

May 2025

DSO nationalgrid electricity distribution

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Executive summary

This Distribution Flexibility Services Procurement Report reviews the Flexibility Services we have acquired and operated during the 2024/25 regulatory year.

The report also summarises our engagement with stakeholders, outlines how we maintain economic and efficient processes, and provides insights into the carbon intensity of the flexibility services we have delivered. In each relevant section, and summarised in Appendix 2, we reference additional data sources to allow you to monitor our progress in greater detail.

This Procurement Report complements the forward-looking <u>Procurement Statement</u> published in April, which outlines our plans for the upcoming year. Together, these two documents detail the processes we use to identify the need for flexibility services, how we aim to procure them, and how we subsequently operate them.

They are designed to enhance market efficiency while balancing the requirements for simplicity and accuracy, and have evolved as we have gained experience and collaborated with our key stakeholders.

We continue to operate a flexibility-first approach, having assessed **204 schemes** in our latest Distribution Network Options Assessment.

Over the past year, we have procured flexibility services across **99 HV zones**, **744 LV zones**, launched our first Demand Turn Up services, and published our inaugural <u>Operational Decision-Making Framework</u>. We have also increased dispatch volumes, **exceeding 2.2GWh** for HV zones and **0.7GWh** for LV zones (double our previous year's volume) across **over 10,000** and **60,000 dispatch events**, respectively.

We anticipate ongoing growth in our flexibility markets, accompanied by increased competition across different zones. Our <u>DSO Strategic Action Plan: One Year On</u> also highlights our broader strategic priorities and how we are delivering for our stakeholders now and in the future.

For further information please contact: Nged.flexiblepower@nationalgrid.co.uk

1. Introduction

National Grid Electricity Distribution operates as both a Distribution Network Operator (DNO) and a Distribution System Operator (DSO), responsible for delivering electricity to over 8 million customers. We manage a network of wires, poles, pylons, cables, and substations, distributing electricity to homes and businesses throughout the East Midlands, West Midlands, South West, and South Wales.

Since 2018, we have been procuring Flexibility Services to address temporary peaks in our network. By utilising Flexibility, we can reduce the urgency of interventions, provided that adequate and cost-effective flexibility is available, by managing peak demand and generation both before and after reaching the network's capacity limit.

This Distribution Flexibility Services Procurement Report (along with the accompanying data template) summarises the services we have procured and utilised during the last regulatory year. It is part of an annual regulatory process that includes the publication of a forward-looking Procurement Statement, which outlines our procurement plans for the upcoming regulatory year, and a backward-looking Procurement Report, which reviews what we have procured. These publications are required under our Distribution Licence (Condition 31E) and aim to establish a minimum level of information necessary to foster a competitive market for Flexibility Services.

We have developed a comprehensive process for the assessment, procurement, and operation of Flexibility Services. This process has evolved from our experience in building services through innovation projects into a full business-as-usual operation, incorporating regular feedback and improvements from our stakeholders. This report seeks to highlight these processes and direct readers to existing data sources where applicable, providing an overview of our activities to date while allowing for detailed exploration when desired.

The report covers:

- Summaries of where we have procured and operated flexibility services,
- A review of the stakeholder engagement carried out in the last year,
- The processes used to assess the economic viability of Flexibility Services, and individual bids,
- A view on the carbon intensity of delivered flexibility services,
- Further details to help understand the supplementary data, &
- A summary of the related publications and data sources.

Should you have any queries about the contents of this report please contact: <u>NGED.Flexiblepower@nationalgrid.co.uk</u>.

2. Flexibility Procurement and Use Summary

2.1 The Services we have procured and operated

As detailed in section 2 of our <u>Procurement Statement</u>, we have established a comprehensive process for identifying, communicating, procuring, and operating Flexibility Services. The tables below provide a concise summary of the HV and LV services we procured during the last regulatory year, as outlined in the Supporting Data. This includes a combination of legacy ENA products obtained through our weekly short-term trades and new products from our recent long-term procurement round. Due to the extensive nature of the LV service dataset, it has been organised by license area. For a more in-depth analysis, please refer to the accompanying Supporting Data Sheet.

Summaries of the services we have **procured for delivery during this reporting year** are presented below. Peak values refer to the maximum requirements within a zone at a point in time, rather than the Total. Total values represent the cumulative sum of all weekly trades, while Peak values reflect the highest figure from that series. Because of the time element involved in the presented values, they may not add up precisely, as they could pertain to different time periods.

Comprehensive details about the services we have procured and operated are available in the accompanying Supporting Data, which includes services contracted during this reported regulatory year for future delivery. Additionally, we provide extensive data on our <u>Connected Data Portal</u>. For complete details on the data we publish, please refer to Appendix 2.

Product	Total Peak Contracted in Prior Years (MW)	Total Peak Forecasted in Delivery Year (MW)*	Total Peak Tendered in Reporting Year (MW)	Total Peak Contracted in Reporting Year (MW)	Total Peak Unmet in Tenders in Reporting Year (MW)
Sustain	3.08	123.76	92.20	2.38	89.91
Secure	160.18	88.79	33.04	2.36	32.58
Dynamic	405.84	158.62	123.57	42.59	121.32
Restore	566.02	-	-	-	-
SU_SPP	-	-	-	-	-
SU_SEP	-	-	145.78	2.50	145.56
SAOU_DA	-	180.15	124.46	3.00	123.58
OU_15	-	-	-	-	-

Table 1: Summary of Flexibility Service Procurement by Product for delivery in reporting year

Table 2: Summary of Sustain Service Procurement by Licence Area for delivery in reporting year

Licence Area	Total Peak Contracted in Prior Years (MW)	Total Peak Forecasted in Delivery Year (MW)*	Total Peak Tendered in Reporting Year (MW)	Total Peak Contracted in Reporting Year (MW)	Total Peak Unmet in Tenders in Reporting Year (MW)
East Midlands	2.71	80.28	70.73	2.03	68.71
West Midlands	0.72	10.89	10.89	0.28	10.61
South West	0.10	26.51	6.28	0.05	6.23
South Wales	0.17	6.06	4.41	0.04	4.37

* Sum of all peak flexibility service forecasted and reported in the Procurement Statement. These do not include new constraint zones which have been opened for procurement during the regulatory year.

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Table 3: Summary of HV Flexibility Service Procurement by Zone for delivery in reporting year

CMZ Name	Products	Postcodes**	Contracted in Prior Years (MW)	Forecasted in Delivery Year (MW)***	Total Tendered in Reporting Year (MW)	Total Contracted in Reporting Year (MW)	Total Unmet in Tenders in Reporting Year (MW)	Reasons not met	Dispatched in Delivery Year (MWh)
CMZ_T2A_SW E_0001	Dynamic,S AOU_DA	TQ3 3UR, PL3 6SA, PL5 1BH, PL219N	0.00	3.92	0.00	0.00	0.00		0.00
CMZ_T2A_SW E_0002	Secure,SU _SEP,SAO U_DA,OU _15	EX173HY, EX2 4SU, EX172BE, EX18 7	0.33	3.92	1.04	0.46	1.04	insufficient market volume	1.74
CMZ_T3B_EM_ 0008	SAOU_DA ,OU_15	CV23 9FS, CV21 4NQ, CV227EL, CV22	9.81	2.15	0.00	0.00	0.00		0.00
CMZ_T3B_SW E_0007	Dynamic	TR19 7DP, TR149JH, TR27 5LS, TR19	0.40	1.35	0.79	0.00	0.79	insufficient market volume	0.00
CMZ_T3B_SW E_0008	Secure,SU _SEP	TR21 0NN, TR21 0HW, TR24 0QG, TR2	0.00	1.28	1.28	0.00	1.28	insufficient market volume	0.00
CMZ_T4A_EM_ 0010	SU_SEP	DE556HL, S45 9HW, S45 9QE, S45 9E	13.96	0.00	0.00	0.00	0.00		0.00
CMZ_T4A_EM_ 0012	Dynamic	LE671AP, CV130HA, LE9 9NT, LE67 4	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T4A_EM_ 0013	Secure,SA OU_DA,O U_15	S41 0JF, S41 0JN, S45 8HN, S42 6F	7.87	0.00	0.00	0.00	0.00		0.00
CMZ_T4A_EM_ 0020	Dynamic,S AOU_DA	DN220HT, DN22 0FQ, DN22 0BH, DN22	6.38	3.30	2.81	0.05	2.81	insufficient market volume	9.61
CMZ_T4A_SW A_0001	Dynamic,S AOU_DA	LD7 1NS, SY186QU, LD1 6BA, LD6 5L	5.00	5.48	2.00	0.03	2.00	insufficient market volume	4.47
CMZ_T4A_SW A_0004	Secure,SU _SEP	SA31 1RP, SA31 3HA, SA31 3EA, SA3	28.90	8.58	3.00	0.46	2.54	insufficient market volume	19.69

