# SEPD NETWORK DEVELOPMENT REPORT

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1<sup>st</sup> May 2024

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## INTRODUCTION

This is Scottish and Southern Electricity Networks – Distribution's (SSEN-D) 2024 Network Development Report (NDR) for the SEPD licence area. The NDR is part of a suite of new information that sets out our longer-term Network Development Plans for our Distribution networks. It gives users access to information pertaining to our network plans for the next ten years in relation to our 11kV networks and above, allowing all interested parties to better assess and identify the future opportunities to use and engage with us and the network. Specifically, it includes:

- a) A description of those parts of the Distribution Network Operator's (DNO's) network that are most suited to new connections and distribution of further quantities of electricity;
- b) A description of those parts of the DNO's network where reinforcement may be required to connect new capacity and new loads;
- c) Information that supports the secure and efficient operation, coordination, development and interoperability of the interconnected system; and
- d) Flexibility or Energy Efficiency Services that the DNO reasonably expects to need as an alternative to reinforcement.

This Report and our wider Network Development Plan (NDP) build on existing publications<sup>1</sup>, including our Long-Term Development Statements and Flexibility Services publications, which provide information on our nearerterm opportunities and our key focus areas as we continue to develop and improve our network to meet the changing needs and requirements of all stakeholders. These supporting documents can be found in the following links.

- a) Long term development statements (LTDS) SSEN
- b) Flexibility SSEN

To aid users of this Report, we have worked with all DNOs across Great Britain to ensure consistency in reporting. SSEN-D, along with other DNOs and TOs across Great Britain, is a member of the Energy Networks Association (ENA). Through the ENA's Open Networks project, we have worked collaboratively to develop a Form of Statement of Network Development Plans<sup>2</sup>.As a result of this work, the NDP is split into three distinct reports, as illustrated in Figure 1; the red box highlights the part that this document – the Network Development Report – represents.

<sup>1</sup> See Figure 2 in NDP – Methodology and Assumptions for existing publications and corresponding time horizons.

<sup>2</sup> ENA NDP Form of Statement Template and Process (22 Dec 2021)



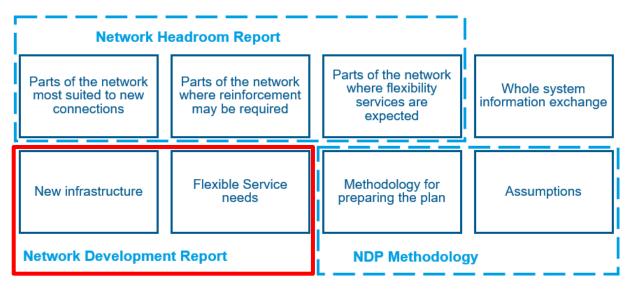


Figure 1: NDP Reporting Structure

### Network Development Report (NDR) overview

The NDR provides a comprehensive view of our network, bringing together our plans for the current price control period (RIIO-ED2, which runs until March 2028) and initial programmes for subsequent years, up to 2034. It also references other key publications that set out the likely use and development of our network and the opportunities that this may present.

Using latest available Distribution Future Energy Scenarios (DFES) at the time of publication, the NDR sets out our proposed investments and likely areas for service requirements going forward. Together with the NDP Methodology, it also sets out the wider information used to inform this report, which users of our network can call upon to inform their own plans and activities. Further, the information contained within this report informs our Network Scenario Headroom Report (NSHR), which indicates potential investment opportunities for flexible services and new connections at a granular level across our network and allows interested parties to clearly correlate proposed areas of investment with changes in network headroom capacity.

The NDR provides a list of high-level plans for network interventions and flexible service requirements:

- For the next five to ten years
- Location of the intervention
- Requirements for flexibility services or increasing existing asset capacity; and
- When the works are forecast for delivery



#### How to read this report

The NDR describes our forward programme of interventions required on our networks over the next five to ten years This includes details of our proposed flexibility needs as well as network interventions. These decisions are derived from our network development process which is described in the accompanying NDP Methodology and Assumptions report as well as our latest Distribution Network Options Assessment (DNOA) methodology.

This section provides both guidance on the information pertaining to potential Flexibility Services and network interventions listed in the report. It also provides further context on our current suite of Flexibility Services.

We provide summary tables of forward-looking flexibility needs and network interventions in two parts attached to this report. These parts are:

- Part 1: Flexibility Service Solutions Known flexibility opportunities as reported in our latest SLC 31E procurement statement.
- **Part 2: SEPD Interventions –** Interventions in SEPD for projects in initial development and detailed development and delivery (see below).

The project statuses mentioned above refer to the following:

- **Projects in initial development** these are projects which are still at an early phase of development and may yet to arrive at a DNOA outcome. As such there is still a possibility that the intervention may not be needed in its current form or at all. The use of flexibility may be a feasible outcome. These tend to be longer term projects. Further updates on these projects and other developments at an even earlier stage will be updated through our periodic DNOA outcome releases.
- **Projects in detailed development and delivery** these are projects that have progressed into more detailed development and delivery. They include projects required for both primary reinforcement and asset replacement purposes. Going forwards an increasing proportion of primary reinforcement projects will be those that have been through the DNOA process and have been assessed as needing network intervention. Projects that have been through the first DNOA outcomes have been identified in this report. Some primary reinforcement projects on the list pre-date the DNOA process but will have been similarly assessed for flexibility needs.



#### **Current Flexibility Services products**

SSEN-D align with the definition of Flexibility Service products as agreed within the ENA's Open Network Programme<sup>3</sup>. The four key services utilised across all distribution networks are: Scheduled Utilisation, Operational Utilisation, Scheduled Availability + Operational Utilisation, and Variable Availability + Operational Utilisation. Currently, SSEN-D primarily procures Variable Availability + Operational Utilisation – week ahead response for supporting the deferral of reinforcement. The payment terms for and definitions of these services are summarised in Figure 2.

