# Flexibility Services

# Ref: NPg25565

# Scope and Specification

## 1. Introduction

We are dedicated to delivering a network and energy system that serves our region, in a safe, efficient and economical way and supports enabling decarbonisation for our customers and stakeholders. As such we are committed to the use of flexibility solutions instead of or to defer network reinforcement solutions wherever appropriate.

Flexibility solutions ensure the most efficient and economical outcome for our network customers. Our Flexibility First Policy ensures we employ Flexibility Services, Flexible Connections and Network Flexibility over traditional Network reinforcement wherever we can demonstrate this is possible.

We are dedicated to enabling a local market for Flexibility Services by creating a level playing field for all flexibility service providers and supporting competition with network solutions, by promoting fair competition and demonstrating decision-making transparency.

As an indication of scale of the value of flexibility services, in the Distribution System Operator (DSO) strategy section of our ED2 business plan, we project net benefits of up to £156 million could be delivered by avoiding traditional reinforcement costs over the course of 2023-28.

In this document we set out our detailed specification for flexibility services for the network areas where interventions are needed to meet the needs of rising load growth. In summary, the needs being tendered are for

- Monday 5 January 2026– Sunday 1 February 2026
- the Scheduled Availability + Operational Utilisation product for up to 6.3MW across 5 high voltage (HV) zones
- the Scheduled Utilisation product for up to 0.7MW across 12 low voltage (LV) zones

This procurement would enable us to defer or avoid network reinforcement, where it is economic and efficient to do so. We have no preference as to whether the service is delivered from dispatchable generation turn up, demand turn down or battery discharge.

## *2.* Flexibility Services Overview

In our Distribution Flexibility Services Procurement Statement 2025/26, we set out:

- Detail on the flexibility requirements that we may tender for during the year 1 April 2025 to 31 March 2026;
- Detail on our tendering process and pricing strategy for flexibility procurement;
- How we plan to engage with stakeholders to further develop markets and capability for flexibility services; and
- An explanation of the detailed quantitative assessments we have undertaken to evaluate our existing and forecast network loading and where necessary our flexibility requirements.

We use the standard flexibility services products developed through the Open Networks project.

## 3. Asset Eligibility

In order for assets to be eligible for competitions, bidders must register their assets on Piclo and enter them into competitions. Each asset will be technically qualified by Northern Powergrid for eligibility to participate in the entered competition.

Eligibility requires

- the asset to be connected at the right point on the network to provide the service in the CMZ specified in the entered competition
- the type of asset to be capable of providing the service specified in the entered competition
- the asset to be an operational asset

To be eligible to enter into a competition for demand turn-down/generation turn-up services, an asset must be “dispatchable”, which means an asset is capable of being scheduled, activated, or adjusted by the Flexibility Services Provider (FSP) in response to a specific instruction or a long term change in electricity demand / generation is achieved through a single intervention (such as the installation of energy efficiency measures).

Any type of demand asset that can turn-down demand to a schedule is deemed to be dispatchable and is therefore eligible to enter competitions for these services.

For generation turn-up services, only generation assets that can be dispatched in response to a utilisation instruction are eligible to enter competitions for these services. This means that intermittent generation assets, such as Solar PV and wind turbines, are not eligible to these enter these competitions.

However, if the Solar PV or wind turbines are coupled with a battery storage asset, and the generation turn-up will be provided by discharging the battery, then the participating asset should be categorised in Piclo as storage. In this example the Solar PV/wind turbines are the source of energy, but it is the battery asset which is participating in the competition.

If you are unclear about how to categorise your asset and its eligibility to enter a competition, please contact support@picloflex.com .

**4. Testing**

In order to satisfy Northern Powergrid that the Distributed Energy Resource (DER) is capable of providing the flexibility services to meet the ‘Flexibility Needs’ set in this document, following trade award the bidder may be required to prove the DER prior to the scheduled delivery period.

This consists of:-

1. Evidence that the DER has been built and energised and a connection agreement is in place, and that it meets all the service requirements set out in the Eligibility section above.
2. A proving test of the communications link as set out in the contract.

Northern Powergrid reserves the right to require testing as required, at its discretion.

This may include:-

- Site visits to verify/carry out testing to demonstrate that the bidder has the capacity and capability to meet the requirements of the contracted service, including being able to change the import/export of the DER from the point of notification to the commencement of the service window and maintain this to the end of the service window. The Provider will not be reimbursed for testing periods.
- Further tests of the API link, for example in the event of a change to the API system, or in the case of any API communication issues at either end

**5. Operations**

See Annex 1 to the service terms of the Flexibility Services Agreement.