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CMZ Name	Products	Postcodes**	Contracted in Prior Years (MW)	Forecasted in Delivery Year (MW)***	Total Tendered in Reporting Year (MW)	Total Contracted in Reporting Year (MW)	Total Unmet in Tenders in Reporting Year (MW)	Reasons not met	Dispatched in Delivery Year (MWh)		
CMZ_T4A_SW E_0010	Dynamic,S U_SEP,SA OU_DA,O U_15	EX15 3SD, EX151RN, EX15 3PQ, EX16	7.95	38.28	11.58	0.79	10.89	insufficient market volume	9.48		
CMZ_T4A_SW E_0013	Dynamic,S AOU_DA, OU_15	BS232PH, BS22 8RE, BS22 6DL, BS22	5.82	8.17	7.45	0.13	7.33	insufficient market volume	3.37		
CMZ_T4A_SW E_0014	Secure,SU _SEP	EX168EW, EX174LE, EX17 4QG, EX174	4.71	0.00	0.00	0.00	0.00		0.00		
CMZ_T4B_EM_ 0002	Secure	LN2 4EG, LN1 3XB, LN2 4ER, LN2 2L	0.00	29.49	29.49	0.97	29.49	insufficient market volume	4.42		
CMZ_T4B_EM_ 0004	SAOU_DA	S40 2WL, NG175DH, NG219LP, NG196N	0.00	4.09	0.00	0.00	0.00		0.00		
CMZ_T4B_WM _0001	Secure,SU _SEP,SAO U_DA,OU _15	HR9 5TJ, HR9 5PT, HR9 7LJ, HR8 1P	16.49	23.37	11.13	1.64	10.93	insufficient market volume	13.91		
CMZ_T5A_EM_ 0024	Dynamic,S AOU_DA, OU_15	LE115EY, LE128LN, LE111PX, LE12 8	0.00	9.64	4.34	0.00	4.34	insufficient market volume	0.00		
CMZ_T5A_EM_ 0026	Secure	S80 2DD, S80 2BL, S80 2PP, S80 2Q	0.00	0.00	0.00	0.00	0.00		0.00		
CMZ_T5A_SW E_0016	Dynamic,S AOU_DA	TR1 2PZ, TR16 5QG, TR165LP, TR1 9	2.94	1.44	0.00	0.00	0.00		0.00		
CMZ_T5B_EM_ 0028	Dynamic,S AOU_DA, OU_15	DE757RF, DE7 6NL, DE7 6GR, DE7 9H	0.35	1.44	0.00	0.00	0.00		0.00		
CMZ_T5B_SW A_0009	Dynamic,S AOU_DA	SA36 0EB, SA34 0JN, SA340DS, SA37	38.13	3.27	3.27	0.50	3.22	insufficient market volume	0.95		
CMZ_T5B_SW E_0017	Dynamic,S AOU_DA	EX395EW, EX332NL, EX33 2AJ, EX399	1.06	3.09	0.43	0.08	0.43	insufficient market volume	1.79		

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CMZ Name	Products	Postcodes**	Contracted in Prior Years (MW)	Forecasted in Delivery Year (MW)***	Total Tendered in Reporting Year (MW)	Total Contracted in Reporting Year (MW)	Total Unmet in Tenders in Reporting Year (MW)	Reasons not met	Dispatched in Delivery Year (MWh)
CMZ_T5B_SW E_0018	Dynamic,S AOU_DA, OU_15	EX14 4QY, EX15 3JU, EX15 3UE, EX1	0.00	2.80	0.33	0.02	0.33	insufficient market volume	0.46
CMZ_T5B_SW E_0019	Secure,SU _SEP,SAO U_DA,OU _15	TR127BY, TR12 7AJ, TR12 7LQ, TR12	0.01	43.25	22.30	0.03	22.29	insufficient market volume	2.98
CMZ_T6A_EM_ 0029	SU_SEP	LE14 4BX, NN172BN, LE16 7JS, PE8	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T6A_SW E_0021	Secure	PL15 7LY, PL158UH, PL15 7QE, PL15	0.00	0.63	0.00	0.00	0.00		0.00
CMZ_T6B_EM_ 0030	Dynamic	MK441NE, MK44 1QL, NN10 0SW, MK44	0.00	1.92	0.00	0.00	0.00		0.00
CMZ_T6B_SW E_0022	Secure,SU _SEP,SAO U_DA,OU _15	PL178BL, PL178FB, PL189NX, PL189F	0.02	2.88	0.90	0.05	0.90	insufficient market volume	4.03
CMZ_T6B_SW E_0024	Secure	TR2 4HF, TR2 4HX, TR2 5SY, TR2 4T	0.82	6.83	3.41	0.82	3.41	insufficient market volume	15.72
CMZ_T6B_SW E_0025	Dynamic,S AOU_DA, OU_15	EX23 9QQ, EX227RD, EX23 9SD, EX23	0.00	9.51	4.16	0.03	4.15	insufficient market volume	1.32
CMZ_T7A_EM_ 0031	Secure,SU _SEP	NG9 8AE, NG9 4GJ, NG9 7JH, NG9 8P	0.00	9.83	9.56	0.38	9.56	insufficient market volume	2.07
CMZ_T7A_EM_ 0032	Secure	NG220LH, NG236SU, NG220UY, NG229L	0.00	9.56	0.00	0.00	0.00		0.00
CMZ_T7A_EM_ 0033	Secure,SU _SEP	NG236HH, NG23 5BG, NG236RN, NG318	0.10	11.46	0.45	0.11	0.38	insufficient market volume	1.91
CMZ_T7A_EM_ 0034	Secure,SU _SEP	CV9 2RN, CV9 3BQ, CV9 1EP, CV9 2P	0.12	19.95	19.95	0.12	19.95	insufficient market volume	42.47



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CMZ Name	Products	Postcodes**	Contracted in Prior Years (MW)	Forecasted in Delivery Year (MW)***	Total Tendered in Reporting Year (MW)	Total Contracted in Reporting Year (MW)	Total Unmet in Tenders in Reporting Year (MW)	Reasons not met	Dispatched in Delivery Year (MWh)	
CMZ_T7A_SW A_0010	Secure	SA1 6QY, SA5 5AQ, SA5 7DQ, SA5 4T	0.00	0.00	0.00	0.00	0.00		0.00	
CMZ_T7A_SW A_0011	Dynamic	SA73 1EA, SA73 2LF, SA73 1RP, SA7	0.00	2.54	0.00	0.00	0.00		0.00	
CMZ_T7A_SW E_0027	Secure	PL210TJ, PL7 1RB, PL21 0QY, PL6 7	0.00	2.54	0.00	0.00	0.00		0.00	
CMZ_T7A_SW E_0028	Secure,SU _SEP,SAO U_DA,OU _15	TQ12 3TT, TQ124AD, TQ124BJ, TQ12	0.03	7.63	1.28	0.10	1.28	insufficient market volume	6.08	
CMZ_T7A_SW E_0029	Secure	TR147SJ, TR149DP, TR14 0LW, TR147	0.00	0.00	0.00	0.00	0.00		0.00	
CMZ_T7A_SW E_0030	Dynamic,S AOU_DA, OU_15	BS148ET, BS31 2WA, BS4 5ET, BS13	0.02	9.32	6.32	0.02	6.32	insufficient market volume	36.25	
CMZ_T7A_SW E_0031	Secure,SU _SEP	BS345JZ, BS34 5QS, BS34 5UY, BS34	0.00	1.29	0.00	0.00	0.00		0.00	
CMZ_T7A_WM _0010	Secure,SU _SEP,SAO U_DA,OU _15	LD7 1DW, LD7 1DP, LD7 1BL, LD7 1L	1.42	7.90	7.60	2.03	7.59	insufficient market volume	11.95	
CMZ_T7A_WM _0011	Dynamic,S AOU_DA	TF2 9RE, TF1 2EX, SY4 1FE, TF3 4E	0.00	11.16	0.00	0.00	0.00		0.00	
CMZ_T7B_SW A_0012	Secure,SU _SEP,SAO U_DA,OU _15	CF14 2HN, CF142LX, CF142AS, CF14	0.93	35.16	11.73	0.93	10.93	insufficient market volume	1076.29	
CMZ_T8A_EM_ 0035	Dynamic,S U_SEP,SA OU_DA,O U_15	CV32 4AP, CV31 2PB, CV34 6LY, CV3	0.00	24.05	12.00	0.40	11.63	insufficient market volume	5.91	