	Product	Description	Decision timescales	Payment
	Peak Reduction	This product seeks a reduction in peak power utilised over time. This response can manage peaks in demand.	<ul> <li>Utilisation Instruction: At Trade</li> </ul>	Utilisation
lcts	Scheduled Utilisation	In this product, the time that flexibility is delivered has been pre-agreed in advance with the provider.	<ul> <li>Utilisation Instruction: At Trade</li> </ul>	Utilisation
Flexibility service products	Operational Utilisation	This product allows for the use case where the amount of flexibility delivered is agreed nearer to real time.	<ul> <li>Utilisation Instruction: Real Time or Week Ahead</li> </ul>	Utilisation
	Operational Utilisation + Scheduled Availability	This product procures, ahead of time, the ability of an FSP to deliver an agreed change following a network abnormality.	<ul> <li>Availability Refinement: Not allowed</li> <li>Utilisation Instruction: Real Time or Day Ahead</li> </ul>	Availability + Utilisation
Flexibil	Operational Utilisation + Variable Availability	This product allows for DNOs and the ESO to procure a level of contracted capacity, but then refine the requirements in terms of availability closer to the event.	<ul> <li>Availability Refinement: Week Ahead or Month Ahead</li> <li>Utilisation Instruction: Real Time or Day Ahead or Week Ahead</li> </ul>	Availability + Utilisation

Figure 2: New Standard Flexibility Service Products<sup>4</sup>

We will continue to dispatch services procured under previous names and Table 1 shows how the previous services match to the new names. It should be noted the mapping is not exact. Some variables, such as when availability instructions are given, have been adjusted to align with the new definitions.

Previous Product Name	New Product Name	Variation
Sustain	Scheduled Utilisation	
Secure	Variable Availability + Operational Dispatch	Month Ahead
Dynamic	Variable Availability + Operational Dispatch	Week Ahead

Table 1: Alimenting Flexible Services Products to ENA

Part 1 highlights where we are proposing to procure flexible services and the type of services required.

<sup>3</sup> https://www.energynetworks.org/assets/images/2023/Aug/on-flexibility-products-alignment-(feb-2024).pdf?1711357255

<sup>4</sup> SLC 31E Flexibility Services Procurement Statement, available in our Flexibility Services Document Library



## **GETTING IN TOUCH**

Although the NDP provides a view of the future in terms of our investments and potential network constraints, we would encourage any party using this information in their decision-making process to engage with us ahead of making an application to connect or offer flexible services.

Table 2 sets out the key e-mail addresses, phone numbers and websites that can support you with your decision making:

Type of Enquiry	DNO	Email	Telephone	Website
Flexible Services	SHEPD SEPD	FlexibleServices@sse.com Flexibilityprocurement@sse.com	N/A	<u>Flexible Solutions</u> <u>Flexibility Services -</u> <u>SSEN</u>
Load Connections	SHEPD SEPD	connections@ssen.com	0800 0483516	<u>New Supplies</u> <u>Existing</u> <u>Supplies</u>
Generation Connections (>50kW)	SHEPD SEPD	mcc@sse.com	0345 0724319	Generation Connections
Generation Connections (<50kW)	SEPD	Southmicrogen@sse.com	0345 0724319	<u>Generation Connections</u> <u>Microgeneration</u> <u>connections - SSEN</u>

Table 2: Contact details for different types of enquiries

Further, if you have any feedback on this NDR, or any aspect of the NDP, which we can use to improve future publications, we would like to hear from you. Please get in touch through the following address <u>whole.system.distribution@sse.com</u>. Please state "Network Development Plan Feedback" in the subject title.



## PART 1: FLEXIBILITY SERVICE SOLUTIONS

This section provides information on the substations that have been identified as potential opportunities for flexible services due to their loading. The information includes the service requirement, the anticipated year that we would go to market and the years of forecast need. Further information is provided through our SLC 31E Flexibility Services Statement, which is an annual statement published on our website every April that sets out our Flexibility Service requirements for the forthcoming year. Further information on our flexibility requirements can be found in our Flexibility Services Document Library<sup>5</sup>.

To participate in the Bidding rounds listed in this section first an Overarching Agreement must be signed, for more information on this please refer to the Flexibility Services website or email the Flexibility Services team (see Table 2).<sup>6</sup>

## 2024 Long Term Bidding Rounds

Greatest certainty of our future flexibility needs can be found from our 2024 anticipated flexibility service requirements. These are taken from the latest SLC 31E Flexibility Services Statement.

Zone Name	Licence Area	Peak Capacity Required (MW)	Forecast Utilisation (MWh)	Voltage Level Flexibility Procured at (kV)	Service Start Year	Service End Year	Service Window
West London – Ealing (excl. Boston Manor Road)	SEPD	29	790	132	24/25	26/27	Winter 16:00-20:00
West London – Ealing Boston Manor Road Only	SEPD	6	330	66	24/25	26/27	Summer 10:00-16:00

Table P1.1 May Bidding Round Anticipated Flexibility Service Requirements

<sup>5</sup> https://www.ssen.co.uk/our-services/flexible-solutions/flexibility-services/flexibility-services-document-library/

<sup>6</sup> https://www.ssen.co.uk/our-services/flexible-solutions/flexibility-services/



West London – Iver 66kV	SEPD	2	50	66	24/25	26/27	Winter 16:00 – 20:00
West London – Laleham. Church Road, Hope and Anchor, East Bedfont B, Staines	SEPD	2	50	22	24/25	26/27	Winter 16:00-20:00
West London – North Hyde 33kV	SEPD	7	190	33	24/25	26/27	Winter 16:00-20:00
West London – Willesden. Leamington Park and Park Royal	SEPD	1	50	22	24/25	26/27	Winter 09:00-17:00
West London – Willesden. Greenford and Goldsmiths	SEPD	4	110	66	24/25	26/27	Winter 16:00 - 20:00
West London – Willesden. Perivale Only	SEPD	15	200	66	24/25	26/27	Winter 16:00 – 18:00
West London – Willesden. Canal Bank Only	SEPD	10	550	66	24/25	26/27	Summer 10:00-16:00
Lytchett	SEPD	5.43	7.7	33	24/25	24/25	Autumn 18:00-18:30 Winter 18:00-19:00



#### Table P1.2 August Bidding Round Anticipated Flexibility Service Requirements

Zone Name	Licence Area	Peak Capacity Required (MW)	Voltage Level Flexibility Procured at (kV)	First Year of Service	Last Year Service Required	Service Windows
Beaconsfield	SEPD	3.03	11	25/26	26/27	Spring/Autumn 17:30-18:30 Winter 14:00-20:30
Lytchett	SEPD	5.87	33	25/26	26/27	Autumn 18:00-18:30 Winter 18:00-19:00



### January 2025 Bidding Round

The review of the network using the DNOA network is ongoing and will be reviewed yearly. The areas where a review is expected to occur ahead of the January 2025 bidding round are listed in Table P1.3. Not all these areas will result in Flexibility Services being the optimal solution. If information is available sooner, some of these services may be procured in August 2024 bidding round.

