



Local Authorities Guide to

Participating in SP Energy Networks' Flexibility Services

June 2025

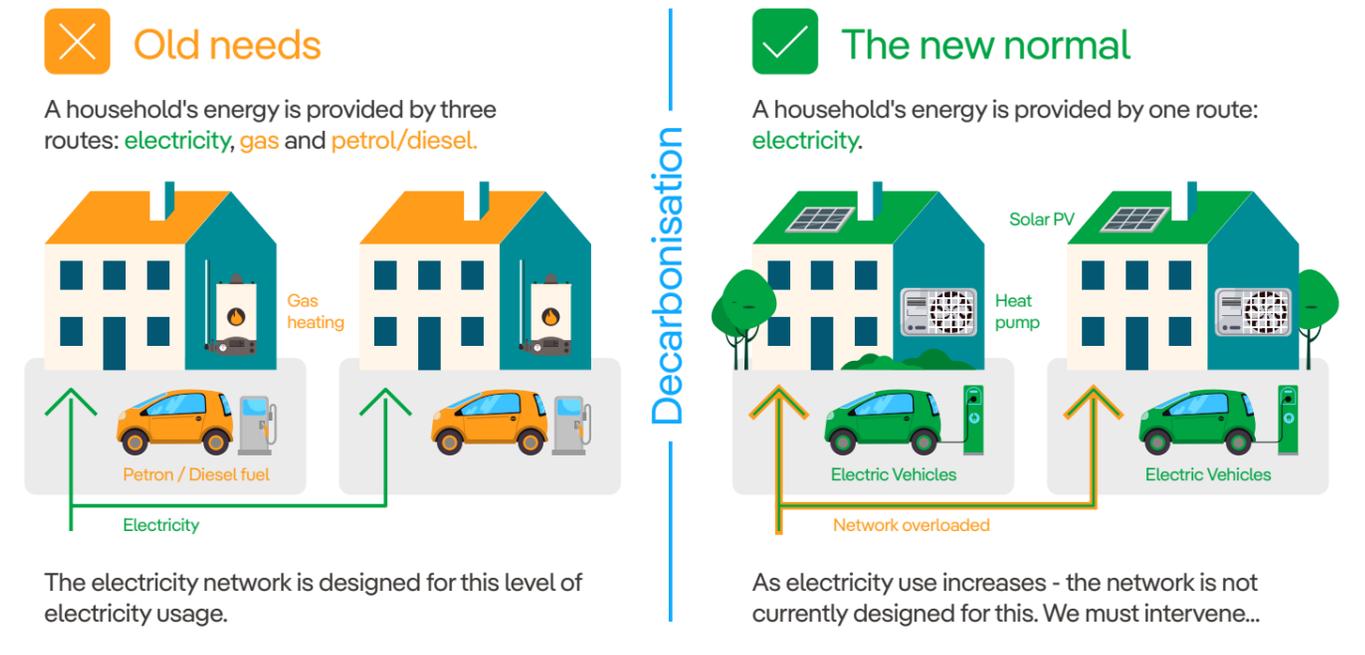
Contents

Participating in SP Energy Networks' Flexibility Services	03
How Local Authorities Can Get Involved	05
The Flexibility Services Process – Step by Step	07
Participation Made Simple: Introduction	08
Types of Flexibility Services You Can Offer	10
Bid Assessment	11
Future Opportunities and How to Stay Involved	14

Participating in SP Energy Networks' Flexibility Services

As we move towards a cleaner, greener energy system, the way we use electricity is changing. More people are generating their own power through technologies like solar panels, and more of us are using electricity for heating and transport.

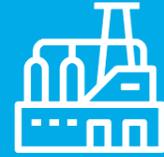
This shift puts new demands on the electricity network, which needs to be more flexible to keep everything running smoothly and reliably.



Flexibility means asking customers to increase or reduce their electricity use or generation at certain times, in return for an incentive. For example:



Electric vehicle owners might be asked to charge at off-peak times.



Factories might shift operations to avoid peak demand.



Generators might adjust output to support the grid during maintenance works on the network

These services help us avoid network constraints, reduce the need for costly upgrades, and keep the lights on for everyone.

But flexibility also plays a key role in **achieving Net Zero**. It allows us to:



Integrate more renewable energy like wind and solar.



Reduce reliance on fossil fuels.



Lower carbon emissions across the system.

For Local Authorities, this presents a real opportunity. By adjusting how and when they use electricity across their buildings, EV fleets, and other assets, they can:

- Earn financial incentives
- Support their own climate action plans
- Lead by example in their communities

At SP Energy Networks, we're committed to making it easier for Local Authorities to get involved. We're raising awareness, offering clear guidance, and building strong partnerships to help unlock the full potential of flexibility.