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CMZ_T8A_EM_ 0038	SU_SEP,S AOU_DA, OU_15	DE562GJ, DE56 2AP, DE55 7NJ, DE55	0.30	20.34	11.69	0.32	11.68	insufficient market volume	135.14
CMZ_T8A_EM_ 0039	Secure,SU _SEP	DE15 0QS, DE11 0SU, DE65 6EF, DE1	0.00	6.46	0.00	0.00	0.00		0.00
CMZ_T8A_EM_ 0041	Secure,SU _SEP,SAO U_DA,OU _15	LE12 9PS, LE11 3RU, LE129EG, LE12	0.08	18.42	10.65	0.16	10.65	insufficient market volume	105.20
CMZ_T8A_EM_ 0042	Secure,SU _SEP,SAO U_DA,OU _15	DN229JU, DN22 7WD, DN226TH, DN22	0.03	13.27	6.13	0.06	6.11	insufficient market volume	29.68
CMZ_T8A_EM_ 0043	Secure,SU _SEP,SAO U_DA,OU _15	PE9 2LR, PE9 2RU, PE9 2TQ, PE9 2L	0.21	8.72	8.32	0.30	8.27	insufficient market volume	136.77
CMZ_T8A_SW A_0013	Secure,SU _SEP	SA62 6DL, SA62 6QB, SA62 6PP, SA6	0.53	11.76	11.76	0.53	11.76	insufficient market volume	7.45
CMZ_T8A_SW A_0015	Dynamic,S AOU_DA	CF81 9NP, SA9 1PL, CF481BA, SA9 5	0.00	0.13	0.07	0.00	0.07	insufficient market volume	0.00
CMZ_T8A_SW E_0032	SU_SEP	EX3 0JB, EX6 8XW, EX6 8UB, EX6 8A	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T8A_SW E_0033	SAOU_DA ,OU_15	BS311LX, BS313JQ, BS31 1RB, BS31	0.00	6.14	0.00	0.00	0.00		0.00
CMZ_T8A_SW E_0034	Secure,SU _SEP,SAO U_DA,OU _15	BA5 3QA, BS284UZ, TA10 9BL, TA116	0.35	6.14	4.91	0.57	4.64	insufficient market volume	211.05
CMZ_T8A_SW E_0035	SAOU_DA ,OU_15	BA6 9LJ, BA6 8DY, BA6 8EZ, BA6 9B	0.00	0.18	0.05	0.02	0.05	insufficient market volume	0.11

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CMZ_T8A_SW E_0036	SU_SEP	BA169RS, BA16 9QG, TA7 8NG, BA169	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T8A_SW E_0037	SAOU_DA ,OU_15	EX15 1BL, EX15 1JQ, EX15 2JR, EX1	0.04	12.13	10.72	0.05	10.71	insufficient market volume	21.42
CMZ_T8A_SW E_0038	Dynamic,S AOU_DA	BS3 3BQ, BS3 5PB, BS3 3PN, BS3 3D	0.06	10.88	5.44	0.06	5.44	insufficient market volume	0.36
CMZ_T8A_SW E_0039	Dynamic,S AOU_DA, OU_15	BS4 4TH, BS3 4SU, BS2 0GF, BS4 3H	0.01	6.25	6.05	0.10	6.04	insufficient market volume	2.16
CMZ_T8A_WM _0012	Secure,SU _SEP	HR9 6ET, NP255RQ, HR2 8NB, HR2 8R	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T8A_WM _0014	SAOU_DA ,OU_15	GL3 4RB, GL3 3HG, GL3 4JG, GL4 8D	0.00	6.19	0.00	0.00	0.00		0.00
CMZ_T8A_WM _0015	Secure,SU _SEP,SAO U_DA,OU _15	GL20 7AQ, GL54 5PN, GL54 5DF, GL2	0.14	6.19	6.19	0.15	6.17	insufficient market volume	59.43
CMZ_T9A_EM_ 0044	SAOU_DA ,OU_15	MK182NN, MK187DS, MK170HZ, MK183J	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T9A_EM_ 0048	SAOU_DA ,OU_15	MK19 6AJ, MK19 6AD, MK147LE, MK19	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T9A_EM_ 0050	SAOU_DA ,OU_15	LE3 2HA, LE3 4BQ, LE3 7AQ, LE191U	0.00	0.00	0.67	0.00	0.67	insufficient market volume	0.00
CMZ_T9A_EM_ 0051	Dynamic,S U_SEP,SA OU_DA,O U_15	LE176JY, LE17 5QQ, LE17 6LX, LE17	0.00	0.00	2.22	0.03	2.19	insufficient market volume	64.08
CMZ_T9A_EM_ 0052	SAOU_DA ,OU_15	DE110SH, DE65 6RA, DE110AL, DE11	0.00	0.00	0.00	0.00	0.00		0.00



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CMZ Name	Products	Postcodes**	Contracted in Prior Years (MW)	Forecasted in Delivery Year (MW)***	Total Tendered in Reporting Year (MW)	Total Contracted in Reporting Year (MW)	Total Unmet in Tenders in Reporting Year (MW)	Reasons not met	Dispatched in Delivery Year (MWh)
CMZ_T9A_EM_ 0054_G	SU_SEP,S AOU_DA	DE12 7PF, DE12 6AL, DE126LJ, DE12	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T9A_EM_ 0055_G	SU_SEP,S AOU_DA	NG23 6TQ, NG23 6SY, NG23 6SL, NG2	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T9A_EM_ 0058	SU_SEP,S AOU_DA, OU_15	NG244NS, NG24 3PQ, NG243SD, NG24	0.00	0.00	4.01	0.05	4.01	insufficient market volume	1.65
CMZ_T9A_EM_ 0059	Dynamic,S U_SEP,SA OU_DA,O U_15	NN9 6SG, NN144XE, NN108PH, NN143J	0.00	0.00	16.35	0.18	16.35	insufficient market volume	63.56
CMZ_T9A_EM_ 0061	SU_SEP,S AOU_DA, OU_15	NN8 1FN, NN10 0QT, NN10 9RS, NN10	0.00	0.00	0.69	0.07	0.69	insufficient market volume	0.10
CMZ_T9A_EM_ 0062	SU_SEP,S AOU_DA, OU_15	NN142QA, NN156DS, NN14 2WP, NN16	0.00	0.00	9.30	0.15	9.30	insufficient market volume	11.03
CMZ_T9A_EM_ 0064	SU_SEP,S AOU_DA, OU_15	PE203RE, PE20 3NL, PE227BZ, PE227	0.00	0.00	0.40	0.01	0.40	insufficient market volume	0.48
CMZ_T9A_EM_ 0075	SAOU_DA ,OU_15	CV128AQ, CV128NQ, CV12 0GJ, CV120	0.00	0.00	1.38	0.00	1.38	insufficient market volume	0.00
CMZ_T9A_EM_ 0076	Dynamic,S U_SEP,SA OU_DA,O U_15	MK160AZ, MK168AY, MK169EZ, MK160J	0.00	0.00	6.92	0.03	6.92	insufficient market volume	11.56
CMZ_T9A_EM_ 0082	Dynamic,S U_SEP,SA OU_DA,O U_15	B78 1TG, CV9 1AE, CV9 1FA, CV10 0	0.00	0.00	5.21	0.00	5.21	insufficient market volume	0.00
CMZ_T9A_EM_ 0083	SU_SEP,S AOU_DA, OU_15	NN126DS, NN128QD, NN126JW, NN129S	0.00	0.00	2.67	0.06	2.67	insufficient market volume	19.20