Table P1.3 January 2025 Bidding Round Anticipated Flexibility Service Requirements

CMZ Name	Licence Area
Alresford	SEPD
Calne	SEPD
Charlbury-Woodstock	SEPD
Bemerton	SEPD
Botley Wood	SEPD
Fawley North	SEPD
Oxford (Osney)	SEPD
Rowden	SEPD
Witney	SEPD
Fort Widely	SEPD
Yarnton	SEPD
Yattendon	SEPD



## PART 2: SEPD INTERVENTIONS

This section provides information on planned interventions in the SEPD licence area. It is organised based on stages of project development and delivery:

- **Projects in initial development** these are projects which are still at an early phase of development and may yet to arrive at a DNOA outcome. As such there is still a possibility that the intervention may not be needed in its current form or at all. The use of flexibility may be a feasible outcome. These tend to be longer term projects. Further updates on these projects and other developments at an even earlier stage will be updated through our periodic DNOA outcome releases.
- Projects in detailed development and delivery these are projects that have progressed into more detailed development and delivery. They
  include projects required for both primary reinforcement and asset replacement purposes. Going forward an increasing proportion of primary
  reinforcement projects will be those that have been through the DNOA process and have been assessed as needing network intervention.
  Projects that have been through the first DNOA outcomes have been identified in this report. Some primary reinforcement projects on the list predate the DNOA process but will have been similarly assessed for flexibility needs.

Interventions that apply to several substations are also separated into group reinforcement tables.

The information in the tables includes the existing and updated capacity, or the capacity to be released, as well as the forecasted reinforcement completion date, which is reflected in the NSHR.

Figure P2.1 shows the supply areas of each Grid Supply Point (GSP) in the SEPD licence area. Supply areas for Primary Substations are available on our <u>Open Data Portal</u>. Only GSPs with network interventions in development / delivery are listed as sections below the map, but the map in P2.1 provides an overview of all GSPs.



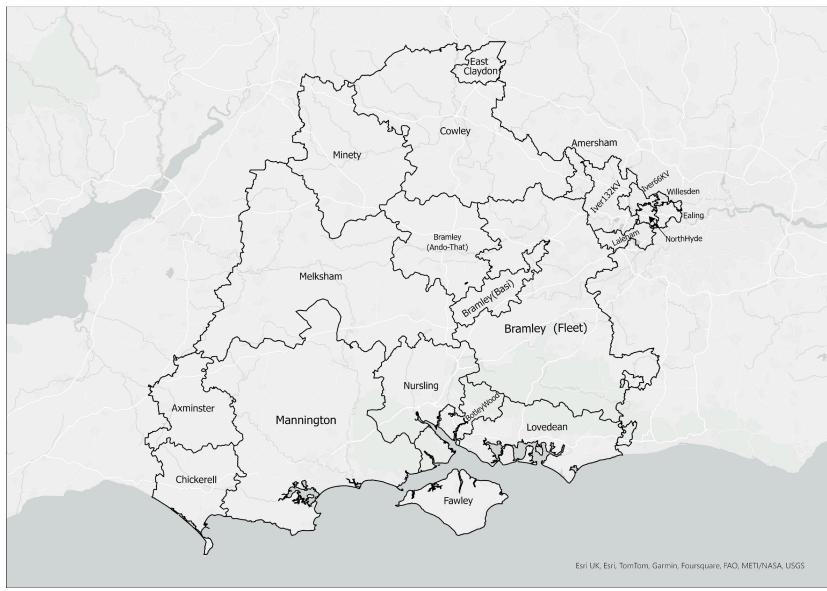


Figure P2.1 GSP Supply Areas in the SEPD licence area.



#### Reference map: network symbology

Figure P2.2 is intended to aid readers in understanding the GSP-specific maps in the following sections by describing the symbology used for different types of network assets. The locations of GSPs, BSPs, and Primary Substations are represented by yellow, purple, and red dots, respectively, 132kV, 66kV, 33kV, and 22kV circuits are represented by blue, light orange, green, and dark orange lines, respectively. The geographic area supplied by the GSP is denoted by the shaded blue area.

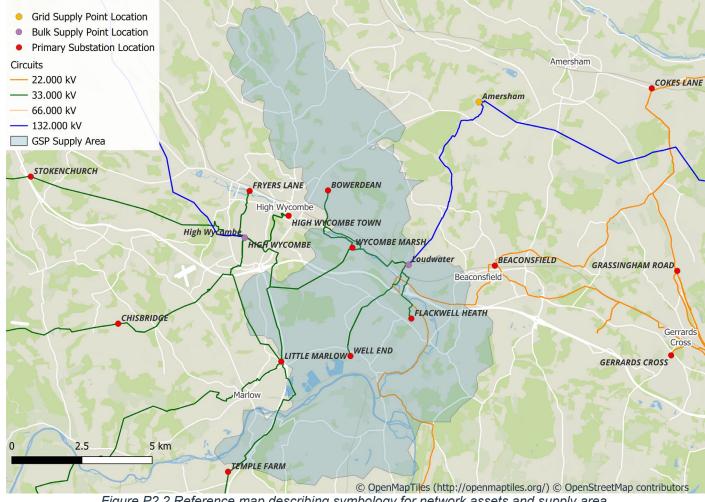


Figure P2.2 Reference map describing symbology for network assets and supply area.