## 6. Payment Calculations

### 6.1 Scheduled Availability + Operational Utilisation

The availability payment is made based on a DER being available to provide flexibility services as agreed at the point of contract. Availability payments will be based on an availability fee in £/MWh set out in a contract between the provider and Northern Powergrid.

The utilisation payment is made based on a DER providing flexibility services as per an accepted dispatch instruction. Dispatch instructions will be issued on a week ahead basis i.e. by close of business on a Thursday for services for the following week (Monday to Sunday). The instruction acceptance should be confirmed by noon on Friday (the day after the dispatch instruction). Utilisation payments will be based on a utilisation fee in £/MWh set out in a contract between the provider and Northern Powergrid.

### 6.2 Scheduled Utilisation

The utilisation payment is made based on a DER providing flexibility services as agreed at the point of contract. Utilisation payments will be based on a utilisation fee in £/MWh set out in a contract between the provider and Northern Powergrid.

For this flexibility product, there is no availability payment.

### 6.3 General note on payment calculations

It is the Provider's responsibility to ensure that the DER can provide the services as agreed. Under no circumstances will Northern Powergrid take responsibility for loss of earnings that the DER may have earned if it were not in contract with Northern Powergrid.

For more information see clause 5 of the service terms of the Flexibility Services Agreement.

## 7. Baselining for Scheduled Utilisation Product and for Scheduled Availability + Operational Utilisation product

### 7.1 Accepted Methodologies

Northern Powergrid accepts the following baselining methodologies as standard:

#### 7.1.1 Fixed Reference – Domestic Households

For DERs that comprise in part or in whole, a domestic household, unless the requirements set out in section 7.1.4 can be met, Northern Powergrid requires any portion of the baseline that is attributed to general domestic household load to be set based on our published reference baseline. The reference baseline is called "Northern Powergrid – Fixed Reference Baselines" and is available in the supporting documents here: Profile — Northern Powergrid (piclo.energy).

#### 7.1.2 Fixed Reference – Domestic EV Chargers

For DERs that are Domestic EV Chargers, Northern Powergrid has produced an optional reference baseline which may be used by the bidder. The reference baseline is called "Northern Powergrid – Fixed

Reference Baselines" and is available in the supporting documents here: Profile — Northern Powergrid (piclo.energy).

### 7.1.3 Zero Baseline – Generation & Storage

For DERs that are generation or storage, the baseline will be zero.

### 7.1.4 Self-Nominated

Northern Powergrid allows bidders to submit self-nominated baselines where any of the following criteria are met:

- The DER is a Domestic Household and the bidder can provide sufficient evidence to satisfy Northern Powergrid that our Fixed Reference baseline does not provide an appropriate baseline for their specific, submitted asset(s). An example of this could be half hourly smart meter data from the asset being included in the bid submission;
- The DER is a Domestic EV Charger and the bidder opts to provide a self-nominated baseline rather than use Northern Powergrid's Fixed Reference baseline; or
- The DER is any other Asset Type not listed in Northern Powergrid's standard baselines, detailed above.

## 7.2 Submission of Baseline to Northern Powergrid

For assets where a Northern Powergrid standard baseline as per 7.1.1 to 7.1.3 above is available, those standard baselines will be used unless bidders submit at point of bid submission a proposal to use a self-nominated baseline (in accordance with section 7.1.4).

Where bidders propose to use a self-nominated baseline, the format in which the self-nominated baseline is submitted can be chosen by the bidder subject to meeting the following minimum standards:

- the bidder should provide accompanying narrative to explain the proposed baseline with supporting evidence where appropriate;
- The submission must cover the full service period covered by the bid submission;
- Baseline data must be submitted for the full duration of the service window, even if the bid specifies a max runtime that is less than the full duration of the service window.

If the bidder is unable to submit a self-nominated baseline at point of bid submission, Northern Powergrid will allow bidders to submit their baseline post-bid submission provided that the bidder:

- Includes supporting narrative in their bid submission as to why they have been unable to submit a baseline at point of bid submission, and when they expect to be able to provide the data; and
- The baseline is submitted to Northern Powergrid no later than 14 days prior to the first service period.

Bidders must upload the self-nominated baseline and/or the supporting narrative via "the Piclo Flex Messaging Service - support@picloflex.com" at point of bid submission.

## 7.3

**Validation and Setting of Baseline**

Northern Powergrid will use the baseline submission to verify the capability of the DER to provide flexibility. We reserve the right to not accept a submitted baseline and require the bidder to use an alternative baseline which will be used to calculate the actual service delivered and payments due.

