

Issue date: Oct 2023

Participation Guidance **Autumn 2023 Flexibility Tender**

UK Power Networks (Operations) Limited

Reference: PE1-0077-2023 Flexibility Services

Version 1.0
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1 Summary

UK Power Networks - Distribution System Operator (DSO) is seeking to recruit Flexibility Providers (FPs) who have solutions ready to start by **Summer 2024** to **Winter 2026/27**. Flexibility Services will be used to alleviate anticipated network constraints. Key features of the recruitment are summarised below:

Service needs

- Solutions capable of:
 - demand turn down (or generation turn up) to manage demand constraints; and/or
 - demand turn up (or generation turn down) to manage generation constraints.
- Services are split into three different product types depending on network need and provider capabilities (see Section 3.2 for details).

Timelines for recruitment

- Pre-Qualification (PQ) period will open on 04 October 2023.
- PQ period will close **15 November 2023 17:00** by which time all PQ technical asset data must be uploaded onto the Piclo Flex platform.
- The competition period for pricing of successfully prequalified solutions will open 11
 December 2023 and close 29 December 2023.
- For more details of dates, see Section 2 Procurement timetable.

How to participate

- In order to pre-qualify, providers must complete the following steps through the Piclo Flex platform:
 - Online DPS (Dynamic Procurement System) application if you're a new provider; and
 - Upload assets and all relevant technical data to the Piclo Flex platform
- UK Power Networks will pre-qualify providers subject to review of the above.
- FPs which pass PQ can then bid for the relevant competitions.
- FPs will then be notified of the outcome of competition and awarded a contract, if successful.
- Full details on the procurement steps can be found in Section 5.

Contract term

- The delivery start dates vary depending on the network needs in the flexibility zones published, starting from Summer 2024 up to Winter 2026/27. The delivery time windows will be found on the <u>Piclo Flex dashboard</u>.
- Providers can set their service start date based on the flexibility zones.
- All awarded contracts will end on 31 March 2027.

Specifics:

- Minimum capability eligible: 10kW Flexible Unit (FU) flexible capacity (can be aggregated), sustainable for 30 minutes.
- For dispatchable services, FU will be dispatched at day-ahead.
- Contractual: No contractual exclusivity, Flexibility Services Standard Agreement.



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2 Procurement timetable

The stages and dates of Flexibility Services recruitment are shown below.



Table 1: Key dates for participation

Table 1: Key dates for participation			
Stage	Activity	Dates	
Stage 1 Visibility and pre-qualification	PQ opens, and - Flexibility zones signposted on Piclo; - Tender documentation published on our DSO website;	Wed, 04 Oct 2023	
	PQ close	Wed, 15 Nov 2023	
	PQ results	Mon, 04 Dec 2023	
	PQ results appeal deadline	Thu, 07 Dec 2023	
Stage 2	Competition open	Mon, 11 Dec 2023	
Competition	Competition close	Fri, 29 Dec 2023	
	Competition results	Fri, 16 Feb 2024	
	Signed contract deadline (providers will need to register on UKPN SAP sourcing system, to allow payments to be made, if not already registered)	Tue, 30 Apr 2024	
Stage 3 Onboarding	Solutions prepared for delivery in accordance with Post Tender Milestones (includes Proving Test)	In accordance with PQ submission and contract	



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3 Flexibility Services Overview

3.1 The opportunity

UK Power Networks is seeking to recruit Flexibility Providers (FPs) for multiple services across Extra High Voltage (EHV), High Voltage (HV) and Low Voltage (LV) levels. Solutions with different turn up/down capabilities and at different voltage levels have access to different pots:

Pot 1: There are 37 Flexibility Zones with EHV/HV generation constraints. The target capacity across these zones is 601 MW. Solutions that can provide demand turn-up or generation turn-down that fall within these zones are eligible. Solutions can be connected at either EHV, HV, or LV as long as they feed into the constraint. This need will be addressed through the **Dynamic** flexibility product. (See Section 3.2 for further information about the products).

Pot 2: There are 61 Flexibility Zones with EHV/HV level demand constraints. The target capacity across these zones is 242 MW. Solutions that can provide demand turn down or generation turn up that fall within these zones are eligible. Solutions can be connected at either EHV, HV, or LV as long as they feed into the constraint. There are two flexibility products open to providers at this level: Secure and Sustain products. Providers may also apply for a Dynamic contract for these zones - though these have no guarantee of utilisation.

Pot 3: There are 354 Flexibility Zones with LV level demand constraints. The target capacity across these zones is 7.1 MW. LV-connected solutions that can provide demand turn down or generation turn up that fall within these zones are eligible. This need will be addressed through Sustain flexibility product.