#### Axminster

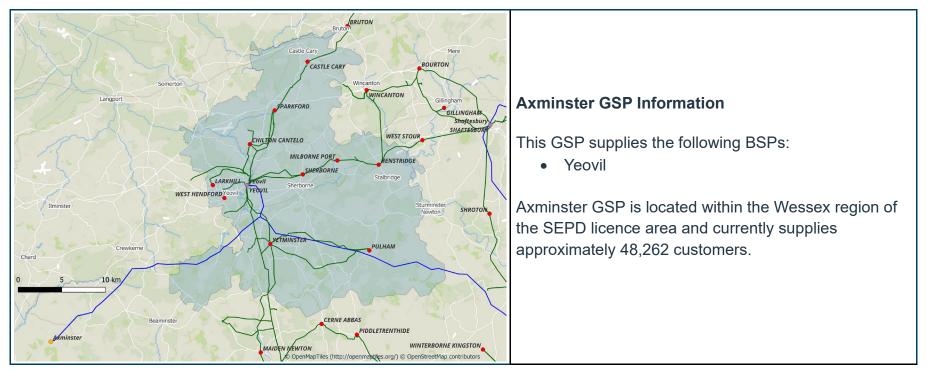


Table P2.1 Axminster GSP group reinforcement projects in initial development

Network Area	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Yeovil – Yetminster – Axminster (P)	33	-	-	2027/28	Ν	Replacement of overhead line and underground cable.	CV1 - Primary Reinforcement



### **Botley Wood**

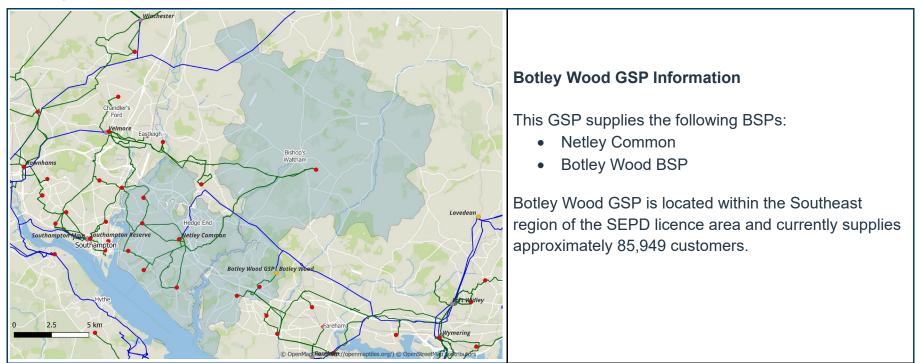


Table P2.2 Botley Wood GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Netley Common	132/33	114	228	2025/26	N	Addition of one 132/33kV 90MVA transformer at Netley Common BSP. Addition of a new 33kV 2200A circuit breaker.	CV1 - Primary Reinforcement
Bishops Waltham	33/11	22.68	37.8	2026/27	N	Change twin 12/24 CER units to 20/40 units at Bishops Waltham and upgrade circuits.	CV1 - Primary Reinforcement



#### Bramley (Ando-That)

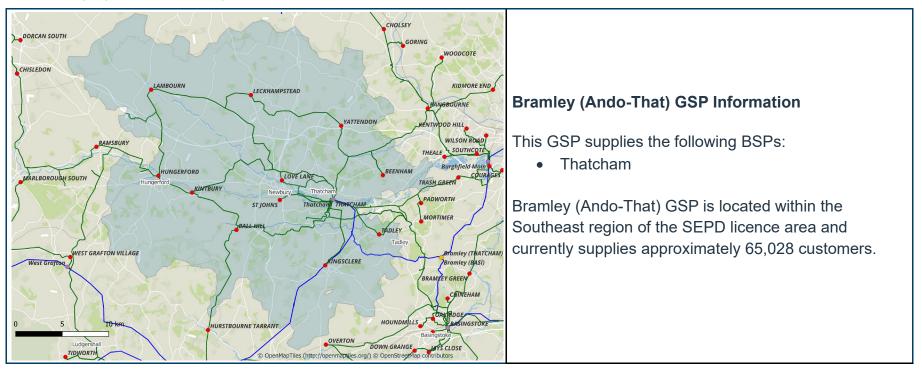


Table P2.3 Bramley (Ando-That) GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Hungerford	33/11	13	15	2025/2026	N	Replace C1MT and C2MT with 2x7.5/15MVA CER units.	CV7 - Asset Replacement



### Bramley (Basingstoke)

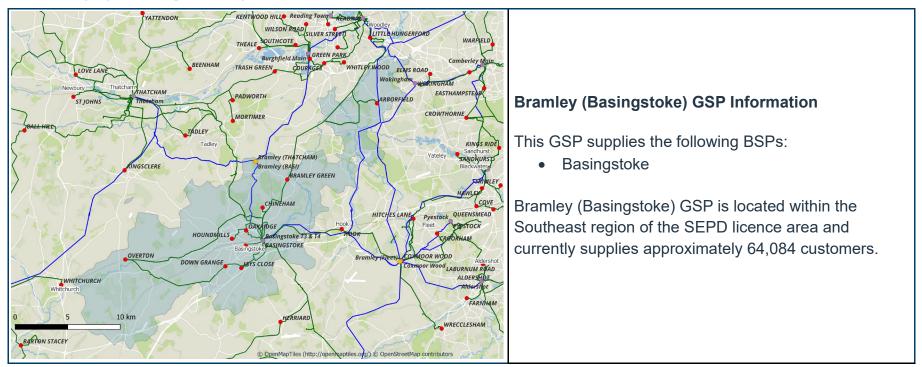


Table P2.4 Bramley (Basingstoke) GSP group reinforcement projects in initial development

Network Area	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Basingstoke / Overton (P) / Bramley Green	33	-	-	2027/2028	Ν	Replacement of 18 33kV poles and 2.7km of overhead line to release 1MVA.	CV1 - Primary Reinforcement