Together, we can create a smarter, more responsive, and lower-carbon electricity network that benefits everyone.



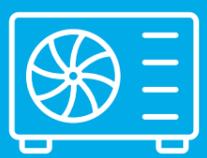
How Local Authorities Can Get Involved

Local Authorities have various assets (such as buildings, batteries, solar and EV chargers) which can be used to provide flexibility. You might be able to take part if you are:

- Running or planning a project that includes **electricity generation** (like solar or wind), **energy storage** (like batteries), or **flexible demand** (like smart heating systems).
- Managing or have access to controllable assets — **these are devices that can be turned on or off or adjusted remotely, such as:**



Electric vehicle (EV) chargers/Fleet Hubs



Heat pumps



Smart appliances



Commercial building lighting/cooling/heating



CHPs

If you're not sure whether your group qualifies, don't worry—this guide will help you explore your options and understand what's possible.



Examples of Participation

Here are some real-world examples of how local authorities can contribute:

- Buildings Reducing Demand During High-Use Periods**
 Commercial buildings, schools, or other shared buildings can reduce their electricity use during busy times—for example, by turning off non-essential equipment or shifting usage to quieter periods.
 - Battery Storage Discharging During Peak Times**
 If your building has a battery system, you can release stored electricity back to the grid when demand is high. This helps reduce pressure on the network and supports local energy needs.
 - Solar PV Adjusting Output Based on Grid Needs**
 Solar panels can be set up to either increase or reduce the amount of electricity they send to the grid depending on what the network needs at that time. This helps keep the system balanced.
- These actions might seem small, but when combined across many groups, they can make a big difference to our network. Over just the last 8 months we have dispatched half a Gigawatt Hour (GWh) of flexibility across our network and have paid out over £100,000 in flexibility payments for it.
- We estimate that up to £12 million worth of flexibility opportunities will be available across our network between now and 2028.
- This represents the potential value that flexibility providers could access by supporting the network—helping to manage demand, reduce constraints, and earn a fair return.
- Looking ahead, we're already developing our plans for the next regulatory period, ED3 (from 2028 onwards), where we expect even more opportunities for flexibility as the energy system continues to evolve and grow.

Estimated £12 million

We estimate that up to £12 million worth of flexibility opportunities will be available across our network between now and 2028.

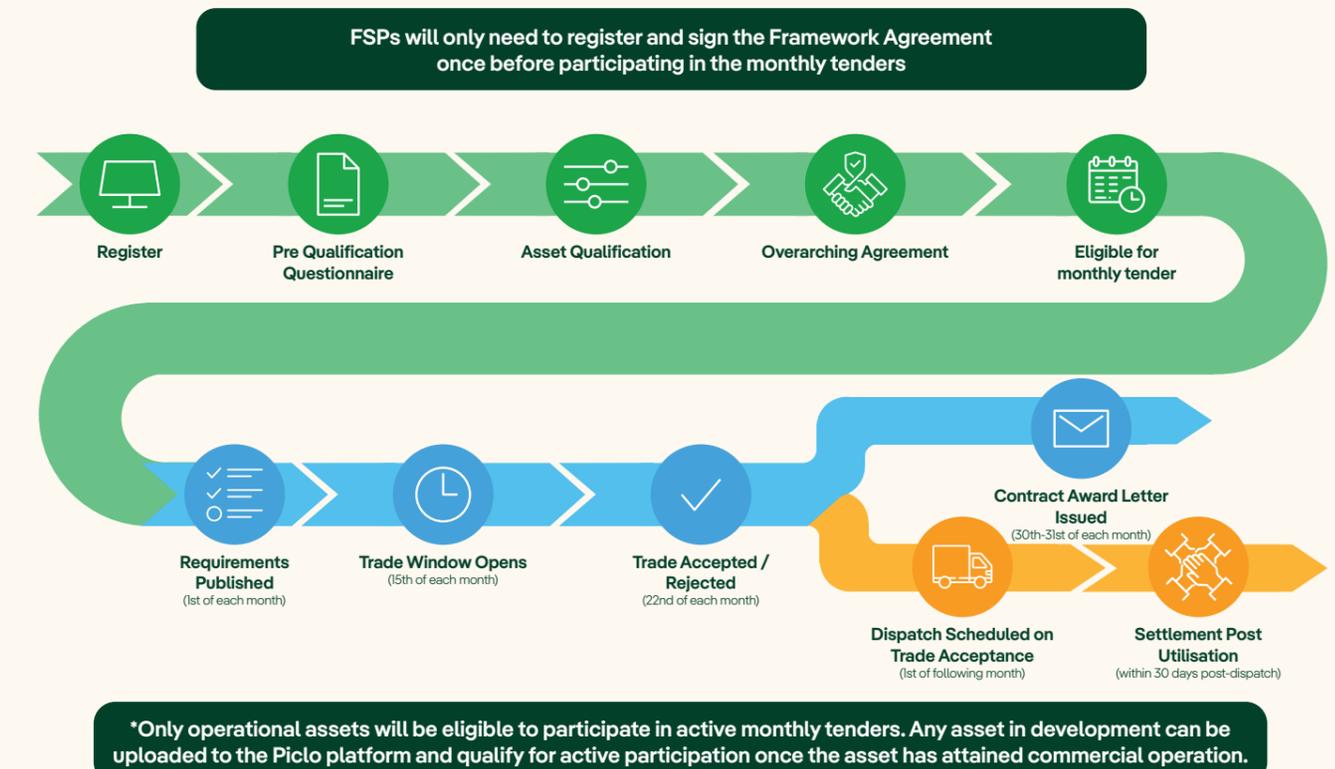
This represents the potential value that flexibility providers could access by supporting the network—helping to manage demand, reduce constraints, and earn a fair return.