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3.2 Flexibility products overview

Flexibility services being procured in this tender round fall under three categories. These are summarised below, highlighting key features and differences:

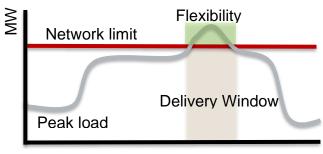
	Secure	Dynamic • Who	Sustain
Direction of flex required	Demand turn-down (generation turn-up)	Demand turn-up (generation turn-down) Demand turn-down (generation turn-up)	Demand turn-down (generation turn-up)
Payment	Availability and Utilisation Fee: Payments for availability and energy delivered	Utilisation Fee: Payments for energy delivered	Service Fee: Payments for peak load reduction within Service Window
Capacity and price variation	FPs commit delivery and fees at contract sign	FP specify Utilisation Fee and capacity available at day-ahead	FPs commit delivery and Service Fee at contract sign
Guarantee of revenue	Some revenue certainty provided by the fixed Availability Fee and capacity*	N/A	Revenue certainty provided by fixed delivery and fee*
Timings	- Seasons & time windows specified in tender - Day-ahead dispatch	No service windows Day-ahead dispatch	- Seasons & time windows specified in tender - Scheduled dispatch
Level of connection	EHV, HV or LV connected assets		
Minimum contractable unit	Minimum (aggregated) 10kW threshold sustainable for 30 mins		

^{*}Assuming delivery as per contract

3.2.1 The need for flexibility

UK Power Networks will typically procure services to manage constraints on the network where high demand or high generation is forecasted to exceed network limits for short periods. This includes deferring generation or demand-driven network reinforcement, manage planned maintenance, and unplanned interruptions. These Flexibility Services offer an alternative approach to traditional network reinforcement solutions such as upgrading network assets.

Figure 1: Flexibility Services targeting peak electricity demand at a substation



Time of day

Flexibility Services can be provided by Distributed Energy Resources (DER), which is defined as a solution that can change its level of consumption or generation relative to its normal operations. Depending on the needs and product, this change can be through responding to dispatch requests, long term response, or even through enduring changes to demand (such as energy efficiency). The DER may be a generator, storage or demand asset, or a combination of these located at the same site. A DER can also be a domestic Consumer Energy Resource (CES).



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A group of DER can be aggregated together into a single controllable unit called a **Flexible Unit (FU)**. A FU is a notional DER that can be made up of one or more real DER located within the same zone.

FUs can be made up of existing and/or planned DER. For planned DER, there must be clear Post Tender Milestones that will be monitored, and planned DER must be ready in time for the Proving Test (see 3.5).

3.2.2 Secure service

Under the **Secure service**, FUs are paid to be available during fixed service windows and only dispatched when needed to resolve operational constraints that occur within the service window. Specific months of the year and windows during the day are identified and the FP receives an Availability Fee (£/MW/h) in return for guaranteeing availability for the service periods. The FP is also paid a Utilisation Fee (£/MWh) for the energy delivered following instruction. Utilisation Instructions are issued at day-ahead. UK Power Networks is also exploring a notification at day ahead that will release a DER from providing availability during a service window to make it easier for the DER to participate in other flexibility services if there is certainty that the DER will not be required.

The service is ideal for business cases which require guaranteed cash flow.

3.2.3 Dynamic Service

Under the **Dynamic service**, FUs are contracted for close to real time service provision. The FP is paid a Utilisation Fee (£/MWh) for the energy delivered when requested by UK Power Networks. It is a non-firm service so FPs can update the available capacity and Utilisation Fee (UF) at any time up to 12:00 pm day-ahead to reflect their expected running or opportunity costs and can choose to accept dispatch requests from UK Power Networks. UK Power Networks intends to notify the FP of the dispatch instruction by 14:00 day-ahead in order to maximise the opportunity for FPs to also participate in other flexibility services.

This service is ideal for flexible solutions which can only commit to delivering flexibility on these short time scales, such as those participating in other energy or flexibility markets or those with variable flexible capacity (for example, demand reduction or intermittent generation reduction).

3.2.4 Sustain Service

Under the **Sustain service**, FUs are paid a Service Fee (£/MW/season) to reduce their peak demand (or increase their minimum generation) for the duration of the Sustain Service Windows. It is a firm service which provides a fixed revenue in return for the agreed reduced peak load.

This service is ideal for flexible solutions that can provide a long-term reduction in peak load during particular windows. This service could also be provided through enduring demand reduction programmes such as energy efficiency, if it can be demonstrated that the programme will have the required peak load reduction.

3.3 **Technical requirements**

An eligible DER needs to have a live or planned Electrical Connection with the network and should be electrically connected to the network asset(s) subject to the constraint and at a connection voltage less than or equal to the constraint voltage, or Maximum Connection Voltage, to ensure that it is effective at resolving the constraint. The area of the network containing suitable points of connection is referred to as a Flexibility Zone. The approximate zone boundary and Maximum Connection Voltage are provided on Piclo Flex.