					🔸 🖯 Distribu	ution System (Operator		
CMZ Name	Products	Postcodes**	Contracted in Prior Years (MW)	Forecasted in Delivery Year (MW)***	Total Tendered in Reporting Year (MW)	Total Contracted in Reporting Year (MW)	Total Unmet in Tenders in Reporting Year (MW)	Reasons not met	Dispatched in Delivery Year (MWh)
CMZ_T9A_EM_ 0084	SAOU_DA ,OU_15	SA12 6PE, SA12 7BB, SA12 6YT, SA1	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T9A_EM_ 0089	SAOU_DA ,OU_15	CV100DP, CV116EP, CV116LT, CV100D	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T9A_EM_ 0090	SAOU_DA ,OU_15	NG24 2AY, NG321PE, NG24 4UJ, NG23	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T9A_SW A_0017	SAOU_DA ,OU_15	SA4 3AY, SA4 4HG, SA4 3BQ, SA5 4Q	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T9A_SW E_0040	SU_SEP,S AOU_DA, OU_15	EX10 9HE, EX100RJ, EX10 0NU, EX10	0.00	0.00	0.46	0.01	0.46	insufficient market volume	0.30
CMZ_T9A_SW E_0041	SU_SEP,S AOU_DA, OU_15	TQ11 0DS, TQ9 6AL, TQ9 5QS, TQ3 1	0.00	0.00	0.96	0.10	0.96	insufficient market volume	0.24
CMZ_T9A_SW E_0042	SU_SEP,S AOU_DA, OU_15	TQ12 2RN, TQ126YT, TQ121YX, TQ121	0.00	0.00	0.78	0.03	0.78	insufficient market volume	0.04
CMZ_T9A_SW E_0043	SU_SEP,S AOU_DA, OU_15	BS21 6PS, BS217UB, BS21 5AW, BS21	0.00	0.00	1.97	0.08	1.97	insufficient market volume	2.14
CMZ_T9A_SW E_0044	SAOU_DA ,OU_15	EX5 7AD, EX5 7FE, EX5 7DH, EX5 1A	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T9A_SW E_0045	SU_SEP,S AOU_DA, OU_15	PL1 9FQ, PL9 9JN, PL9 8JX, PL2 9A	0.00	0.00	0.30	0.01	0.30	insufficient market volume	0.00
CMZ_T9A_SW E_0047_G	SU_SEP,S AOU_DA	PL305FA, PL26 8FN, PL268JB, PL26	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T9A_SW E_0049	SU_SEP,S AOU_DA, OU_15	TA1 5HA, TA1 4JZ, TA3 7HG, TA1 3B	0.00	0.00	0.26	0.10	0.26	insufficient market volume	0.50

					🕨 🖒 Distribu	ition System (Operator		
CMZ Name	Products	Postcodes**	Contracted in Prior Years (MW)	Forecasted in Delivery Year (MW)***	Total Tendered in Reporting Year (MW)	Total Contracted in Reporting Year (MW)	Total Unmet in Tenders in Reporting Year (MW)	Reasons not met	Dispatched in Delivery Year (MWh)
CMZ_T9A_SW E_0050	SU_SEP,S AOU_DA, OU_15	PL19 9PN, PL20 7AB, PL199JZ, EX20	0.00	0.00	1.35	0.07	1.35	insufficient market volume	10.56
CMZ_T9A_SW E_0052	SU_SEP,S AOU_DA, OU_15	BA229JW, BA22 8TJ, BA202WU, BA22	0.00	0.00	0.13	0.04	0.13	insufficient market volume	0.17
CMZ_T9A_SW E_0067	SAOU_DA ,OU_15	BS16 2LL, BS161UA, BS16 5QT, BS16	0.00	0.00	0.00	0.00	0.00		0.00
CMZ_T9A_WM _0016	SU_SEP,S AOU_DA, OU_15	B32 4JB, B29 5BS, B31 1TT, B32 4H	0.00	0.00	7.52	0.05	7.52	insufficient market volume	12.83
CMZ_T9A_WM _0017	Dynamic,S U_SEP,SA OU_DA,O U_15	GL12 7HF, GL128HT, GL12 8DJ, GL12	0.00	0.00	6.50	0.04	6.50	insufficient market volume	8.51
CMZ_T9A_WM _0018	Dynamic,S U_SEP,SA OU_DA,O U_15	GL2 7NX, GL10 3FP, GL2 7LU, GL2 7	0.00	0.00	4.68	0.04	4.68	insufficient market volume	16.16
CMZ_T9A_WM _0019	SAOU_DA ,OU_15	ST15 8RQ, ST119JN, ST11 9TS, ST3	0.00	0.00	0.00	0.00	0.00		0.00

** This is a high level view of the post codes, condensed to allow for visibility on this table. The list of full postcodes is available in our requirements publications on the connected data portal.

*** Zones identified in our T9A tranche will show forecast as zero as they were not captured in the associated procurement statement. Tender & Contracted volumes may also show zero where tenders were for subsequent delivery years. Full details can be found in the supporting data.



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It should be noted that due to our process for the identification of network needs, and assessing the value of flexibility services, we expect deviations from the forecasts in our Procurement Statement. This could be due to a number of reasons including:

- The identification of new network requirements,
- Customer driven works,
- Under subscription of the services,
- Over subscription of the services (especially where volume is only available in large increments),
- Over/under delivery by participants,
- Pricing changes due to competition, &
- Inherent forecasting inaccuracies.

2.2 When we procured services

As outlined in section 3 of our <u>Procurement Statement</u> for 2024/25, we planned to carry out one annual procurement round for our Long-Term trades within the calendar year, in addition to our weekly short-term trades. We secured availability through our long-term trades in accordance with the timelines specified in our procurement statement, with minor modifications made to the deadlines for trade responses and the announcement date for trade awards. These adjustments were made to allow FSPs sufficient time to respond to the published long-term trade opportunities.

19 th Aug 24	We published flexibility requirements for: - Long Term SAOU_DA service - Low Voltage SU_SPP service - OU_15 service
23 rd Sept 24	Trade Opportunities for FSPs open
18 th Nov 24	Deadline for Trade Responses
20 th Jan 25	Trade Awards announced

In addition to the Long-Term procurement, our Short-Term trades functioned within a week-ahead timeframe. FSPs provide us with their assets' availability, capacity, and utilisation prices. These offers are matched against requirements to supplement the long-term volumes already procured to address the relevant network needs, and are manually cleared in accordance with our dispatch principles outlined in section 4.2. The key dates for our short-term trades are highlighted below.

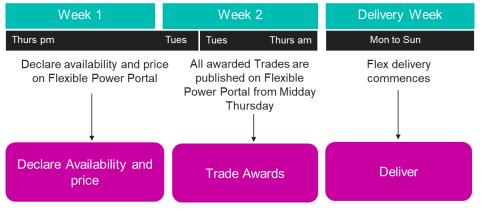


Figure 1: Weekly Short-term flexibility procurement timeframe

nationalgrid electricity distribution Following our procurement cycle, we received valuable feedback from stakeholders. While the majority was positive, we are committed to continuous improvement and have already begun identifying areas where we can further enhance the process.

3. Stakeholder Engagement

3.1 Engagement around Flexibility requirements

Our tendering processes have been designed to be objective, transparent, and market-based. They aim to be as straightforward as possible while ensuring compliance with the Utilities Contract Regulations, which impose strict requirements on how utilities procure services. Since 2019, we have utilised a Dynamic Purchasing System (DPS) to maintain a register of all pre-qualified parties, allowing them to tender for all our published procurement cycles.

In April 2023, we enhanced our tendering processes to align with the framework contract approach adopted by the NESO. As a result, we have implemented a system where market participants are pre-qualified and awarded an overarching contract before they can bid for trade opportunities. This change has enabled us to procure services across both long- and short-term timeframes and will facilitate even closer to real-time procurement in the future.