We will notify of the acceptance or rejection of their submitted baseline.

The baseline shall be set prior to the first service period. It may be reviewed and updated in the light of relevant material changes e.g. a change to the asset portfolio or new evidence such as actual meter readings.

**8. Payment Terms**

See clause 5.4 of the service terms of the contract.

**9. Flexibility Needs**

In this section we set out the flexibility services that we are tendering for. The competitions for these flexibility needs will be hosted on the Piclo platform. Data files with details of the competitions and their map polygon or postcode data can be downloaded from the documentation' tab of the Northern Powergrid profile page.

We are seeking to procure flexibility services at some or all of the constraint management zones (CMZ) set out in **Table 1 Flexibility Needs High Voltage (HV)** and **Table 2 Flexibility Needs Low Voltage (LV),** below.

The flexibility could be provided through any of: generation turn up, demand turn down, or battery discharge. Flexibility can be provided by a single DER or by an aggregation of multiple DERs.

The tables set out the flexibility product, likely capacity requirements and time windows for flexibility services.

We are interested in receiving bids even if a bidder can deliver flexibility services for only part of the required capacity or for part of the time window at a CMZ.

**Table 1 Flexibility Needs HV: Scheduled Availability + Operational Utilisation product**

Flexibility Services to be provided by assets connected at or below 11kV

Anticipated dispatch rate: 60% i.e. we anticipate dispatching 60% of the MWh availability required in a CMZ across all delivery weeks. This is not a guarantee of the levels of dispatch for any individual bidder or overall. Northern Powergrid will not be accept any liability for deviations from the estimated dispatch rate.

The Maximum Effective Price is the highest priced bid (in terms of effective price) that Northern Powergrid will accept. For information on how the effective price of a bid is calculated for this product, see Section 2.2.3 of Document 1: Instructions to Bidders

| Constraint Management Zone (CMZ) | Budget £ | Total MWh Availability | Effective Price £/MWh | Service Period Name | Capacity Required (MW) | Start Date (inclusive) | End Date (inclusive) | Service Days | Window Start Time | Window End Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Scunthorpe - Crowle | £2,862 | 3.5 | £1,363 | 2026 wk 2 | 1.000 | 05/01/2026 | 11/01/2026 | Mon-Sun | 16:00 | 16:30 |
| | £10,018 | 12.3 | £1,363 | 2026 wk 2 | 0.700 | 05/01/2026 | 11/01/2026 | Mon-Sun | 16:30 | 19:00 |
| | £1,431 | 1.8 | £1,363 | 2026 wk 3 | 0.500 | 12/01/2026 | 18/01/2026 | Mon-Sun | 16:00 | 16:30 |
| | £2,862 | 3.5 | £1,363 | 2026 wk 3 | 0.200 | 12/01/2026 | 18/01/2026 | Mon-Sun | 16:30 | 19:00 |
| | £5,152 | 6.3 | £1,363 | 2026 wk 4 | 0.300 | 19/01/2026 | 25/01/2026 | Mon-Sun | 16:00 | 19:00 |
| | £8,587 | 10.5 | £1,363 | 2026 wk 5 | 0.500 | 26/01/2026 | 01/02/2026 | Mon-Sun | 16:00 | 19:00 |
| Stocksbridge - Wheatacre Road | £2,302 | 14.0 | £274 | 2026 wk 3 | 0.500 | 12/01/2026 | 18/01/2026 | Mon-Sun | 16:00 | 20:00 |
| | £2,302 | 14.0 | £274 | 2026 wk 4 | 0.500 | 19/01/2026 | 25/01/2026 | Mon-Sun | 16:00 | 20:00 |
| | £2,302 | 14.0 | £274 | 2026 wk 5 | 0.500 | 26/01/2026 | 01/02/2026 | Mon-Sun | 16:00 | 20:00 |
| Wetherby - Audby Lane | £229,278 | 70.0 | £5459 | 2026 wk 2 | 1.400 | 05/01/2026 | 11/01/2026 | Mon-Fri | 08:00 | 18:00 |
| | £147,393 | 45.0 | £5459 | 2026 wk 3 | 0.900 | 12/01/2026 | 18/01/2026 | Mon-Fri | 08:00 | 18:00 |
| | £147,393 | 45.0 | £5459 | 2026 wk 4 | 0.900 | 19/01/2026 | 25/01/2026 | Mon-Fri | 08:00 | 18:00 |
| Harrogate - Starbeck | £9,225 | 53.2 | £289 | 2026 wk 2 | 1.900 | 05/01/2026 | 11/01/2026 | Mon-Sun | 16:00 | 20:00 |
| | £9,225 | 53.2 | £289 | 2026 wk 3 | 1.900 | 12/01/2026 | 18/01/2026 | Mon-Sun | 16:00 | 20:00 |
| Driffield - Kirkburn | £3,234 | 98.0 | £55 | 2026 wk 2 | 1.400 | 05/01/2026 | 11/01/2026 | Mon-Fri | 06:30 | 20:30 |
| | £3,465 | 105.0 | £55 | 2026 wk 3 | 1.500 | 12/01/2026 | 18/01/2026 | Mon-Fri | 06:30 | 20:30 |
| | £3,465 | 105.0 | £55 | 2026 wk 4 | 1.500 | 19/01/2026 | 25/01/2026 | Mon-Fri | 06:30 | 20:30 |