A DER or the Flexible Unit it belongs to, participating in Secure or Dynamic, has Communication equipment and processes capable of both receiving instructions and sending information as required. Communications with UK Power Networks can be through an Application Programming Interface (API) or email. Further details are provided in Section 4.5.



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A DER has metering installed for the purposes of baselining, calculation of delivered energy and settlement. The metering is located at a suitable location and meets certain accuracy and granularity requirements (see Section 4).

3.4 Eligibility

FPs need to submit and pass company checks by signing onto the Dynamic Procurement System (DPS) via Piclo Flex. FPs with previously approved DPS will not have to resubmit. By signing onto the DPS and participating in Pre-Qualification, the FP accepts the terms and conditions of the Flexibility Services Standard Agreement and Procurement Terms & Conditions (Appendices 1 and 2 respectively).

All FPs are required to upload assets and technical data to the Piclo Flex platform in order to prequalify FUs.

Service delivery periods will vary depending on the Flexibility Zone. FPs offering more than one FU can choose a different start date for each FU (note, FPs are limited to one importing and / or one exporting FU per Flexibility Zone). The latest service date will be for Winter 2026/2027.

Pre-qualified FPs with pre-qualified FUs will be invited to the competition stage. UK Power Networks will award a contract to FUs where the following conditions are satisfied:

- The FP is accepted onto the DPS
- The sites at which the DER are installed/to be installed where known at the time of Pre-Qualification and the associated Meter Point Administration Numbers (MPANs) or sufficient location information are provided
- The MPANs are electrically connected to the network asset(s) subject to the constraint and at a
 connection voltage less than or equal to the Maximum Connection Voltage. The Flexibility Zones
 on Piclo Flex only give an indication of whether a site is electrically connected to a constraint, so
 UK Power Networks may conduct a more definitive connectivity check using the MPAN data
 provided.
- UK Power Networks is satisfied that the FU will meet the Service Requirements (Section 4) by the time of the Proving Test.

3.5 Testing

A date for a Proving Test will be agreed which will be at least one month before the chosen service start date for each FU.

The Proving Test will be paid for by UK Power Networks, with the price calculated based on the Utilisation Fee for Secure and Dynamic services and based on the Service Fee for Sustain services. For Secure and Dynamic services, the Proving Test payment will be based on energy delivered, calculated as per the Utilisation Fee calculation (with no Availability Fee). For the Sustain service, the Proving Test payment will be calculated as Monthly Service Fee divided by the average number of Service Windows in a month (the Fee for one service window of delivery).

The FP shall demonstrate the following as part of a Proving Test in respect of each FU:

- Receive and respond to UK Power Networks' instructions (for Dynamic and Secure services);
- Deliver its Flexible Capacity from the start time;
- Maintain active power delivery for an agreed continuous period; and
- Demonstrate delivery through the metered data from each DER/FU.

In line with the Flexibility Services Standard Agreement, UK Power Networks intends to amend contracted capacities in line with performance in the Proving Test. Further to this, if a FP is unable to undertake the Proving Test before the chosen service start date of the FU, UK Power Networks reserves the right to terminate the contract with the FU.



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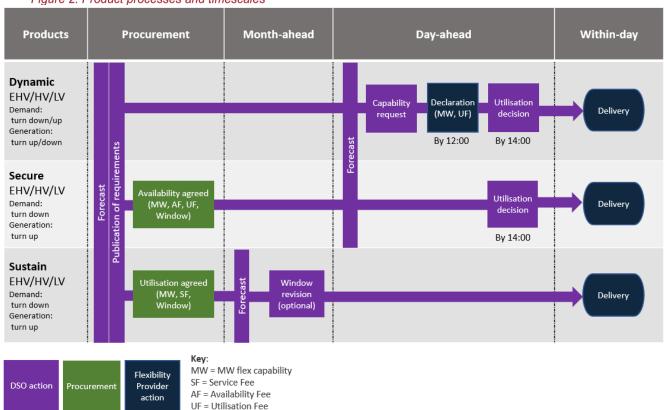
FPs have the right to request a retest in case they were not able to demonstrate the full contracted capabilities of the FU, however any retest will not be paid for by UK Power Networks.

The detailed test procedure shall be agreed between the FP and UK Power Networks.

3.6 Operations

The three products have different process timelines, as outlined in Figure 2: Product processes and timescales

Figure 2: Product processes and timescales

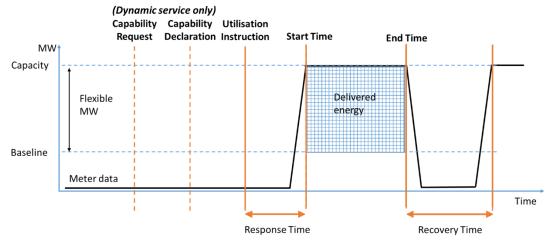




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Figure 3 provides an illustration of the day-ahead and within day process for the Secure and Dynamic services. At day-ahead, capability is submitted by the provider by 12:00 and any utilisation instructions will be issued by UK Power Networks by 14:00. Within-day, the provider will deliver services as had been instructed.

