



Distribution Network Options Assessment (DNOA) Reports

NOVEMBER 2024



CHAPTER 01

Executive Summary

UK Power Networks' vision is to deliver a fit for purpose electricity network for the energy transition at the lowest cost to our customers. To do that, we set up GB's first independent Distribution System Operator (DSO) in 2023 with appropriate governance to ensure that decisions on the provision of future network capacity are made in the interest of all UK Power Networks' customers. Hence, we were first to set up an independent DSO Supervisory Board in 2023, as part of our operating model.

Our DSO will be at the heart of facilitating the lowest cost transition to Net Zero, whilst supporting clean economic growth. Also, we are and will continue to publish new granular data on our capacity needs and investment decision making throughout the RIIO-ED2 period.

In March 2024 we published the 2024 DNOA Methodology and Reports documents. The Reports document contained the results of the DNOA process following the flexibility tender round 9 (TR9) that ran during the fourth quarter of 2023.

In September 2024, the activities of the flexibility tender round 10 (TR10) were completed. In this tender we secured additional capacity through ten Flexibility Service Providers with five participants entering the market for the first time. Hence, in this document we are providing an update on our flexibility procurement following the completion of TR10 in relation to the DNOA recommendations made in March 2024.

The DNOA process for the 2025 recommendations is ongoing and the results will be published in the new year.

CHAPTER 02

HV Demand flexibility procurement results





In the table below, we provide an update of the flexibility procurement results for the HV sites. The first five columns are taken from the previous publication.

Site / Name	License area	Constraint Year	DNOA March 2024 Result	DNOA Stage	Nov 2024 update - From flexibility tender round 10
Aldreth	EPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Alresford	EPN	2025	Flexibility	Flexibility procurement	No change
Aylesbury Group	EPN	2026	Flexibility	Flexibility procurement	Flexibility requirement fully satisfied
Barsham	EPN	2026	Flexibility	Flexibility procurement	No change
Bramford Diss Thetford	EPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Brington	EPN	2024	Reinforce with Flexibility	Reinforcement delivery	No change
Caister	EPN	2026	Flexibility	Flexibility procurement	No change
Cockfosters	EPN	2024	Reinforce with Flexibility	Reinforcement delivery	Added more flexibility capacity in line with previous recommendation
Croydon	EPN	2024	Reinforce with Flexibility	Reinforcement delivery	Added more flexibility capacity in line with previous recommendation
Diss Grid	EPN	2026	Flexibility	Flexibility procurement	No change

Site / Name	License area	Constraint Year	DNOA March 2024 Result	DNOA Stage	Nov 2024 update - From flexibility tender round 10
East Enfield	EPN	2024	Flexibility	Flexibility procurement	Flexibility requirement fully satisfied
Godmanchester	EPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Guyhirn	EPN	2024	Flexibility	Flexibility procurement	No change
Halesworth Primary	EPN	2024	Flexibility	Flexibility procurement	No change
Halstead	EPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Hendon Way	EPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Hilton	EPN	2026	Flexibility	Flexibility procurement	No change
Kenninghall	EPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Kimbolton	EPN	2024	Reinforce with Flexibility	Reinforcement delivery	Added more flexibility capacity in line with previous recommendation
Kimms Belt	EPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Laxfield	EPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity



Site / Name	License area	Constraint Year	DNOA March 2024 Result	DNOA Stage	Nov 2024 update - From flexibility tender round 10
Manton Lane	EPN	2026	Flexibility	Flexibility procurement	No change
March Primary	EPN	2025	Flexibility	Flexibility procurement	Flexibility requirement fully satisfied
Rainbow Lane	EPN	2026	Flexibility	Flexibility procurement	Flexibility requirement fully satisfied
Reed	EPN	2024	Reinforce with Flexibility	Reinforcement delivery	No change
Rickmansworth	EPN	2026	Flexibility	Flexibility procurement	No change
Selwyn Road	EPN	2024	Reinforce with Flexibility	Reinforcement delivery	Added more flexibility capacity in line with previous recommendation
St Anthony St	EPN	2024	Flexibility	Flexibility procurement	Flexibility requirement fully satisfied
Stickfast Lane	EPN	2024	Reinforce with Flexibility	Reinforcement delivery	Added more flexibility capacity in line with previous recommendation
Takeley	EPN	2024	Flexibility	Flexibility procurement	Flexibility requirement fully satisfied