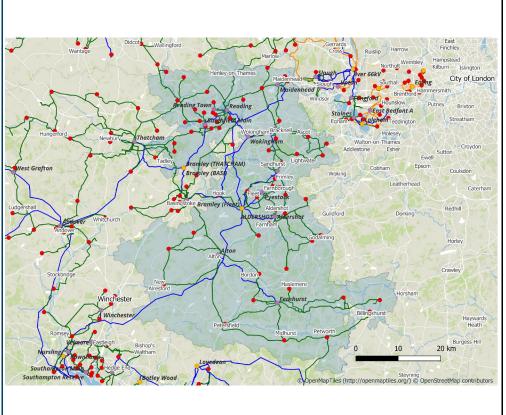


Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Basingstoke T1A & T2A	132/33	75.6	114.75	2024/2025	N	Replace existing 60MVA A1MT transformer with a 90MVA unit and change circuit breaker.	CV7 - Asset Replacement
Basingstoke T1A & T2A	132/33	75.6	114.7585.05	2024/2025	N	Replace existing 60MVA A2MT transformer with a 90MVA unit.	CV7 - Asset Replacement

Table P2.5 Bramley (Basingstoke) GSP reinforcement projects in detailed development and delivery



#### Bramley (Fleet)



#### **Bramley (Fleet) GSP Information**

This GSP supplies the following BSPs:

- Aldershot
- Alton
- Bracknell Main and Reserve
- Burghfield Main and Reserve
- Camberley Main and Reserve
- Coxmoor Wood
- Fernhurst
- Maidenhead
- Pyestock
- Reading
- Reading Town
- Wokingham

Bramley (Fleet) GSP is located within the Southeast region of the SEPD licence area and currently supplies approximately 538,542 customers.



Network Area	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Aldershot - (P) / Tongham	33	-	-	2026/2027	Ν	Replacement of 18 33kV poles and 2.75km of overhead line to release 1MVA.	CV1 - Primary Reinforcement
Fernhurst - (P) / Midhurst	33	-	-	2026/2027	N	Replacement of 18 33kV poles and 2.75km of overhead line to release 1MVA.	CV1 - Primary Reinforcement
Cholsey - (S) / Goring*	33	-	-	2026/2027	Ν	Replacement of 11.59km of overhead line to release 10MVA.	CV1 - Primary Reinforcement

Table P2.6 Bramley (Fleet) GSP group reinforcement projects in initial development

\*Cholsey – (S) / Goring project relates to Bramley (Fleet) GSP and to Cowley GSP as such it is listed under both GSPs.

Table P2.7 Bramley (Fleet) GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Alresford	33/11	13	24	2026/2027	Ν	Release of 11MVA at Alresford due to transformer reinforcement.	CV1 - Primary Reinforcement
Chobham	33/11	14.025	22.68	2025/2026	Ν	Replace C1MT and C2MT with 2x12/24MVA CER units.	CV7 - Asset Replacement
Haslingbourne	33/11	13	22.68	2025/2026	N	Replace C1MT and C2MT with 2x12/24MVA CER units and replace 33kV switchgear.	CV7 - Asset Replacement
MVEE	33/11	28.35	28.35	2025/2026	N	Replace C1MT and C2MT with 2x15/30MVA units and replace 33kV switchgear.	CV7 - Asset Replacement



Network Area	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Fernhurst - Five Oaks - Plaistow	33	31.8	46.8	2024/2025	N	Overlay existing 33kV overhead line and upgrade Plaistow substation (install 2x7.5/15MVA units and other circuit works) to release 15MVA.	CV1 - Primary Reinforcement

Table P2.8 Bramley (Fleet) GSP group reinforcement projects in detailed development and delivery



#### Chickerell

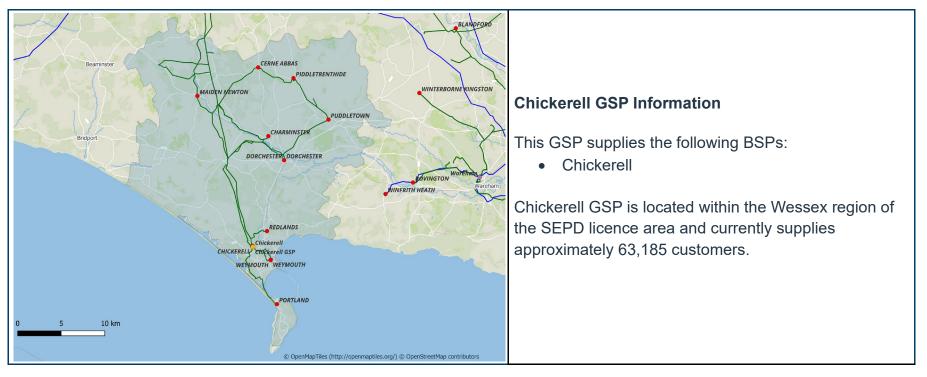


Table P2.9 Chickerell GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Cerne Abbas	33/11	3.38	4	2025/2026	Ν	Replace C1MT with a new 4MVA unit. Replace circuit breakers and cables.	CV7 - Asset Replacement



#### Cowley

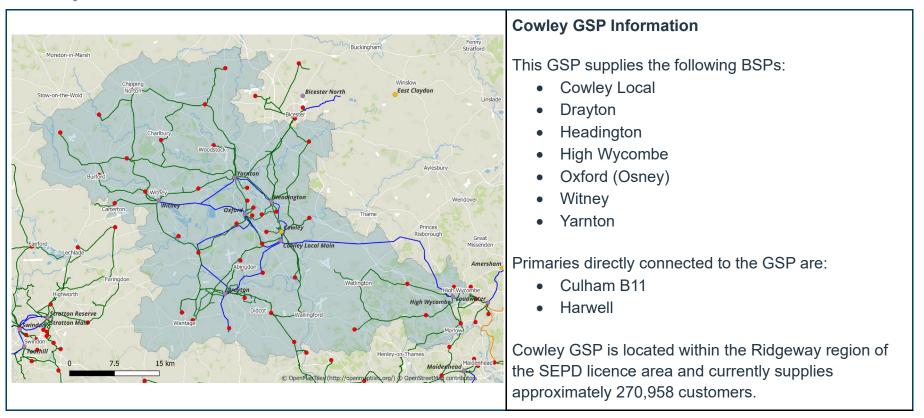


Table P2.10 Cowley GSP reinforcement projects in initial development

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Fulscot	33/11	-	-	2027/2028	N	Replacement of overhead line and underground cable to release 15.9MVA capacity.	CV1 - Primary Reinforcement