Figure 3: Secure/Dynamic operational parameters during a utilisation event



3.6.1 Dispatch

UK Power Networks will dispatch Secure and Dynamic FUs in accordance with three **dispatch principles** – cost efficiency, security of supply, and operability as set out in Figure 4: Dispatch principles.

Figure 4: Dispatch principles



The utilisation instruction for Secure and Dynamic is communicated by email or API. The process may change based on subsequent improvements in UK Power Networks' communication capabilities and will be communicated and agreed with FPs prior to any future implementation.



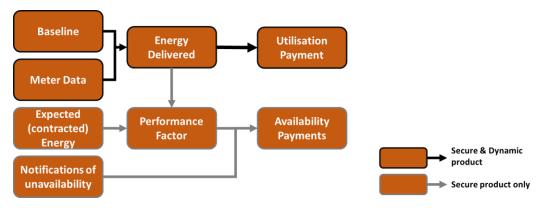
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3.7 Calculation of flexibility service charges

3.7.1 Secure and Dynamic

The Secure product has two service charges – Availability Fee and Utilisation Fee, and the Dynamic product only has the Utilisation Fee. The Utilisation Fee is calculated using the same approach for both Secure and Dynamic. Figure 5 shows the high-level calculation for these payments.

Figure 5: High-level payment calculation method: Secure and Dynamic

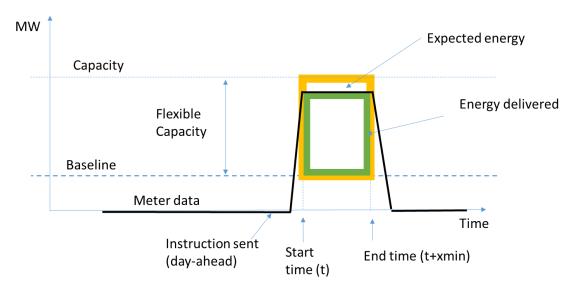


Utilisation Fee calculation

To calculate Utilisation Fee for both Secure and Dynamic, at the end of each month, the FP shall submit half-hourly or minutely resolution meter data for the FU to UK Power Networks. The meter data is compared to the baseline to calculate the energy delivered during utilisation events and hence utilisation payments, where Utilisation Payment (\pounds) = Utilisation Fee (\pounds/MWh) * Energy Delivered (MWh).

Figure 6 gives an example of a generator or storage solution FU responding to a utilisation instruction and shows the energy delivered (green box) and the expected energy to be delivered (yellow box). The same principle applies for all directions of service (demand turn-up (generation turn-down) and demand turn-down (generation turn-up)).

Figure 6: Delivery of flexible energy from an example generator or storage





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Note that over-delivery in any period is not paid, nor will it be treated as compensating under-delivery in another.

For the Dynamic product, the FP can update their Utilisation Fee up to day-ahead, see more fee guidance in Appendix 3.

A FU contracted for both Secure and Dynamic, will be paid for utilisation of their Secure contracted volume during the Service Window at the as-bid Secure Utilisation Fee. Any utilisation which occurs outside of the Service Window, or for offered Dynamic volume in the Service Window, will be paid at the Dynamic Utilisation Fee provided by the FP.

Availability Fee performance adjustments

For the Secure product, the FP shall be paid availability payments for all periods available even if the FU is not dispatched. The Availability Fee will be reduced by a Performance Factor derived on a monthly basis by comparing the energy delivered to the energy requested to be delivered during utilisation events. If a FP notifies UK Power Networks of periods of unavailability this will avoid affecting the Performance Factor through un-delivered utilisation requests however these periods will not receive Availability Fee payments.

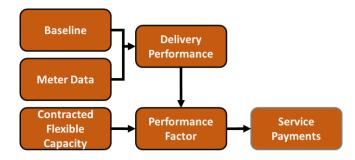
The Monthly Performance (MP) factor is derived from the Delivery Performance (DP) using tiers as shown below, where DP is calculated as the monthly ratio of all delivered energy (capped by its contracted energy) to all contracted energy expected during utilisation events. If there were no utilisation events in a month, then it is assumed that the MP = 1.

If DP is	MP =
≥ 90%	1
< 90% AND ≥ 80%	0.8
< 80% AND ≥ 70%	0.7
< 70% AND ≥ 60%	0.6
< 60%	0

3.7.2 Sustain

Figure 7 shows the high-level method for calculating the Sustain service payment.