This process continues to utilise a DPS and is divided into an initial qualification phase, during which formal procurement is conducted to award an overarching contract. Following this, ongoing technical qualification and trading can occur at any time. This process is managed through our online <u>Market Gateway</u>, which we launched in April 2023 to digitise our end-to-end procurement process and enhance platform and marketplace interactions.

Start Commercial Qualification	Next Step Technical Qualification	Next Step Trades	Next Step Delivery
1. Register on Market Gateway	1. Access to Asset Registration	1. Complete the Trade Response	 Deliver Flex Services – optional dispatch start/start
2. Digitally sign Overarching Contract	2. Register assets through the Market Gateway Interface or via the API	 Respond to any clarifications Trade Award 	signals over API 2. Submit metering for MUs over API or
 Complete Billing Form Receive Award Letter 	3. Assign Assets to a Meterable Unit (MU)	decision issued 4. Trade visible on Flexible Power Portal	through upload 3. Performance/ earnings reports and Invoices
5. Flexible Power Portal Account provided	4. Prove Metering		available to view in Flexible Power Portal

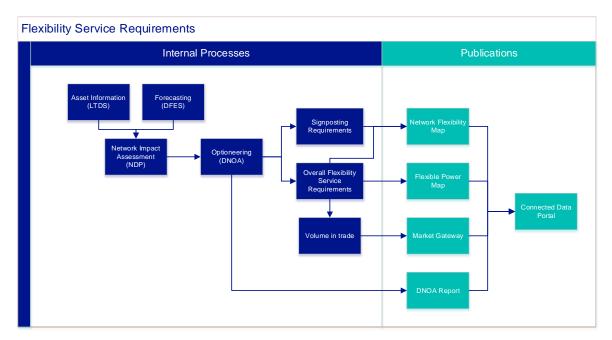
Figure 2: Overview of our qualification and trading processes

Our procurement activities were supported by various promotional initiatives aimed at maximising participation, along with feedback processes that enable us to continually enhance our procedures. Information regarding our pre-qualification requirements, as well as all other relevant details, were made available on the <u>Flexible Power Website</u>. We have summarised the complete list of relevant documents in Appendix 2.

The publication of our requirements was accompanied by promotional efforts to raise market awareness and encourage participation. This included outreach through our <u>update service list</u>, social media posts, webinars, surgeries, one to one engagement, and the attendance of relevant events. These efforts target a diverse range

of stakeholders to ensure that all interested parties are informed about the trade opportunities and the necessary responses required.

In the last year, we held **5** Flexibility Webinars and Workshops, reaching over **170** flexibility market stakeholders, and delivered approximately **40** Flexibility Surgeries with prospective and participating FSPs.



Our flexibility requirements were published to a number of places as shown in the figure below.

Figure 3: Network Requirement Publications

Once the long-term procurement round is completed, we focus on gathering feedback on how we can enhance our publication of requirements and the DNOA process.

Section 3.3 outlines the engagement we undertook regarding the services we procure.

We are always seeking ways to improve this process and ensure that our engagement is accessible and meaningful. If there are any suggestions we should consider, please let us know.

3.2 Engagement with NESO and DNOs

We recognise that we are just one participant among many in a progressively complex energy marketplace. Consequently, in addition to our wider engagement efforts, we aim to work closely with other network licensees.

A key element of this collaboration is our active involvement in the Energy Network Association (ENA), especially in the Open Networks (ON) project, where we have partnered with other licensees to create and implement unified approaches across various DSO-related activities. The Market Development workstream is dedicated to the enhancement of Flexibility Services, with primary objectives that include:

- Enhancing transparency in how DNOs facilitate local markets for flexibility and make decisions, thereby increasing confidence in independent decision-making.
- Simplifying participation in local flexibility markets through the standardisation of approaches among DNOs and between DNOs and the NESO.



 Addressing barriers to participation in flexibility markets and enabling the stacking of revenues across multiple markets.

The ENA ON project has integrated stakeholder engagement into its processes. This includes regular interactions through the Challenge and Dissemination Groups, as well as consultations on the Program of Works and the content of the workstreams.

In the last year we have:

- Continued to align with the NESO's framework procurement method and implemented version 3 of the Standard Flexibility Agreement, enabling other DNOs to adopt the same structure.
- Successfully aligned with and implemented the new ENA Open Networks flexibility product naming conventions in our current and future procurement rounds.
- Worked alongside other DNOs and NESO through the Open Networks Flexibility Product and Stacking group to create clearer resources on <u>Revenue Stacking</u> for flexibility service providers, including a <u>Revenue Stacking Assessment Tool</u>, and established <u>Design Principles</u> to ensure that new DSO and NESO active services are stackable by default.
- Co-led the ENA Open Networks Primacy group to explore the adjacent issue of how flexibility from nearby (not the same) assets could be coordinated by NESO and DSOs to maximise system value.
- Worked with the other DNOs to review and deliver a more <u>concise list</u> of the new ENA product naming convention.
- Actively participated in the <u>International Collaboration on OpenADR 3.0.</u> This new partnership between ENA, Elexon, NESO, and the OpenADR Alliance aims to establish an internationally recognised standard for interoperable flexibility dispatch systems in the GB market. This initiative reaffirms our commitment to eliminating barriers and enhancing market access.

We will continue to implement the outcomes of the Open Networks project and have already started developing our systems to enable the swift adoption of changes to our flexibility service baselines based on the outputs from the ENA ON Baselining Group.

Additionally, we have actively engaged with other licensees directly when necessary. Examples of this include:

- Our joint consultation with UK Power Networks on <u>Proposals for Local Flexibility</u>. The valuable feedback we received has enabled us to refine our positions on several key deliverables, including our plans to introduce a Day-ahead procurement later this year. Focusing effects on developing liquid and well-functioning primary markets for flexibility, and trialling our Demand Turn Up operation across 3 constraints zones in Q2 and Q3 of 2025.
- Our collaboration with the NESO and other relevant DNOs on the Regional Development Programmes (RDPs). The RDPs look across the whole-system landscape to identify key areas of development to unlock additional network capacity, reduce constraints and open up new revenue streams for market FSPs. Through this work we have developed the MW Dispatch service with the NESO.
- Opening up our Flexible Power brand and processes to other DNOs, we aim to enhance alignment and collaboration within the industry. The collaboration will help streamline the process for flexibility providers and make interfacing with DNOs simpler and easier by avoiding the complexities and resource intensity associated with liaising with numerous network operators. We plan to work in

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partnership to further develop the Flexible Power brand and enhance portal functionality to support near real-time procurement and automate clearing processes.

We welcome Ofgem's appointment of Elexon as the Market Facilitator and will actively engage to create a more coordinated and accessible flexibility market as relevant ENA Open Networks projects transition.

3.3 Engagement about products and process

In addition to our engagement with NESO and other DNOs, we also sought direct feedback from stakeholders regarding our service procurement and operational processes. We focused on key stakeholders, including those involved in various aspects of our procurement and operations, as well as broader industry participants. The feedback received was fed into improving some of our systems and processes. In the last year we:

- Published our first <u>Operational Decision-Making Framework</u> along with a set of consultation questions aimed at gathering feedback from identified stakeholders, such as flexibility service providers, large generation connection customers, and customers affected by curtailment via active network management schemes. This ensures that our decision-making development priorities align with and focus on the areas most valued by our stakeholders.
- Collaborated with the Centre for Sustainable Energy (CSE) to assess <u>equitable access to flexibility</u>, and identified barriers that hinder low-income and vulnerable households from participating in flexibility markets. The published report highlights significant disparities and provides recommendations for making the transition to a low-carbon economy more inclusive. We will continue to advance this work with CSE and stakeholders over the coming year and hope to share our learnings with other DNOs to drive a wider impact across the industry.
- Developed a <u>Revenue Estimator Tool</u> tailored specifically for flexibility service providers. This new tool provides an estimate of potential revenue in our weekly Short-Term flexibility markets, allowing providers to evaluate opportunities more effectively and assist with asset forecasting.
- We have been diligently working behind the scenes to enhance the user experience of our <u>Market</u> <u>Gateway platform</u>, enabling us to process asset requests more quickly and better synchronise data across our various systems. Additionally, we have more improvements planned to facilitate easier participation.
- Released version 2 of the <u>Flexible Power Portal Dispatch API</u> to implement enhancements while ensuring compatibility with existing systems.
- Enhanced our <u>Flexibility Map</u> to offer a more accessible way to explore where National Grid DSO is
 procuring flexibility on the distribution network. By entering a postcode, users can quickly identify
 whether their assets are located within a Constraint Management Zone and discover available trade
 opportunities.