Looking ahead, we're already developing our plans for the **next regulatory period, ED3 (from 2028 onwards)**, where we expect even more opportunities for flexibility as the energy system continues to evolve and grow.



The Flexibility Services Process – Step by Step

SPEN follows a clear process to identify, procure, and use flexibility services. We allow all types of assets both from the demand and generation side to participate in our competitions with no minimum requirements for capacity offered to us. We procure all our flexibility requirements on the same platform and have an end to end process which allows providers to have a seamless journey from the moment they register to getting paid after a flexibility event. **The below graph highlights this process:**



The technical requirements are manageable with the right support. In the Pre-Qualification stage, you simply need to make an account on the Piclo Platform with your business details, upload your asset onto the platform through a simple excel sheet, and register to participate in SPEN's month ahead market.

Once a competition comes up, you have two weeks to assess the hours and requirements and make a decision on what price you want to bid at that makes the most sense for your asset and financial planning.

On bidding day, you simply provide us with a price and capacity, and a few days later we accept or reject your bids. If your bid is accepted, you will then be given dispatch

instructions, and it will then be your responsibility to ensure you provide us with the dispatch you are contracted for.

At the end of the flex event, you simply upload how many MWs your asset dispatched and that is assessed against a Zero baseline for generation assets, asset capacity for BESS, and a fixed reference for most demand assets. These ensure you get the fairest baseline that will allow you to be settled for the true amount of Flexibility your provided for us.

All of this can be done manually on Piclo, or through APIs. We have providers who do this all themselves, or who utilise third parties to manage this for them. We are happy to discuss with you which of the two ways make more sense.

Participation Made Simple

Getting involved in flexibility services might sound technical, but with the right support, it's very achievable. Understandably, if you do not have a current energy management system or aggregation tools within your organisation, you will most likely require third party support for that which does come at a cost to you however, there are a wide range of financial, societal, and sustainable benefits that come with participating in flexibility.

Here's a breakdown of what's needed to participate, and how you can approach it—either on your own or with help from partners.



Tip:



Automated systems make participation easier and more reliable, but manual participation is still possible for smaller or simpler setups.

Pre-Qualification

Before you can take part, your group will need to register and provide some basic information about your project. This helps SP Energy Networks understand what your site can offer.

What's involved:

- Registering your organisation and project
- Sharing simple technical details (e.g. type of technology, size of system, location)
- Confirming who owns or operates the equipment

Who can help

If you work with a third-party aggregator or technology provider, they can often handle this step for you. This will have a cost attached to it. If you manage your own assets, you may need to gather this information yourself—but support is available.

Metering

To take part in flexibility, you need to be able to measure how much electricity you're using or generating. This is important so SPEN can see the impact of your actions and settle payments fairly.

What's needed:

- A meter that can record your electricity use or generation in real time or near real time
- The ability to share this data with SPEN or a flexibility platform

Options:

- Some smart meters may be suitable
- Larger systems may need more advanced metering
- There are third parties that conduct meter aggregation and real time monitoring that can support if nobody in house has this capability

Communication

To respond to flexibility events, your system needs to receive a signal—this could be a manual instruction (e.g. an email or phone call) or an automated signal sent to your equipment.

What this means:

- You'll need a way to receive and act on requests to change your energy use or generation
- This can be done manually by someone in your group, or automatically through a control system



Key Considerations for Local Authorities

Whether you're managing your own system or working with a partner, here are a few things to think about:

Who manages the asset?