Figure 7: High-level payment calculation method: Sustain



At the end of each month, the FP shall submit half-hourly resolution meter data for the FU to UK Power Networks. The FP shall be paid service payments for all months that a Sustain service is provided. The service payments will be adjusted based on Monthly Performance Factor (MP), calculated by comparing the actual peak load to the Baseline. Peak load for each month is the average of the three highest half-hour peak loads across all Sustain Service Windows for that month. Note that over-delivery is not paid.



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The MP is derived from the DP using tiers as shown below.

DP	MP
≥ 90%	1
< 90% AND ≥ 80%	0.8
< 80% AND ≥ 70%	0.7
< 70% AND ≥ 60%	0.6
< 60%	0



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3.8 Baseline methodology

There are a number of baselines established for different DER types for different services. The current baseline options are identified in Table 2 below.

Table 2: Baselines for each DER type

DER type	Secure / Dynamic service	Sustain
Intermittent generation (Demand turn-up / Generation turn-down sites only)	Preferred: Last Observation Option: Nomination	N/A
Schedulable generation	Recent History	Historic peak
Storage	Recent History	Historic peak
DSR (all except Domestic EV CPs)	Recent History	Historic peak
Domestic EV Charge Points	Recent History	Option 1: Home EV Option 2: Historic peak
Energy efficiency (and other enduring solutions)	N/A	Historic peak

3.8.1 Operational Baselines (Secure and Dynamic)

The Secure and Dynamic services use operational baselines.

Recent History Baseline: A recent history baseline is calculated based on days within the last fortnight which have no utilisation instructions. So, if no utilisation instructions have taken place, the calculation will be based on either 10 workdays, or 4 non-workdays. The baseline is a half-hourly profile calculated from either the average of the workdays or the average of the non-workdays depending on the day-type of the utilisation.

Last Observation Baseline: This baseline is defined as the average output of the FU in the last full half hour preceding the utilisation start time.

Nomination Baseline: By 12pm at day-ahead an FP submits a half-hourly schedule for the following day. Meter readings will be required for the same period as the hour-hourly nomination for UK Power Networks to monitor accuracy.

3.8.2 Static Baselines (Sustain)

Historic Peak: Prior to the start of the contract a baseline is calculated using the steps below. This baseline is fixed for the period of the contract unless there is a change to the DER/FU.

- The periods from the previous year that correspond to the Sustain Service Windows are selected. For example, if the proposed Sustain Service Period is next November-March, 6-8pm, workdays, then select the same period from last year.
- 2. Aggregated half-hourly meter data profile is calculated from the summation of the meter data from each DER for each half hour.
- 3. The baseline peak is the mean of the three highest half-hour demand peaks from the aggregated meter data.

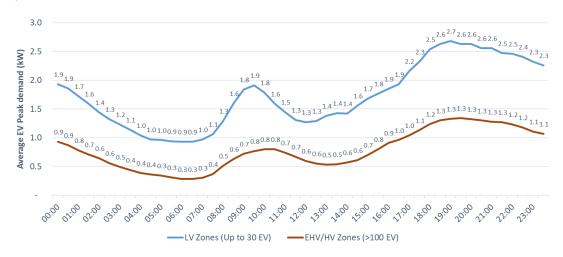
Home Electric Vehicle (EV): This methodology is only applicable to home-based EV charging. The diversified load impact per EV, as shown in Figure 8, is multiplied by the number of EVs in the Flexible Unit to give the total diversified load. The kW/EV ratio depends on whether the Flexibility Zone is in the LV network or the EHV/HV network (the latter's larger zones with more EVs will have a higher



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diversity). The baseline peak is the maximum half-hourly load within the equivalent period as the Sustain Service Window.

Figure 8: Maximum demand as a function of cluster size



UK Power Networks may consider an alternative baseline to the baseline methodologies described in 3.8 if the FP enters an appeal to flexibility@ukpowernetworks.co.uk providing satisfactory reasons why these methodologies are not suitable prior to Pre-Qualification close. UK Power Networks can accept or reject that request.

The baseline methodology cannot be changed during the contract term without satisfactory reason.



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4 Service Requirements

The Service Requirements must be satisfied in order to provide Flexibility Services. The FP will need to declare how these are or will be satisfied at Pre-Qualification.

4.1 Direction of service

The Flexible Unit shall be able to deliver a change in active power as seen from the distribution network. In demand constrained zones (D), the required direction is reduced imports (I-) or increased exports (E+). In generation constrained zones (G), the required direction is increased imports (I+) or reduced exports (E-).

4.2 Aggregation and control

A Flexible Unit is a notional DER made up of one or more real DER located within the same flexibility zone. The Provider can select which DER is providing the service at any given time for Secure and Dynamic, whilst all DERs must be active for Sustain.