3.4 Contact details

We have a wide range of options for engaging with stakeholders as highlighted above.

To join our Update Service please sign up using our contact form: Contact NGED.

You can also contact us directly at <u>NGED.Flexiblepower@nationalgrid.co.uk</u>.

A full list of documents is covered in Appendix 2.



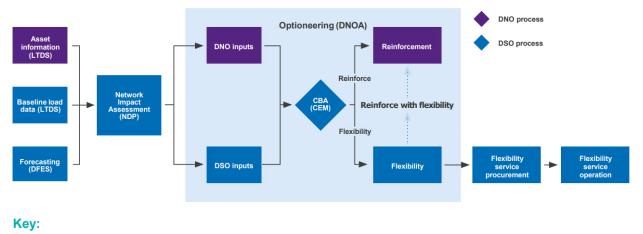


4. Economic Viability

4.1 Flexibility Service Requirements

As highlighted in section 5.1 of our <u>Procurement Statement</u>, we have a robust process for the assessment of Flexibility Needs.

Our <u>Long Term Development Statement</u> (LTDS) highlights the assets that make up our network. Feeding in the forecasting of Load Growth from our <u>Distribution Future Energy Scenarios (DFES)</u> allow us to understand how the loadings on the network will change. This feeds into an evaluation of the limitations on the network in the <u>Network Development Plan</u> (NDP). The <u>Distribution Network Options Assessment</u> (DNOA) process then compares the options for managing any potential constraint. Built around the ENA's Common Evaluation Methodology, this assesses the most effective routes forwards. The optimum solutions from the DNOA then feeds into our Procurement of Flexibility Services.



LTDS: Long Term Development Statement DFES: Distribution Future Energy Scenarios NDP: Network Development Plan DNO: Distribution Network Operator DSO: Distribution System Operator CBA: Cost Benefit Analysis CEM: Common Evaluation Methodology

Figure 4: Determining Flexibility Requirements

The summary below highlights the breakdown of the investment decisions for all the schemes from our latest DNOA document.

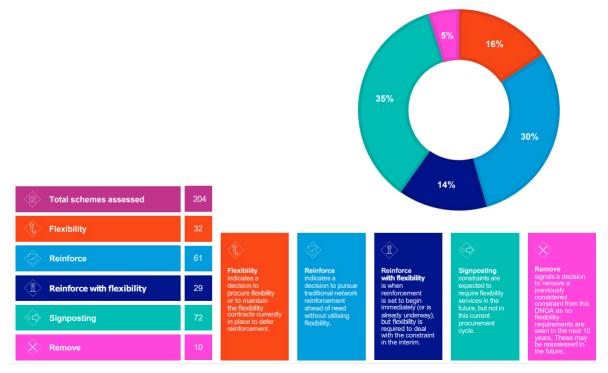


Figure 5: Latest DNOA summary

Further details are available in the latest DNOA document (<u>Distribution Network Options Assessment</u>), including the areas selected for procurement.

4.2 Flexibility Service Selection

As highlighted in section 3 of our <u>Procurement Statement</u>, we have a detailed process for procurement of Flexibility Services, including a clear methodology for how we select which services to procure and then instruct for dispatch.

Our approach to dispatching flexibility services is based on the guiding principles established by the ENA through the Open Networks Project. These principles were initially developed by NGED in 2019 and shared within Open Networks in 2020 for collaborative enhancement, aiming to standardise dispatch and settlement processes across DNOs. We have been instrumental in shaping these principles, which have since been incorporated into our operational practices.

Table 4: Dispatch Principles

Principle	Description	National Grid Electricity Distribution Implementation
Security	The needs of the system will be met using flexibility in such a way that security of supply is	This principle can be subdivided into two key criteria that need to be met, Technical Integrity and Customer Security.
	maintained.	 Technical Integrity considers Network Integrity, the ability of a network to operate within technical limits and





		 System Frequency Integrity, the ability of the System to operate within acceptable frequency limits¹. Customer Security is the ability of a network to meet customer demand and generation. There are minimum standards for these National Grid Electricity Distribution must meet but opportunities to go beyond these standards are also considered where these are economic.
Cost	Flexibility will be operated to meet system need at the minimum level of cost.	The use of Flexibility Services should be cost effective and expenditure proportional to the benefits it brings to the network.
Operability	DSOs will seek to dispatch services that offer compatible levels of operability.	Operability is a measure of how well an offer of a Flexibility Service meets actual or potential System needs. National Grid Electricity Distribution will seek to develop an objective and transparent method for assessing the operability of offers of Flexibility Services.
Competition	DSOs will provide transparency of their dispatch decisions and activities.	Flexibility should be procured using simple, fair and transparent rules and processes. Services should be developed such that service providers can participate easily in different markets.
Fairness	DSOs will operate a fair dispatch methodology and provide equal opportunities to participate.	Flexibility Services shall be assessed and selected impartially purely on their technical and commercial merits. Where multiple technically sufficient Flexibility Services are available at a comparable cost, we will share the dispatch of services across these providers.

Also, we have created a prioritisation service selection framework that serves as our practical application of the ENA guiding principles. This framework ensures consistency and clarity in decision-making, supporting both immediate service selection and the continuous development of rules for implementing an automated, rule-based approach to dispatch.

Table 5: Priorities for our Dispatch Principles

Priority	Name	Meaning	Corresponding Open Networks Principle
1	Technical Integrity	The National Grid Electricity Distribution requirements of Network Integrity, System Frequency Integrity (<u>SD2</u> / <u>TP1B</u>) shall be met. Where these are dependent on Flexibly Services, these services must meet these requirements.	Security
2	Customer Security	National Grid Electricity Distribution requirements for demand and generator security (<u>SD2</u>) shall be met. Where these are dependent on Flexibility Services, these services must meet these requirements. Opportunities for enhancements to demand and generator security may be used where economic.	Security
3	Value	Flexibility should be procured and operated to carry out the roles of a DSO, in a cost-effective manner.	Operability & Cost
4	Market Resilience	Where multiple technically sufficient Flexibility Services are available at a comparable cost, we will share the dispatch of services across these providers.	Competition & Fairness

¹ Although System Frequency is not managed by National Grid Electricity Distribution, it can be affected by the operation of National Grid Electricity Distribution's network and customers.

As our operational experience in dispatching flexibility grows, we are observing how these principles are applied in practice and identifying additional rules we need to implement to ensure consistent application and effective, transparent decision-making. We will regularly communicate these updates to FSPs to help them maximise their value to the system.

4.3 Market Assessment

As outlined in section 3, we have engaged with stakeholders regularly to ensure that our products continue to be relevant and valuable for various service providers.

This engagement included:

- Providing options for feedback after the publication of the DNOA document.
- Offering opportunities for feedback following our long-term procurement round.
- Allowing feedback options after the release of our Operational Decision-Making Framework.
- Participating in the Open Networks Project and its related stakeholder engagement and governance activities.

As a result of this engagement, we have implemented or planned several improvements, including:

- Delivery of the phase 3 plan for our Market Gateway.
- Adoption of the new ENA Open Networks product naming convention in our long- and short-term trades.
- Enabling assets to co-deliver in our LV and HV zones where service windows align.
- Procurement of our first Demand Turn Up/Generation Turn Down service.
- Updating our data structure on the Connected Data Portal.
- Adjusting our baselines to be technology-specific based on our network planning profiles rather than historical data.

We have also taken into account the impact on the Total System by:

- Developing a coordinated service through the Regional Development Programmes.
- Co-leading the Open Networks Primacy Group.
- Actively participating in the Open Networks Baselining Group to standardise flexibility baselines.

5. Carbon Reporting

Following our initial quantification of the carbon impact on our services, a common methodology was developed by the Open Networks project in WS1A P7. The latest report can be found <u>here</u>.