If your group owns and operates the equipment, you'll need to handle the technical steps—or work with someone who can. If a third party manages it, they may take care of most of the process.

Pricing

Flexibility services can generate income. Prices vary depending on location, time of day, and how much flexibility you can offer. You can set your own price or accept market rates. Here at SPEN we provide long term forecasts you can use to model financial benefits you can access through our ODS platform or directly on our website (link to ODS and to Market Prospectus)

Dispatch and Settlement

“Dispatch” means being called on to act—like reducing demand or exporting power. “Settlement” is the process of confirming what happened and arranging payment. This is usually handled by the platform or aggregator you work with.

Support is Available:

You don't have to do this alone. SPEN and other partners can help guide you through the process, and there are tools and services designed to make participation easier.



Bid Assessment

Once the bidding window has closed, we will assess all bids received against our bid criteria. For each bid submitted, we will assess:

- the overall value of the service offered
- the technical parameters
- the competing bids.

We will consider all bids that meet the technical and operational requirements, regardless of their pricing signal range. If we receive multiple bids for a constraint location, we will accept the bid that meets full capacity at a higher price over one that does not meet full capacity at a lower price, provided the higher bid is still below the identified ceiling price for that location. This approach ensures the best cost for our end customers by meeting full flexibility requirements and providing the optimal deferred reinforcement benefits.

We will introduce changes to our requirements if the parameters have altered after the acceptance of monthly bids to ensure we are continuously utilising optimal solutions that offer the best value for our customers.

Support Available

Full guidance on our bidding assessment criteria is available in [section 7.2 \(Evaluation Criteria\) of our Participation Guidance](#). We have a governance process to assess the accepted monthly bids on an annual basis to ensure that the technical and financial parameters set prior to the launch of the month ahead tenders are still applicable.

Tools and Platforms You'll Use

Digital tools make it easier to register, bid, and deliver services. We have two key tools that we use to allow you to participate in our Flex Markets and to have all the data you require to make informed decisions about your assets.

Types of Flexibility Services You Can Offer

Here at SPEN we procure a wide range of ENA standard flexibility products. We procure Scheduled Utilisation, Operational Utilisation, Scheduled Availability, and Variable Availability products to help us address different types of network needs. Here is a short explanation of what each of those means and why we use it:

Scheduled Utilisation

This product is a guaranteed utilisation product meaning that when you secured an SU contract with us, you are guaranteed and are guaranteeing that you will be dispatching on the hours and with the MWs you have been contracted for. We use this product to address our reinforcement deferral needs as it allows us to know exactly where and when we will reduce demand on our network.

Operational Utilisation

This product is used for our planned outage products and means that utilisation is called upon if and when our control room requires it to manage with a fault in our network. Due to this having varying degrees of likelihood for dispatch, the £/Mwh for utilisation are higher.

Scheduled Availability

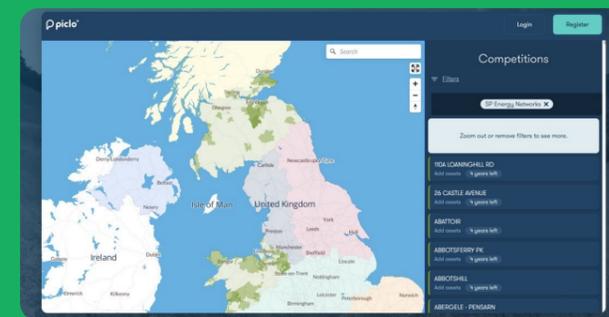
This is used concurrently with Operational Utilisation and sets out terms for which the capacity of your asset can be made available to us. You will get paid £[x] per MW available per hour you have it available for us during these planned outages. This allows you to still receive a payment for your services even if you don't get utilised as we will always pay the availability fee when we have utilised a scheduled availability product.

Variable availability

This is a slightly newer product for us and is to be used for unforeseen events such as storms and unplanned outages. What this means is that your assets availability can be requested days/hours before the unforeseen event and only at that time the availability payment kicks in. Due to this being a highly variable product, the £/Mwh are high.