The Provider should have appropriate systems and processes to control or incentivise DER delivery to reliably deliver the contracted FU capabilities.

The Provider shall be able to submit evidence on request to the Company's satisfaction that proves the Provider has the sole authority to act on the behalf of the owner of the DER in respect of the service. This will be required if, but not limited to, if the Provider's allocated DER(s) is contested by another third-party provider.

4.3 Flexible capacity conditions

The flexible capacity contracted from a Flexible Unit cannot be less than 10kW. The flexible capacity is fixed at the point of contract but can be reduced as a result of a deficiency identified during the Allocations process and Proving Tests as set out in the contract. The flexible capacity can be increased only for the Dynamic service in agreement with the Company.

Secure Utilisation Instruction will only instruct the flexible capacity, or less if partial capacities are allowed by the Provider, within the Service Window. Dynamic Utilisation Instruction capacities will be based on the Provider's Capability Declaration, or less if partial capacities are allowed by the Provider.

4.4 Other parameter conditions (Secure and Dynamic only)

The Maximum Run Time contracted from a Flexible Unit cannot be less than 30 minutes. The parameter is fixed at the point of contract but can be reduced as a result of a deficiency identified during the Allocations process and Proving Test.

The Response Time contracted from a Flexible Unit cannot be less than 30 minutes if within-day utilisation has been selected.

4.5 Communications and data provision

The Provider shall be able to receive Utilisation Instructions and Stop Instructions from the Company through email or API for Secure and Dynamic services.

The Provider can receive window variations from the Company through email for the Sustain service (but it is optional on the Provider to respond to these notifications).

The Provider shall notify the Company of any planned or unplanned technical unavailability that could affect Secure and Dynamic services as soon as practicable through email (found within the Communication section within the contract).

The Provider shall send aggregated Flexible Unit meter data in a format as specified by the Company at minutely or half-hourly granularity, every month for the previous month where the FU was providing services. The meter data shall include any additional time periods required to calculate the agreed baseline. The Provider shall also be able to provide DER meter data on request.



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4.6 Restrictions within a Service Window

Where the Flexible Unit is contracted for a Secure or Sustain Service Window, the DER shall not act to increase the network constraint within a Service Window except for essential site activities (such as supplying energy end consumption), and unless otherwise permitted by the Company.

4.7 **DER** connection conditions

DER making up the Flexible Unit shall be electrically connected to the network asset(s) subject to the limitation during intact and under first circuit outage of that asset(s). The Company will check compliance with reference to the Meter Point Administration Number of the site that the DER is located (or an address or coordinate if the site does not have a Meter Point Administration Number) as submitted by the Provider as part of tender pre-qualification or the Allocations process. Independent Distribution Network Operator's (IDNOs) network connected DER are eligible if the IDNO network is electrically supplied from the appropriate network asset(s).

Exporting generators and storage assets greater than 16A per phase shall have a long-term parallel connection compliant with the requirements of Engineering Recommendation (EREC) G59 or G99. Those less than 16A per phase shall be compliant with the requirements of EREC G83 or G98.

DER with flexible connections is allowed to provide flexibility services subject to the conditions of the connection agreement and as confirmed by the Company as part of pre-qualification. Where there are any discrepancies between the flexible connection instructions and flexibility services instructions under this agreement, the DER shall follow the instruction that will result in the lowest operational set point.



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5 Stages of Procurement

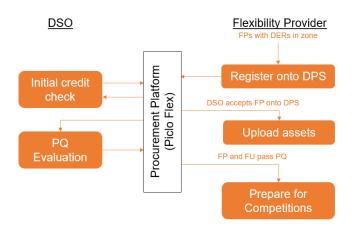
5.1 Stage 1: Visibility and Pre-Qualification

UK Power Networks have published flexibility zones with network needs. FPs must register their DER to communicate their location and capability to UK Power Networks via Piclo Flex.

DER will be shown as "Eligible" once the provider has been accepted onto the Dynamic Procurement System (DPS) on Piclo Flex and if the geographic location and declared connection voltage matches that of the flexibility zone. A list of postcodes for each Flexibility Zone are also provided in Appendix 3. Please note that the postcodes only serve as a guidance as postcodes do not always align perfectly to the network topology.

This Participation Guidance contains detailed joining instructions and service terms of provision. Flexibility Providers can seek clarification by emailing: flexibility@ukpowernetworks.co.uk. UK Power Networks and Piclo Flex will also host bilateral meetings with interested FPs throughout the Pre-Qualification process.

Figure 9: Pre-Qualification process



FPs wishing to participate will need to register for Pre-Qualification by the PQ Submission Deadline. This involves the FP submitting company details and technical solution details for evaluation. The company details are provided through the DPS and technical details through asset upload to Piclo. The section below provides further information.