**Table 2 Flexibility Needs LV: Scheduled Utilisation product**

Flexibility Services to be provided by assets connected at or below 415V

The Utilisation Ceiling Price is the highest priced bid (in terms of Utilisation Price) that Northern Powergrid will accept.

| Constraint Management Zone (CMZ) | Budget £ | Total MWh Utilisation | Utilisation ceiling price £/MWh | Service Period Name | Capacity Required (MW) | Start Date (inclusive) | End Date (inclusive) | Service Days | Window Start Time | Window End Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Alnwick - Alnwick Fleece | £2,721 | 1.8 | £1,555 | 2026 wk 3 | 0.050 | 12/01/2026 | 18/01/2026 | Mon-Fri | 09:00 | 16:00 |
| Beamish - Lime Street | £126 | 0.7 | £170 | 2026 wk 2 | 0.037 | 05/01/2026 | 11/01/2026 | Mon-Fri | 16:00 | 20:00 |
| | £102 | 0.6 | £170 | 2026 wk 2 | 0.075 | 05/01/2026 | 11/01/2026 | Sat, Sun | 16:00 | 20:00 |
| | £126 | 0.7 | £170 | 2026 wk 3 | 0.037 | 12/01/2026 | 18/01/2026 | Mon-Fri | 16:00 | 20:00 |
| | £102 | 0.6 | £170 | 2026 wk 3 | 0.075 | 12/01/2026 | 18/01/2026 | Sat, Sun | 16:00 | 20:00 |
| | £126 | 0.7 | £170 | 2026 wk 4 | 0.037 | 19/01/2026 | 25/01/2026 | Mon-Fri | 16:00 | 20:00 |
| | £102 | 0.6 | £170 | 2026 wk 4 | 0.075 | 19/01/2026 | 25/01/2026 | Sat, Sun | 16:00 | 20:00 |
| | £126 | 0.7 | £170 | 2026 wk 5 | 0.037 | 26/01/2026 | 01/02/2026 | Mon-Fri | 16:00 | 20:00 |
| | £102 | 0.6 | £170 | 2026 wk 5 | 0.075 | 26/01/2026 | 01/02/2026 | Sat, Sun | 16:00 | 20:00 |
| Bradford - Thornbury Avenue | £375 | 0.7 | £568 | 2026 wk 2 | 0.033 | 05/01/2026 | 11/01/2026 | Mon-Fri | 16:00 | 20:00 |
| | £227 | 0.4 | £568 | 2026 wk 2 | 0.050 | 05/01/2026 | 11/01/2026 | Sat, Sun | 16:00 | 20:00 |
| | £375 | 0.7 | £568 | 2026 wk 3 | 0.033 | 12/01/2026 | 18/01/2026 | Mon-Fri | 16:00 | 20:00 |
| | £227 | 0.4 | £568 | 2026 wk 3 | 0.050 | 12/01/2026 | 18/01/2026 | Sat, Sun | 16:00 | 20:00 |
| Doncaster - Yarborough Terrace | £178 | 0.3 | £635 | 2026 wk 2 | 0.014 | 05/01/2026 | 11/01/2026 | Mon-Fri | 16:00 | 20:00 |
| | £254 | 0.4 | £635 | 2026 wk 2 | 0.050 | 05/01/2026 | 11/01/2026 | Sat, Sun | 16:00 | 20:00 |
| | £178 | 0.3 | £635 | 2026 wk 3 | 0.014 | 12/01/2026 | 18/01/2026 | Mon-Fri | 16:00 | 20:00 |
| | £254 | 0.4 | £635 | 2026 wk 3 | 0.050 | 12/01/2026 | 18/01/2026 | Sat, Sun | 16:00 | 20:00 |
| Hartlepool - Chaucer Avenue | £143 | 2.1 | £68 | 2026 wk 2 | 0.075 | 05/01/2026 | 11/01/2026 | Mon-Sun | 16:00 | 20:00 |
| | £143 | 2.1 | £68 | 2026 wk 3 | 0.075 | 12/01/2026 | 18/01/2026 | Mon-Sun | 16:00 | 20:00 |
| | £143 | 2.1 | £68 | 2026 wk 4 | 0.075 | 19/01/2026 | 25/01/2026 | Mon-Sun | 16:00 | 20:00 |
| | £143 | 2.1 | £68 | 2026 wk 5 | 0.075 | 26/01/2026 | 01/02/2026 | Mon-Sun | 16:00 | 20:00 |