Stokenchurch	33	-	-	2025/2026	N	Add 20.5km of underground cable and 4x33kV circuit breakers.	CV1 - Primary Reinforcement
Standlake	33	-	-	2033/2034	N	-	CV1 - Primary Reinforcement

Table P2.11 Cowley GSP group reinforcement projects in initial development

Network Area	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Cholsey - (S) / Goring*	33	-	-	2026/2027	Ν	Replacement of 11.59km of overhead line to release 10MVA.	CV1 - Primary Reinforcement
Berinsfield	33	-	-	2027/2028	N	Replacement of 0.58km of underground cable and 18.44km of overhead line to release 10.8MVA.	CV1 - Primary Reinforcement
Oxford (Osney)	132	-	-	2030/2031	Ν	Add 9.57km of 132kV cable from Cowley GSP to Oxford (Osney) BSP. Install new 132/33kV Transformer.	CV1 - Primary Reinforcement

\*Cholsey – (S) / Goring project relates to Bramley (Fleet) GSP and to Cowley GSP as such it is listed under both GSPs.

Table P2.12 Cowley GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Wheatley	33/11	14.175	28.35	2026/2027	N	Replace two 7.5/15MVA transformers to 15/30MVA CER units and upgrade circuits.	CV1 - Primary Reinforcement
Witney Town	33/11	21.625	37.8	2026/2027	N	Replace two 15/22.5MVA transformers to 20/40MVA units at Witney Town.	CV1 - Primary Reinforcement



#### Ealing

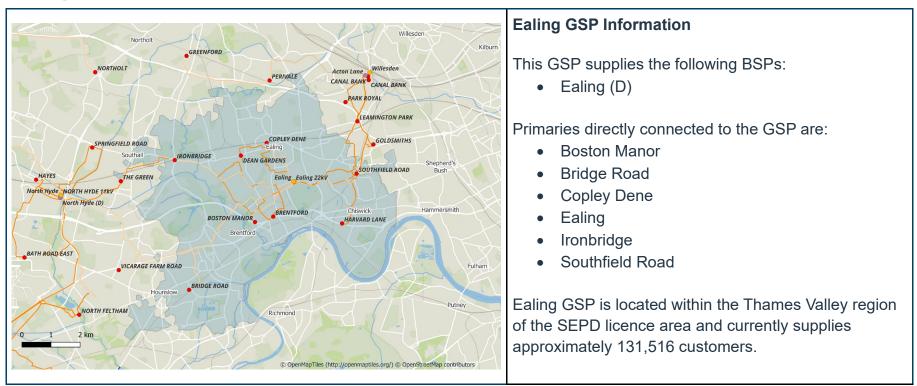


Table P2.13 Ealing GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Ealing	22/11	N/A	N/A	2028/2029	Y	Replacement of 17 circuit breakers with new circuit breakers with higher fault rating.	CV3 - Fault level reinforcement
Ealing	66/22	N/A	N/A	2028/2029	Y	Air insulated switchgear replaced with gas insulated switchgear. 21 new 132kV gas insulated circuit	CV3 - Fault level reinforcement



						breakers replacing existing 66kV air insulated circuit breakers.	
Southfield Road	66/11	40	60	2025/2026	N	Replace B1MT and B2MT 40MVA units with 60MVA CMR units.	CV1 - Primary Reinforcement
Harvard Lane	22/11	23.6	74.6	2028/2029	Y	Dispose of 3 transformers and install 2 new units to release 51MVA.	CV1 - Primary Reinforcement



### Iver 132kV

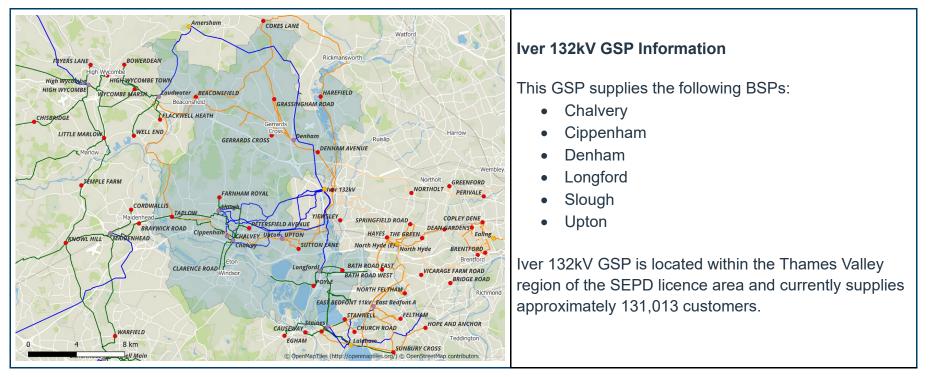


Table P2.14 Iver 132kV GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Beaconsfield	33/11	19.25	32.15	2028/2029	Y	Dispose of 4 transformers, install 2 dual-ratio 33/6.6 - 11kV units and upgrade circuits to release 12.9MVA.	CV1 - Primary Reinforcement
Denham	132/22	114.75	117.4	2028/2029	Ν	Replace twin transformers with two 60MVA transformers.	CV7 - Asset Replacement



#### Table P2.15 Iver 132kV GSP group reinforcement projects in detailed development and delivery

Network Area	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Denham - Iver	132	138	200	2025/2026	Y	Reinforce 270m of 132kV circuit with a cable of a higher thermal rating.	CV1 – Primary Reinforcement

Table P2.16 Iver 132kV GSP group reinforcement projects in initial development

Network Area	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Slough / Slough South / Cippenham	132	-	-	2028/2029	N	Network reconfiguration between Slough and Cippenham BSPs. Installation of new 132kV circuit and 132/33kV transformer at Slough South BSP.	CV1 – Primary Reinforcement



