexibility products but may be driven by different use cases for the DSO. For each of these use cases we need to establish the benefit case, this will in turn define our guide prices. It is essential that this represents value for our customers and we test each use case to demonstrate this.

In the last year we have focused on Operational Flexibility, using flexibility to manage network risk during planned outages. We are now working closely with our control room planning teams to review all planned major outages, seeking flexibility where appropriate. To date we have primarily engaged with large controllable plant (>10MW) however in future we also envisage utilising intermittent plant or aggregated domestic response provided the technical requirements can be met. Operational Flexibility now forms a standard part of our flexibility requirements portfolio and we expect to provide market opportunities of ~£60-80k p.a.

Detailed here are a range of initiatives that we are currently pursuing with a view to eventually opening them up as full service offerings. With each update of our Market Prospectus we will outline the progress against these initiatives until they are ready to be deployed as a standard service requirement.



### Demand Turn-up



In 2022 we trialled the use of Demand Turn-up with Octopus Energy, with the purpose of managing generation constraints, This trial demonstrated that there is a clear capability for domestic demand turn-up to respond to network needs. It is our intention to establish this as a standard service offering, however we first need to demonstrate the value proposition, ensuring that it represents value for our customers. We are in the process of reviewing this value proposition and once established we will provide further information on our forecast scale of deployment and the opportunity for market participants.

**Time to Market – 6 months**

### Equiflex



As part of our Just Transition strategy we are seeking to ensure that all of our customers are able to participate and benefit from providing network flexibility. To that end launched our Equiflex project, as part of the Strategic Innovation Fund (SIF) we are working with key partners like East Ayrshire Council, Energy Action Scotland and Frazer-Nash to understand how fuel poor customers can benefit and take part in network flexibility. This project was recently approved by Ofgem to progress to the SIF Alpha phase and we will provide updates in our Market Prospectus as this exciting project progresses.

**Time to Market – 24 months**

### Low Voltage



As we progress towards Net Zero there will be a significant impact on low voltage networks with an increasing requirement for investment, visibility and control of an area of our network that was historically fit and forget. We now have in place a Low Voltage (LV) Support room which has improved monitoring and control on LV networks. We are working with this team to identify opportunities to use flexibility to manage LV constraints. This will become increasingly important as more electric vehicles, heat pumps and other technologies are connected to our LV network(s).

**Time to Market – 12 months**

### Megawatt Dispatch



Where we have deployed Constraint Management Zones (CMZs) the NESO has traditionally not allowed customers connected within these zones to participate in NESO markets. This is because the autonomous nature of CMZ could result in a counter action to take place, i.e. if the NESO dispatches a generator the CMZ could identify this as spare capacity and allow another generator to utilise it. We are working with the NESO to remove this market limitation through system integration, ensuring that these counter actions do not take place and customers can act freely in NESO or DSO markets.

**Time to Market – 12 months**

## What's Next ?

**Our commitment to facilitating growth in a Flexibility Services Market means that we must ensure there is a clear and transparent path for procuring services.**

Where it is possible to do so, we will procure Flexibility Services via competitive tender and will run additional longer-term tenders when appropriate. We will continuously monitor our Flexibility procurement processes and it is our intention this year to attain whether shorter-term tenders will reduce barriers to the DSO flexibility market going forward.

### Annual updated view of Market Requirement and Participating volumes

We intend to publish an update to our short and longer outlook in Q3 of each year via our Market Prospectus Outlook document.

### Flexibility Feedback

If there is further analysis or insights in relation to Flexibility that you'd like to let us know Please reach out and speak to us directly, we want to hear your feedback to help us shape the Future of Flex!

## What does the Future of Flex look like for you?

### Removing Current Challenges

What Barriers still Exist in Distribution Flexibility Markets ?  
What would you like to see included within our future Market Prospectus?

### Making it easier to participate

We're here to help get you onboarded along with our third party flexibility platform provider Piclo.

### Creating Market Opportunities

What's your Net Zero Ambition, how can providing flexibility services realise that ambition?

If you would like to speak to us directly about your portfolio contacts us at:  
[flexibility@spenergynetworks.co.uk](mailto:flexibility@spenergynetworks.co.uk).

**We are committed to Flexibility and believe it will be a key tool required to achieve Net Zero at the lowest overall cost for our customers.**

## Speak to the Flexibility Team

### Market Development and Commercial Operations

We hold a mix of skills from a range of different backgrounds covering Engineering, Commercial, Generation, Trading, Route to market, Market Engagement. Our main aim is to facilitate Flexibility as a real solution enabling us to transition to net zero.



**Pamela Mathieson**  
*Flexibility Procurement Manager*

**Vision:**  
"Integrated Flex solutions that are part of the toolbox..."



**Elin Williams**  
*Lead Energy System Specialist*

**Vision:**  
"Automated Solutions, Smart Data, Flex Benefit for our Network and Customer."



**George Fournarakis**  
*Senior Energy System Specialist*

**Vision:**  
"The future of flex is one where flex is considered as the first solution to network problems across SP Energy Networks."



**Leonard Baraclough**  
*Energy System Specialist*

**Vision:**  
"...Data leading the way to inform and drive Flexibility."



**Basil Mangottil**  
*Senior Commercial Analyst*

**Vision:**  
"Simplified processes, across the Flexibility Lifecycle..."

**Our vision for a just transition to Net Zero is both a process and an end goal which we cannot achieve alone. We are committed to reviewing our progress regularly and working collaboratively with all of our stakeholders - ensuring that no one is left behind in the energy transition.**