This uses a similar basis to our previous methodology, but adds an additional consideration of the consequential carbon impact. These are summarised in the Methodology below:

5.1 Methodology

- The calculations apply to flexibility services requested for an increase in exports or reduction in imports.
 This is the most prevalent application of flexibility services currently.
- DSO will perform the calculation by technology category without input from providers, except to confirm the technology category where required.
- The calculation includes direct (such as fuel combustion) and consequential carbon impacts (such as battery charging) but excludes indirect impacts (such as embedded emissions in the materials).
- The general formula varies by generation, storage (exports), and demand/storage (imports). In the formulae, kWh is the energy delivered (as opposed to requested) measured at the site of the resource, and η is the energy conversion efficiency.

Generation



x fuel emission factor (EF)

- For generation export, the carbon impact is:
 - 1. combustion of the fuel (direct) = + $kWh/\eta_g x EF$
 - 2. displacing grid generation (consequential) = kWh x GI
- If the generator is displacing imports, the carbon impact is the same as the equivalent amount exported directly to the grid.
- For bioenergy, report on both inclusive and exclusive of biogenic CO₂ released during burning of biomass and biofuels by using the relevant emission factors.

<u>Storage</u>



• For **storage export**, the carbon impact is:

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- 1. carbon intensity of the input energy (consequential) = + $kWh/\eta_s \times Gl_i$ (if from grid), or + $(kWh/\eta_s)/\eta_g \times EF$ (if from generator)
- 2. displacing grid generation at export (consequential) = $kWh \times Gl_e$
- If storage input energy is physically supplied from a renewable generator assume zero carbon, this does not apply to non-physical supplies of low carbon electricity, which should assume grid intensity.
- If storage discharge is displacing imports, the carbon impact is the same as the equivalent amount exported directly to the grid.
- Storage import reduction should be calculated as demand, assuming shifted load (100% payback). Where
 DSO are unsure whether storage is providing export increase or import reduction, use the storage
 calculation. This ensures carbon impacts are not underestimated and incentivises additional information
 to be provided.

<u>Demand</u>



- For demand reduction, the carbon impact is:
 - 1. reduced grid imports during the turn-down (direct) = kWh x GI_{td}
 - 2. increase in grid imports during "payback" (consequential) = + kWh x payback% x Gl_i
- If demand is shifted, such as deferred EV charging, then payback% is 100%. Otherwise, assume an associated payback as a percentage of the turn-down energy of 21%. Where DSOs are unsure, assuming load shifting. This ensures carbon impacts are not underestimated and incentivises additional information to be provided.

The conversion factors are from the following sources.

Table 6: Carbon Conversion Factors

Factor type	Source
Fuel emission	BEIS/Defra
factors	
Efficiency	BEIS Electricity Generation Costs 2020 -
	<u>Coal – DUKES</u> –
	BEIS Storage Costs and Assumptions 2018 –
Grid intensity	Green Book data tables
Payback%	Low Carbon London report



5.2 Results

The key outcomes of the analysis are presented below:

Table 7: Carbon Impact of our Distribution Flexibility Services

LC31 Technology Category*	Requested energy (MWh)	Delivered energy (MWh)	Direct carbon impact (kgCO2e)	Consequential carbon impact (kgCO2e)
Stored Energy	751.06	1,034.99	-214,243.37	214,243.37
Demand	2,301.23	2,023.95	-418,958.08	418,958.08
Fossil - Gas	14.46	12.75	7,272.69	-2,639.25
Solar	0.23	0	0	0
Total	3,066.97	3,071.69	-625,928.75	630,562.19

* This analysis focuses on the Primary Technology categorisation. We do have some sites with a secondary technology which would impact the carbon reporting. For this analysis we have considered the largest asset as the Primary Technology

There are a few key observations to pull out from this analysis:

- All Stored Energy in the reporting year is import reduction.
- Requested and delivered energy volumes are dominated by Demand and Stored Energy. Due to the carbon reporting methodology, demand shifting has a net-neutral carbon impact, and Storage import reduction is calculated as demand, assuming shifted load (100% payback), hence Stored Energy has a net-neutral carbon impact.
- The carbon intensity of the delivered flexibility services is **1.5 kgCO2e/MWh** (total carbon impact divided by the total energy delivered). This value is mainly due to the reduced use of fossil gas assets in reporting year.

Appendix 1: Supporting Data

Please see the associated Supporting Data for further details on the services we have procured and dispatched in the last regulatory year.

This is a common data template mandated by Ofgem and implemented across all DNOs. As such it cannot capture all the details of our service requirements. See Appendix 2 for more details about the other data we publish.

To further aid interpretation of the data see the list of clarifications below.

Procurement and Use Summary

As required within the guidance document, we have provided one worksheet per licence area. We have also provided a worksheet to present the data across all NGED's four licence areas.

We have not procured any Reactive Power services in the last year.

In this reporting year some of our products have been procured under the new ENA Open Networks flexibility product naming conventions such as:

- Operational Utilisation 15-minute Instruction (OU_15)
- Scheduled Availability, Operational Utilisation Day Ahead Notice (SAOU_DA)
- Scheduled Utilisation Settlement Periods (SU_SEP)
- Scheduled Utilisation Specific Periods (SU_SPP)

All data in this summary aligns with the Procurement – Locational worksheet.

Total Peak refers to the total of all the peak values for contracted and tendered volumes.

Total Peak Contracted in Prior Reporting Years (MW) & Total Peak Contracted in Reporting Year (MW)

We have included all the contracted flexibility in zones where we have either tendered for flexibility during the 2024/25 regulatory year, dispatched existing contracts or simply zones where we have awarded contracts for delivery in 2024/25.

Total Peak Tendered in Reporting Year (MW)

This includes all the tendered volumes throughout the procurement tranches (T8A and T9A) and weekly trades, irrespective of response.

Total Peak Needs Not Met (MW)

This sums the needs not met. As detailed later, as they refer to the worst period of time, this will not be a strait calculation from the Peak Tendered and Peak Contracted

Dispatched in Delivery Year (MWh)

This includes all the MWh volumes dispatched throughout the reporting regulatory period. We have provided dispatch data for all zones listed for 2024/25.

Tender Rounds Summary

This data summarises the data in the Procurement worksheet, with locational tenders grouped (by CMZ and procurement round).



We have included all tenders for the procurement tranches in the regulatory year as well as the weekly trades. These are aggregated up to either the tranche round or the week.

Where we have not received any bids, the "Number of Participants" columns has been filled with 0 and "Peak Contracted" (MW) with 0. It should be noted that the Peak Contracted value, covers the Peak volume contracted for 2024/25 delivery only.

Procurement

This provides individual tender outcomes by bidding party within the regulatory year. Where cells are blank, this generally refers to zones where we had no responses to the tenders.

Operational Utilisation 15-minute Instruction

We don't tender for OU_15 as sole products in a zone, but rather as an additional product attached to the main one (SAOU_DA / SU_SEP). As such, whenever we procure a SAOU_DA or SU_SEP product, we also procure the equivalent OU_15 volumes.

Tender Reference

This is a unique ID that can be referenced across to the Tender Rounds Summary, and Dispatch worksheet.

Service Location (Grid Supply Point)

Due to the locational nature of our services, we have grouped the services by CMZ. This provides more details than GSPs which may require the aggregation of zones.

Flexible Unit Reference

This unique unit reference allows for reference with the Dispatch. Where the contract is for future delivery years, the contract may not have been added to our operational systems and will be marked as TBC. Before it gets dispatched a Flexible Unit Reference will be generated.

Maximum Connection Voltage

This refers to the maximum allowable voltage in the CMZ, rather than the highest connection voltage of an asset registered in that given CMZ.

Main Technology Type

The technology of the asset with the highest capacity in each CMZ is used. In cases where the Flexible Unit Reference is TBC, this column may not yet be populated as this is subject to change before initially being dispatched.

Dispatchable / Non-dispatchable

All services, except for Sustain & SU_SPP, are dispatchable. These services' Periods are pre-arranged and don't require a dispatch signal, thus are non-dispatchable.

Number of bids received

This refers to the number of bids received for the given tender. With our trade structure this can result in a high number of bids in some cases where separate responses can be submitted with different offered capacity and available times with the same or multiple flexible units.