#### Laleham

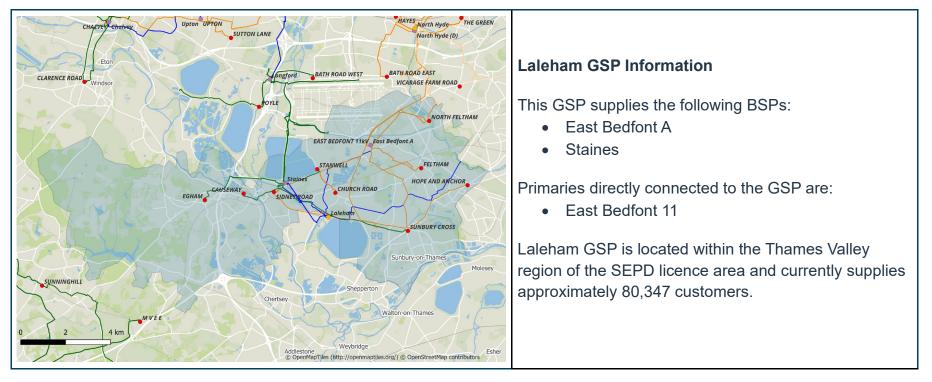


Table P2.17 Laleham GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
East Bedfont A	132/22	76.5	92.5	2028/2029	Y	Replace two 132kV transformers to release 16MVA.	CV1 - Primary Reinforcement
Egham	33/11	28.35	56.7	2030/2031	Υ	Install a new 30MVA transformer unit.	CV1 - Primary Reinforcement



#### Lovedean

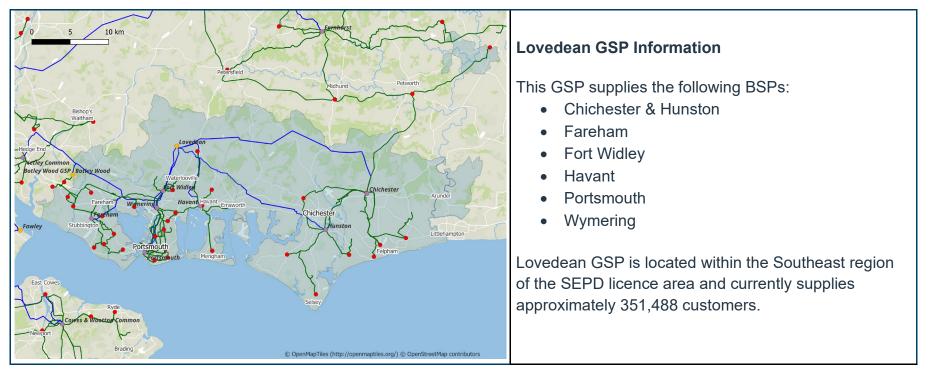


Table P2.18 Lovedean GSP group reinforcement projects in initial development

Network Area	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Chichester - Shripney	33	-	-	2027/2028	Ν	33kV circuit reinforcement to release 1MVA.	CV1 - Primary Reinforcement
Fareham - Hoeford	33	-	-	2027/2028	Ν	Release 1MVA to ease N-1 security issue.	CV1 - Primary Reinforcement



Table P2.19 Lovedean GSP reinforcement projects in detailed development and delivery

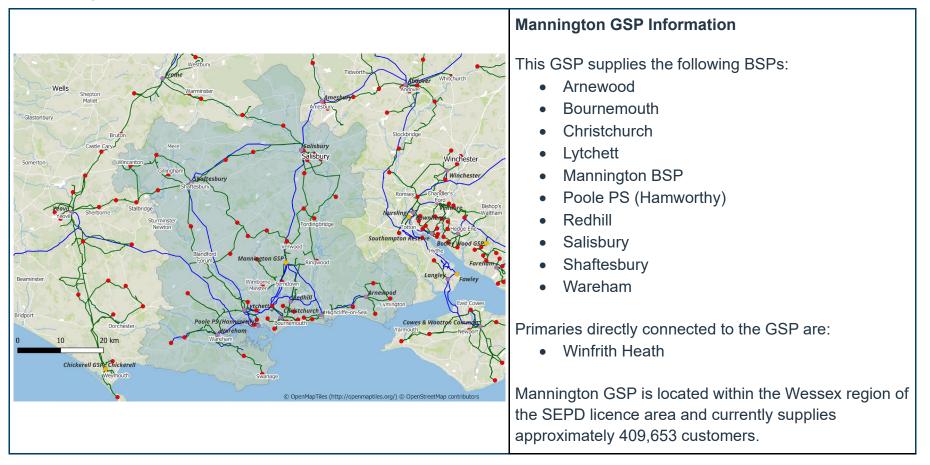
Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Birdham	33/11	13	28.35	2029/2030	Y	Replace two 10MVA transformers to 15/30MVA units.	CV1 - Primary Reinforcement
Ashling Road	33/11	26	31.1	2027/2028	Ν	Replace two 33kV transformers and upgrade circuits to release 5.1MVA.	CV1 - Primary Reinforcement

Table P2.20 Lovedean GSP group reinforcement projects in detailed development and delivery

Network Area	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Shripney - ARGR - SBER	33	56	86.8	2024/2025	N	Rutter pole removal and installation of new underground circuit to release 30.8MVA.	CV1 - Primary Reinforcement



### Mannington



#### Table P2.21 Mannington GSP reinforcement projects in initial development

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Wimborne	33/11	19.5	40	2027/2028	Ν	Replace 2x15MVA transformers to 2x20/40MVA units, also	CV1 - Primary Reinforcement



			replace EHV switchgear to match	
				·

 Table P2.22 Mannington GSP group reinforcement projects in initial development

Network Area	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Shaftesbury – Bourton	33	-	-	2024/2025	N	Install 2x33kV transformers, 2x33kV circuit breakers and 22.3km of new underground cable.	CV1 - Primary Reinforcement
Bemerton 33kV	33	-	-	2025/2026	N	Replacement of 2x33kV transformers, add new circuit breakers and underground cable	CV1 - Primary Reinforcement

Table P2.23 Mannington GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Swanage	33/11	13	37.8	2026/2027	N	Replace two 10MVA transformers to 20/40MVA CER units.	CV1 - Primary Reinforcement
Winterborne Kingston	33/11	9.7	22.68	2026/2027	N	Replace C1MT and C2MT with two 12/24MVA CER transformers, replace 33kV switchgear and 11kV indoor switchboard.	CV7 - Asset Replacement
Wareham	132/33	28.35	42.525	2026/2027	N	Replace two 30MVA transformers (A1MT and A2MT) with 22.5/45MVA units to meet future demand.	CV7 - Asset Replacement
Lytchett	132/33	N/A	N/A	2027/2028	Y	Replacement of 33kV board with new circuit breakers with higher fault rating.	CV3 - Fault level reinforcement