FPs will have 3 working days after receiving the Pre-Qualification results to raise any disputes. FPs should submit any disputes to flexibility@ukpowernetworks.co.uk including any Piclo Flex asset references to which the disputes relate to along with supporting evidence.

Dynamic Procurement System (DPS)

UK Power Networks will determine initial eligibility of FPs to participate in Flexibility Services based on information provided through the DPS. This may include undertaking an initial credit check of the FP. The FP needs to be a registered company, submit all required information, including company insurance cover, and be verified as a dependable supplier in order to be considered. You can find a help article here: DPS / Company Qualification Setup - Piclo Flex.

FPs will need to complete the DPS form on Piclo Flex submitting details of the company and declare that the terms of procurement and service have been accepted without amendment. <u>The company details provided must be for the organisation that will be registering on UK Power Networks' SAP Sourcing system and entering into contract with UK Power Networks.</u> If the FP intends to transfer any



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of their rights, benefits, duties and obligations under the flexibility contract to another company after the Pre-Qualification it must inform UK Power Networks at this stage.

The FP will be notified of the DPS result via an email notification from Piclo Flex. FPs that are rejected will be provided with a reason for rejection and will have the opportunity to revise and resubmit their DPS application subject to Pre-Qualification timelines.

DPS applications submitted will be valid for future Pre-Qualification events, on condition that the FP's information has not changed.

Asset upload to Piclo

FPs that have been accepted onto the DPS should complete the asset upload. Please note that the Asset upload template has been updated since the previous tender to simplify and standardise across the DSOs. More information can be found in this notice.

UK Power Networks will undertake technical evaluation of the information submitted. The FP may be contacted to clarify the information submitted. Failure to submit all required information may result in a DER/FU failing Pre-Qualification.

UK Power Networks is also interested in DER located outside published flexibility zones and may prequalify/contract with such DER under the optional Dynamic service where considered useful to the network.

5.2 Stage 2: Competition

Pre-qualified FPs and FUs can bid from Competition Open until Competition Close. UK Power Networks shall assess the bids in accordance with the Assessment Methodology. The results will be announced to participants through Piclo Flex by the Competition Results date, and a formal notification letter will be issued by UK Power Networks.

UK Power Networks shall update the contract schedule after the FP has registered onto SAP Sourcing. FPs will need to sign the contract by the Signed Contract Deadline.

Figure 10: Contract process





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Bidding Rules

The FP can only submit a **single bid** by FU by flexibility zone by product type. The FP can only have one FU per flexibility zone per product type per import/exporting DERs. Each bid can consist of variations of capability, fee, and service period parameters. Detailed instructions on how to submit bids is available on Piclo Flex. **Please note that the FSPs do not have to bid for Dynamic product.** FUs that are qualified for Dynamic competitions may directly proceed to contract awards.

The following bidding rules will apply:

- **Flexible Capacity** can offer the Flexible Capacity at a single price or split the Flexible Capacity into smaller volumes but at different prices. Note that this is all-or-nothing.
- **Service Window** bids must be for whole Service Window but does not have to be for all Service Windows where there are multiple Service Windows in any given Delivery Season. This does not apply for Dynamic which does not have set Service Windows.
- **Delivery Season** must be for a whole Delivery Season. This is subject to the requirements at each zone.
- **All-or-nothing** variations within the bid are treated as all-or-nothing the whole bid must be either accepted or rejected. Summer and Winter seasons are treated as independent bids.
- Additional parameters no additional commercial parameters can be submitted in the bid, above the technical limitations as specified in the asset registration. If there are other technical limitations that have not been captured, FPs should make UK Power Networks aware.
- Dynamic product bidding (outside of Competition stage) the FP should submit a Dynamic Utilisation Fee (See Appendix 3), which can be easily changed during the contract term and does not form a long-term commitment on the FP. The volume submitted for Dynamic should be the maximum flexible capacity of the FU.

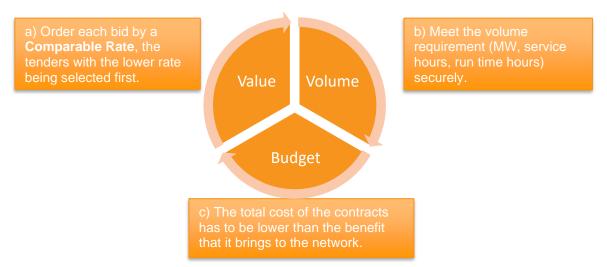
Assessment methodology

UK Power Networks' assessment of bids will seek to meet the volume requirement, at a cost that is within budget, as economically as possible as shown in the following schematic.



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Figure 11: Assessment criteria



Where flexibility is used to defer reinforcement, the benefit is the Present Value of the deferred reinforcement cost. The benefit is published to the market as revenue ranges to support FPs in their bidding (see Appendix 3).