Site / Name	License area	Constraint Year	DNOA March 2024 Result	DNOA Stage	Nov 2024 update - From flexibility tender round 10
Thaxted Local	EPN	2024	Reinforce with Flexibility	Reinforcement delivery	No change
Trowse Grid	EPN	2026	Flexibility	Flexibility procurement	No change
Uplands Park	EPN	2026	Flexibility	Flexibility procurement	Flexibility requirement fully satisfied
West Horndon	EPN	2024	Reinforce with Flexibility	Reinforcement delivery	No change
White Roding	EPN	2024	Flexibility	Flexibility procurement	No change
Wisbech Railway	EPN	2024	Flexibility	Flexibility procurement	No change
Worstead	EPN	2024	Flexibility	Flexibility procurement	No change
Bow	LPN	2025	Flexibility	Flexibility procurement	Added more flexibility capacity
Lithos Road	LPN	2025	Flexibility	Flexibility procurement	Added more flexibility capacity
Whiston Road	LPN	2024	Reinforce with Flexibility	Reinforcement delivery	Added more flexibility capacity



Site / Name	License area	Constraint Year	DNOA March 2024 Result	DNOA Stage	Nov 2024 update - From flexibility tender round 10
Willesden Grid GSP	LPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Barming	SPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Capel Switching Station	SPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Capel	SPN	2025	Flexibility	Flexibility procurement	No change
Cobham	SPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Croydon B	SPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Edenbridge	SPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Hurstpierpoint	SPN	2026	Flexibility	Flexibility procurement	No change
Leysdown	SPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Little Chart	SPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Medway Grid	SPN	2024	Flexibility	Flexibility procurement	No change
Rainham	SPN	2026	Flexibility	Flexibility procurement	No change

Site / Name	License area	Constraint Year	DNOA March 2024 Result	DNOA Stage	Nov 2024 update - From flexibility tender round 10
Ripe	SPN	2025	Flexibility	Flexibility procurement	Added more flexibility capacity
Rye Grid	SPN	2024	Flexibility	Flexibility procurement	No change
Smeeth	SPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
St Helier	SPN	2024	Flexibility	Flexibility procurement	Flexibility requirement fully satisfied
Steel Cross	SPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Tunbridge Wells Group	SPN	2024	Flexibility	Flexibility procurement	No change
West Weybridge	SPN	2025	Flexibility	Flexibility procurement	Added more flexibility capacity
Warehorne	SPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Warehorne Group	SPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Wingham	SPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Wittersham	SPN	2024	Reinforce with Flexibility	Reinforcement delivery	Added more flexibility capacity
Wrotham	SPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity

CHAPTER 03

HV Generation flexibility procurement results





We have transitioned our procurement approach for generation constraints from long-term to the Day Ahead market. In the table below we show the sites where we procured further flexibility since the previous DNOA publication.

Site / Name	License area	Constraint Year	DNOA March 2024 Result	DNOA Stage	Nov 2024 update – From flexibility tender round 10
Bramford	EPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Bury Grid	EPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Farcet 1	EPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Hempton Grid	EPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Lawford 1	EPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Lawford 2	EPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity
Peterborough Grid	EPN	2024	Flexibility	Flexibility procurement	Added more flexibility capacity

CHAPTER 04

LV Demand flexibility procurement results





In the table below, we present the updates for the LV demand sites. More information can be found at UK Power Networks' DSO website, in the flexibility hub section¹. The first five columns are taken from the previous publication.

Area	Substation Name	Constraint Year	Deferred Transformer size (kVA)	DNOA March 2024 Result	Nov 2024 update - Post flexibility tender round 10
EPN	Wix School	2024	200	Procure more flex in future tender events	Flexibility requirement fully satisfied
LPN	Leighton Rd R/O Kennistown Hse	2025	1315	Procure more flex in future tender events	Flexibility requirement fully satisfied
LPN	Waterloo Passage	2024	1315	Procure more flex in future tender events	Added more flexibility capacity

¹ [Tender Hub - UKPN DSO \(ukpowernetworks.co.uk\)](https://www.ukpowernetworks.co.uk)

CHAPTER 05

Definitions and acronyms





CHAPTER 05

Definitions and acronyms

Term	Definition
DNO	Distribution Network Operator
DNOA	Distribution Network Options Assessment
DSO	Distribution System Operator
EPN	Eastern Power Networks
HV	High Voltage
LPN	London Power Networks
LV	Low Voltage
SPN	South Eastern Power Networks
TR9	Tender Round 9
TR10	Tender Round 10
UKPN	UK Power Networks