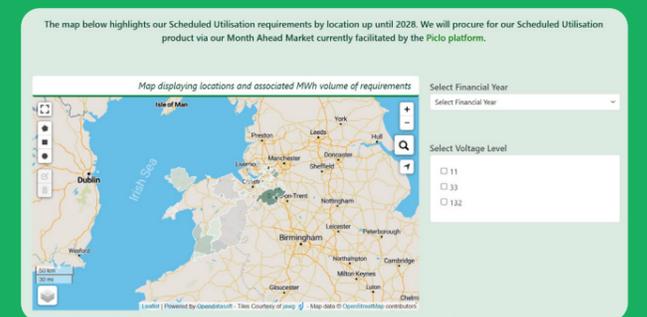
Key Tools

Piclo MAX - Piclo Max is a platform designed for Flexibility Service Providers (FSPs), enabling them to access and participate in multiple electricity markets through one interface. Here you will be able to see where we require flexibility, upload your assets, place bids, manage dispatch and settlement, and communicate with the Piclo team for any customer service requirements.



SPEN Open Data Soft Platform -

SP Energy Networks Open Data Portal provides access to data on our Distribution and Transmission networks. Here you can access tools such as our heat maps, see asset maps, view long term flex opportunities, and get an overview of past competition results.





Benefits for Local Authorities

By taking part in flexibility services, local authorities can unlock a range of benefits. Whether you're focused on earn additional income for projects, sustainability, environmental impact, or carbon savings, flexibility can support your goals.

Key Benefits

Financial Returns

Flexibility services offer two main types of payments:

- **Availability Payments** – for being ready to respond when needed
- **Delivery Payments** – for actually adjusting your energy use or generation when called upon

These payments can provide a valuable income stream to support your ongoing work, fund new projects, or reinvest in your local authority.

Local Resilience

By managing energy locally, your local authority can help reduce reliance on centralised systems.

This means:

- Greater energy independence for your local authority
- More control over local energy use
- Improved ability to respond to local challenges, like power outages or high demand

Sustainability

Flexibility helps make better use of renewable energy by:

- Reducing the need for fossil fuel backup
- Supporting the integration of local solar, wind, and battery systems
- Lowering carbon emissions across the network

Your participation directly contributes to a cleaner, greener energy system.

1. Building Energy Independence and Local Resilience:

Flexibility Services encourage and empower local authorities to take control of their local energy system. By managing flexible demand and generation locally we can become less reliant on the wider grid for stability which will increase energy security and resilience in your area.

2. Environmental Impact & Net Zero Communities:

Flexibility will aid the integration of more renewable energy connecting to the grid network by managing the intermittency caused by increased number of Low Carbon Technologies connecting to the grid. This directly supports your decarbonization goals and the collective impact amongst multiple regions in our network can lead the way in reaching our national Net Zero targets.

3. Net Zero Empowerment and Ownership:

Flexibility is an opportunity for Local Authorities to actively participate in the energy transition, beyond just generating or consuming energy. You can become proactive players in grid management and have a fair chance of participating alongside some of the biggest players in the energy industry.

4. Local benefit for a wider Just Transition:

By participating in SPENs DSO Flexibility Market, local authorities will receive flexibility payments which can generate an additional revenue stream that stays within the local area. Flexibility payments not only have direct impacts on your project OPEX and yearly revenue, but they also indirectly mean that we spend less for constraints on our network which saves even more money for the end consumer – the bill payer. This is because by utilising local flexibility from local authorities, we can run our network more efficiently and reduce the cost of early network upgrades. This aids in Reducing energy bills for your local authority but also for all consumers making your local benefit national! Over the last 5 years we have delivered over £50 Million in cost savings through flexibility and there is a lot more we can do!

Local Authority Case Study - Liverpool City Council



What we Looked at

Liverpool city council has kicked off a wide range of innovative projects to decarbonise the area and achieve some of the most ambitious net zero targets in the country. Part of these projects involve understanding the role that flexibility may have in both decarbonising local grids, but also adding an additional revenue stream. We have now held multiple workshops with LCC where we showed some potential financial models and have signed up LCC as a registered Flex provider on Piclo.

Flexibility

We found that a lot of key LCC current and planned assets fall within our Lister Drive CMZ which has flex requirements through to the end of ED2 and are now exploring which planned LCC assets will be able to provide flexibility and what the revenue opportunity is for Liverpool City Council.

Key Takeaway

A key piece of work is needed for each local authority to understand what flexible assets they have, where they fall within our network, and what the opportunity and requirement to operate is to seize that opportunity and we are here to support and guide along this whole process.

Future Opportunities and How to Stay Involved

Flexibility is a growing space with evolving opportunities. 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. Our Flexibility Market Prospectus is a great tool to give you an overview of the opportunities and value of our flex markets.

Ways to Stay Involved:

- Subscribe to SPEN updates and Pico Flex alerts
- Explore new technologies and funding opportunities
- Join our webinars
- Get in touch with us at flexibility@spenergynetworks.co.uk



SP Energy Networks
320 St Vincent Street, Glasgow G2 5AD
www.spenergynetworks.co.uk