If the volume requirement in a given zone is satisfied at a total cost to UK Power Networks below the budget for the zone, UK Power Networks reserves the right to use the remaining budget in other zones, where beneficial.

A **Comparable Rate** (in £/MWh) is derived to convert the total cost of each bid into a unit rate that allows comparison between bids. The total cost per season is divided by the total capability per bid.

UK Power Networks may offer to unsuccessful bidders rejected on the basis of price, an alternative efficient fee that is acceptable to UK Power Networks for the same capabilities as tendered, subject to volume and budget restrictions, in ascending order of FU comparable rate.

The volume requirement is an indication of how much and when flexibility is needed. UK Power Networks may consider procuring more or less than this amount based on the bids received in the zone, budget available, other mitigating network measures, changes in load growth forecasts, and future tendering opportunities.

UK Power Networks retains the right to economically cover the risk of the loss of the largest FU to ensure security of supply.

Not all FPs will offer availability in all periods (Service Windows), and for this reason, UK Power Networks may need to accept higher priced bids that can be available for all periods compared to a lower priced bid that can only be available for one Service Window.

The above assessment methodology is a guidance to the general approach, but UK Power Networks may make reasonable variations to this calculation where there are material differences in technical restrictions between FUs.

Competition result

FPs will be notified of the outcome of Competition via email from UK Power Networks and Piclo Flex. UK Power Networks will email the FP the award notification letter and request the name, company registration number and signature of the legal entity who will sign the Flexibility Services Standard Agreement.

FPs will then be invited to register on UK Power Networks' SAP Sourcing system as a supplier following the award notification letter (if not already registered). This will trigger an additional credit check of the FPs financial circumstances and will be subject to UK Power Networks' usual supplier checks. UK Power Networks reserve the right to withdraw the award.



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UK Power Networks will award a contract to all FPs with pre-qualifying FUs subject to FPs successfully registering on SAP Sourcing.

FPs awarded a contract need to sign the Flexibility Services Standard Agreement (Appendix 1) with the updated schedules, as issued by UK Power Networks, and return it to UK Power Networks by the **signed contract deadline date**. This should be through UK Power Networks' Digital Signature process or if required by UK Power Networks, a single PDF emailed to flexibility@ukpowernetworks.co.uk, and two physical copies sent to the following address:

UK Power Networks, Newington House, 237 Southwark Bridge Road, London, SE1 6NP

For the attention of: Procurement Team, Flexibility Services

Only FPs that have pre-qualified and have been awarded a contract award shall be allowed to sign the Flexibility Services Standard Agreement. Thereafter, if successful FPs wish to transfer any of their rights, benefits, duties and obligations under the flexibility contract to another company, they shall do this in accordance with the clauses in the Flexibility Services Standard Agreement. UK Power Networks may require a parent company guarantee in the case of subsidiaries.

Any information provided by the FP at any point during the procurement event is subject to the Procurement Terms and Conditions (Appendix 2). This shall include publishing bid information post-tender.

UK Power Networks may decide not to proceed to Competition in zones where there is insufficient flexibility potential to meet the procurement requirements. In such cases, UK Power Networks will notify the affected FPs.

5.3 Stage 3: On-boarding

Following the tender, and prior to service delivery, FPs and their FUs shall fulfil their Post Tender Milestones as set out in the Delivery Plan and contract. This shall include milestones such as grid connections, connection point details provided, and testing. FPs are required to keep UK Power Networks informed on progress. Failure to meet the Post Tender Milestones could result in termination of the agreement for the affected FUs.

FPs without a Delivery Plan due to having satisfied the Service Requirements at Pre-Qualification will need to undergo a Proving Test milestone prior to delivery. The date of the proving test needs to be at least 1 month prior to service delivery in accordance with the contract terms.

It is the responsibility of the FP to ensure that the FU meets all Service Requirements, including those pertaining to metering and communication before their service start date.



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Participant Check List

Piclo Flex platform - https://picloflex.com/
UK Power Networks' DSO tender library - https://dso.ukpowernetworks.co.uk/flexibility/tender- library

Activity – Flexibility Services Tender, Winter 2022	When	Complete?		
Visibility and Pre-Qualification				
Check whether your DER/FU(s) are qualifying on the Piclo Flex platform	From Wed, 04 Oct 2023			
Complete the DPS and upload assets	By Wed, 15 Nov 2023 17:00			
Competition				
If passed the PQ, submit bid into tender on Piclo Flex	By Fri, 29 Dec 2023			
If received contract award, sign contract	By Tue, 30 Apr 2024			



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7 Appendices

Key Term	Definition
Appendix 1	Flexibility Services Standard Agreement
Appendix 2	Procurement Terms and Conditions
Appendix 3	Competition Data

8 Version Control

Version	Updates	Updated information
1.0	First issue	