| Constraint Management Zone (CMZ) | Budget £ | Total MWh Utilisation | Utilisation ceiling price £/MWh | Service Period Name | Capacity Required (MW) | Start Date (inclusive) | End Date (inclusive) | Service Days | Window Start Time | Window End Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Hexham - Dene Avenue | £715 | 0.7 | £1,022 | 2026 wk 3 | 0.040 | 12/01/2026 | 18/01/2026 | Mon-Fri | 08:00 | 11:30 |
| Leeds - Archery Road 2051 | £907 | 0.5 | £1,814 | 2026 wk 3 | 0.025 | 12/01/2026 | 18/01/2026 | Mon-Fri | 16:00 | 20:00 |
| Leeds - Royal Park Road 348 | £340 | 2.1 | £162 | 2026 wk 4 | 0.075 | 19/01/2026 | 25/01/2026 | Mon-Sun | 16:00 | 20:00 |
| | £340 | 2.1 | £162 | 2026 wk 5 | 0.075 | 26/01/2026 | 01/02/2026 | Mon-Sun | 16:00 | 20:00 |
| North Shields - Broadway Tynemouth | £143 | 4.2 | £34 | 2026 wk 2 | 0.150 | 05/01/2026 | 11/01/2026 | Mon-Sun | 16:00 | 20:00 |
| | £143 | 4.2 | £34 | 2026 wk 3 | 0.150 | 12/01/2026 | 18/01/2026 | Mon-Sun | 16:00 | 20:00 |
| | £143 | 4.2 | £34 | 2026 wk 4 | 0.150 | 19/01/2026 | 25/01/2026 | Mon-Sun | 16:00 | 20:00 |
| | £143 | 4.2 | £34 | 2026 wk 5 | 0.150 | 26/01/2026 | 01/02/2026 | Mon-Sun | 16:00 | 20:00 |
| North Shields - Rowntree Way | £545 | 1.4 | £389 | 2026 wk 2 | 0.050 | 05/01/2026 | 11/01/2026 | Mon-Sun | 16:00 | 20:00 |
| | £545 | 1.4 | £389 | 2026 wk 3 | 0.050 | 12/01/2026 | 18/01/2026 | Mon-Sun | 16:00 | 20:00 |
| | £545 | 1.4 | £389 | 2026 wk 4 | 0.050 | 19/01/2026 | 25/01/2026 | Mon-Sun | 16:00 | 20:00 |
| Wakefield - Batley Road 2243 | £907 | 0.5 | £1,814 | 2026 wk 3 | 0.025 | 12/01/2026 | 18/01/2026 | Mon-Fri | 16:00 | 20:00 |
| York - Kirbymoorside West | £907 | 1.0 | £907 | 2026 wk 3 | 0.050 | 12/01/2026 | 18/01/2026 | Mon-Fri | 16:00 | 20:00 |

## 10. Minimum DER Requirements

In order to be eligible to provide flexibility services to Northern Powergrid, it is necessary that DERs are able to meet the technical standards that will ensure the DER can provide the level of service that is required.

1. The DER must be metered at a minimum frequency of half hourly.
2. Capacity available must be at least 10kW per CMZ (note this is capacity of the flexibility service from the DER, not the capacity of the DER). If the DER is an aggregation of assets, the minimum capacity requirement applies to the aggregate, not to the individual assets.
3. The metering point shall be at the boundary between the site on which the DER is located and the distribution network.

## 11. Contract Duration

The contract is an enduring contract. The Service Terms to the contract specify the duration of the services to be provided which is dependent on the service windows awarded. Service dates are set out in Tables in section 9 above.