Committed Contracts / Non-committed Contracts

With the trade structure our contracts from 2023/24 onwards are Firm as opposed to the previous Non-Firm Contracts.

Connection Voltage

This represents the connection voltage of the assets.

Potential Service days / Service Window FROM/TO

Our CMZ requirements vary on a monthly basis, with different Service days and windows required. For this table we have used the outermost requirements (e.g. the earliest start and latest end of a service requirement throughout the regulatory year).

There are no instances of Service Window 2 FROM/TO as we only procure a single block of time for a given day for our Sustain / SU_SPP services.

Full details can be found in our service requirements documents (as highlighted in Appendix 2).

Service Fee

We do not utilise a service fee for any of our products.

Procurement – Locational

This worksheet provides a summary of the tender outcomes by CMZ. We have built on last year's data, kept all previous zones even if we have stopped procurement since, and added new zones where we have either tendered for or dispatched flexibility services in the reporting year.

Zones with multiple products have been included separately to differentiate between them. We have also included a total OU 15 per zone line in the table.

Peak values refer to the maximum requirements within a zone at a point in time whereas Total is a simple sum. This means that the total would sum all weekly trades, whereas peak would take the maximum of that series.

Due to this time element in the values presented; they may not neatly sum as they may refer to different time periods

Peak Contracted in Prior Years / in Reporting Year (MW)

We have calculated these based on the active contracts for delivery in the reporting year, separated by contract start date.

Peak unmet in Tender in Reporting Year (MW)

It is worth noting that the tendered MW value is a maximum difference between the tendered and contracted volume over the delivery year. This may be a different time period to the peak contracted value.

Dispatch

This data includes all the individual dispatches which occurred throughout the reporting year.

Tender reference

This is a unique ID that can be referenced across to the Tender Rounds Summary and Procurement worksheet.

Incident reference

This ID combines the CMZ code and the date of dispatch, linking all dispatches within a day and zone to a single incident.

Incident Location (Grid Supply Point)

Due to the locational nature of our services, we have grouped the services by CMZ. This provides more details that GSPs which may require the aggregation of zones.

Flexible Unit Reference

This uniquely identifies a contract rather than a specific Asset and should refer back to the procurement tab.

Service Fee

We do not utilise a service fee for any of our products.

Pricing Strategy

We have moved across to Pay as Clear pricing strategy. A few legacy contracts still operate fixed pricing.

Date/Time of Instruction

This is set to 15 minutes ahead of the Start time as our Formal Utilisation Instruction via the Flexible Power API is sent 15 minutes ahead of delivery.

Notice Time (HH:MM)

Sustain and Scheduled Utilisation - Specific Periods are pre-arranged and don't require a dispatch signal, therefore the notice period is N/A.

Appendix 2: Data and Publications

We acknowledge there is a significant amount of data and information involved in the procurement of our services, as well as wider DSO processes.

As such we have summarised the key references in this section. This reflects the latest documentation, rather than all documentation that was relevant last year.

To provide a live view of please refer to our Document and Data Catalogue.

Distribution Flexibility Services Regulatory Reporting

Publication	Description	Location
Distribution Flexibility Services Procurement Statement	A forward-looking report on how we will procure services in the coming regulatory year.	National Grid Website & Flexible Power Website
Distribution Flexibility Services Procurement Report	A report, and supporting data table, detailing how and where we have procured flexibility services in the past regulatory year.	National Grid Website
Ongoing Reporting	We publish the outcomes of our Flexibility Service procurement. This is covered by our Procurement Results document.	Flexible Power Website
Evolution of Distribution Flexibility Service Procurement Document and Webinar	Our initial, informal engagement on the changes we would like to make to how we procure flexibility services.	Flexible Power Website
Distribution Flexibility Services Procurement Consultation Document, Webinar and Outcomes	Our formal consultation on changes we have proposed on how we procure flexibility services.	Flexible Power Website
Ofgem Guidance	The Ofgem guidance determining what should be covered in the regulatory reporting.	Ofgem Website

DSO process (and inputs)

Publication	Description	Location
Long Term Development Statement (LTDS)	The Long Term Development Statement provides an overview of the design and operation of the distribution network, together with data on the 132kV, 66kV and 33kV systems and the transformation levels down to 11kV. This is produced by DNO rather than DSO functions.	National Grid Website (registration needed)
Distribution Future Energy Scenarios (DFES)	The Distribution Future Energy Scenarios outline the range of credible futures for the growth of the distribution network out to 2050.	National Grid DSO Website
Network Development Plan (NDP)	The Network Development Plan provide stakeholders with transparency on network constraints and needs for flexibility. The NDP has been created to present the 'best view' of planned asset based and flexible network developments over the five to ten-year period	National Grid DSO Website
Distribution Network Options Assessment (DNOA)	The Distribution Network Options Assessment (DNOA) is a publication which outlines reasons behind investment decisions made in order to deal with constraints on our network.	National Grid DSO Website

Flexibility Requirements

Publication	Description	Location
Connected Data Portal	The Connected Data Portal hosts detailed and machine- readable data on our Connected Data Portal. This is a platform for the hosting of datasets across the business. It allows data to be accessed via API, allowing easy processing at scale. We have committed to publishing the data behind the above publications on the portal. This includes, the detailed requirements in each zone as well as the associated geographic postcodes and polygons. It also hosts results of Awarded Trades.	Connected Data Portal
Network Flexibility Map	The Network Flexibility Map includes the availability windows and expected market volumes required for all our DFES scenarios for a five-year period under the Signposting process. Visualisations of the data are available online through the mapping tool and datasets are downloadable. The Network Flexibility Map also presents our firm flexibility requirements which feed into our procurement process. This shorter-term view, gives clarity on our needs and is refreshed every six months in line with our procurement timeline.	<u>National Grid Website</u>
Flexible Power Map	The Flexible Power Map replicates much of the functionality of the Network Flexibility Map but focusses on the requirements against which we will procure. It highlights the required volumes and forecast availability windows. This map is held on the Flexible Power website and hosts data from the other DNOs who are also involved in the Flexible Power Collaboration.	Flexible Power Website
Market Gateway	Our portal for all commercial interactions.	Market Gateway
Procurement results	The results documents provide detailed information on the volumes procured through each cycle.	Flexible Power Website & Connected Data Portal
Post Code Checker	A simple look up tool to assess the allocation of postcodes to CMZs. The background data is available as and excel sheet and on the connected data portal.	Flexible Power Website & Connected Data Portal
Revenue Estimator Tool	A tool to provide a view on the maximum potential revenue available to a provider.	Flexible Power Website

Flexibility Process

Publication	Description	Location
Procurement &	This document provides the proposed procurement window	Flexible Power Website
Engagement Timetable	dates and the surrounding market engagement	
National Grid Guidance	Our Consolidated guidance on how we procure flexibility	Flexible Power Website
for Electricity Distribution	services	
Service Providers		
NGED_ENA Standard	The latest version of the T&Cs applicable to our	Flexible Power Website
Flexibility Services	Procurement of Flexibility Services	
Agreement		
On Track to Trade -	Slides and Recording on our Webinars on how to	Flexible Power Website
Webinar	participate in our services.	
Flexible Power Payment	An overview of the Flexible Power Payment Mechanics	Flexible Power Website
Mechanics		



Flexible Power Example Event Performance Report	An example of the performance report created post a response event.	Flexible Power Website
Flexible Power Example Monthly Invoice	An example of the monthly invoice created at the end of each month.	Flexible Power Website
Flexible Power Example Event Earnings Report	An example of the payment breakdown of utilisation earnings created post a response event.	Flexible Power Website

Flexibility Updates

Publication	Description	Location
Flexibility Update	A mailing list to receive Updates on our	Email Sign up at: <u>Contact NGED</u>
Service	Flexibility Services	(flexiblepower.co.uk)

Other relevant information

Торіс	Description	Location
Open Networks	An overview of the Open Networks Project and all the relevant documentation.	ENA Website
RDPs	Overviews of the Regional Development Programmes	<u>NESO website</u> & <u>National</u> <u>Grid website</u>
Innovation	An overview of the National Grid Electricity Distribution innovation portfolio	National Grid Website

Distribution**System**Operator