#### Melksham

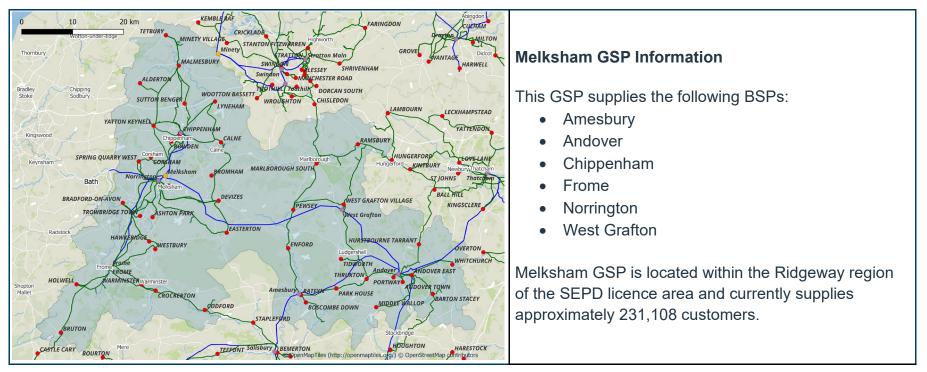


Table P2.24 Melksham GSP reinforcement projects in initial development

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Alderton	33/11	3	14.1	2026/2027	Ν	Replacement of two 33kV transformers to release 11.1MVA at 132kV.	CV1 - Primary Reinforcement



#### Table P2.25 Melksham GSP group reinforcement projects in initial development

Network Area	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Bruton	33	-	-	2026/2027	N	Replacement of 17.3km 33kV overhead line to release 1.7MVA.	CV1 - Primary Reinforcement
Malmesbury - Tetbury	33	-	-	2027/2028	N	Replace 18 33kV poles and 2.9km overhead line to release 1MVA.	CV1 - Primary Reinforcement

#### Table P2.26 Melksham GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Amesbury	132/33	114	114	2024/2025	N	Decommission of A1MTB, replace A1MTA 45/90MVA grid transformers with the spare 90MVA unit at Winchester, and replace 132kV circuit breaker.	CV7 - Asset Replacement



#### Minety



Table P2.27 Minety GSP reinforcement projects in initial development

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Faringdon	33/11	14.57	25.57	2026/2027	Ν	Replacement of two 33kV transformers to release 11.1MVA.	CV1 - Primary Reinforcement



Table P2.28 Minety GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Stratton	132/33	76.5	114.75	2026/2027	Ν	Replace 60MVA A1MT and A2MT with 90MVA units.	CV7 - Asset Replacement
Lechlade	33/11	9.75	10.4	2025/2026	Ν	Replace C1MT and C2MT with 2x8MVA units.	CV7 - Asset Replacement



### North Hyde

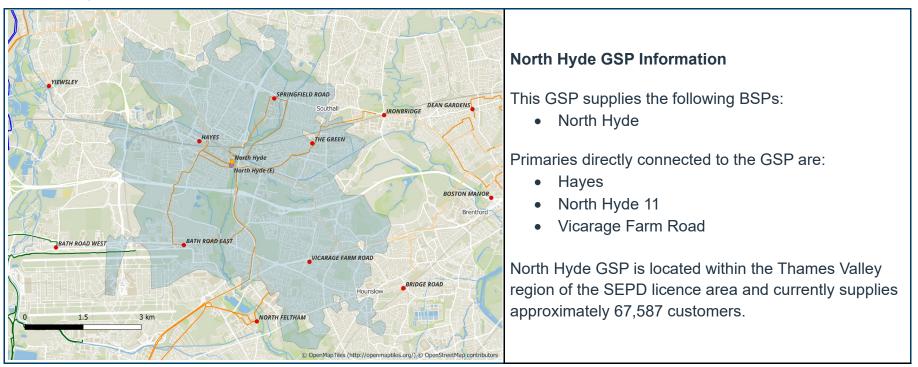


Table P2.29 North Hyde GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
North Hyde BSP	66/22	45	240	2028/2029	Ν	Addition of new 66kV switchboard at North Hyde GSP.	CV1 - Primary Reinforcement



### Nursling



Table P2.30 Nursling GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
North Baddesley	33/11	19.5	28.35	2025/2026	N	Change twin 15MVA transformers to 15/30MVA CER units, upgrade circuits	CV1 - Primary Reinforcement



#### Willesden

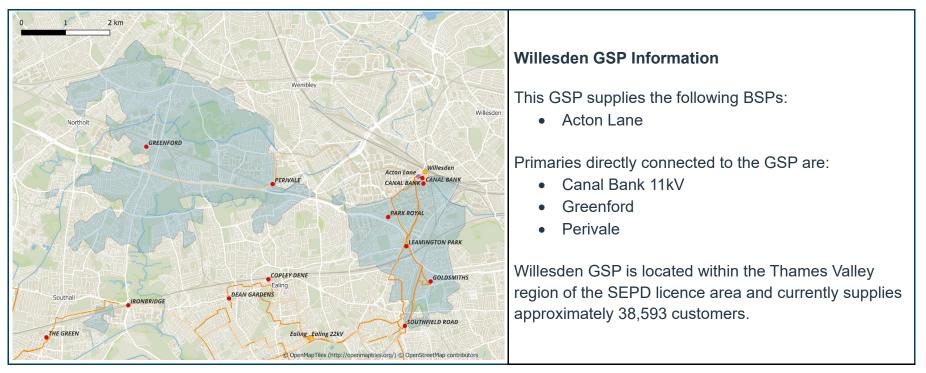


Table P2.31 Willesden GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Published DNOA	Project Description	Driver
Canal Bank	66/11	38.1	116.2	2025/2026	N	Install two new 66/11kV 40MVA transformers.	CV1 - Primary Reinforcement
Leamington Park Substation	22/11	15.3	53.28	2025/2026	N	Install two 22/11kV, 24MVA transformers and new 11kV switchgear. The capacity at 22/11kV will be increased accordingly.	CV1 - Primary Reinforcement





## CONTACT

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