SHEPD NETWORK DEVELOPMENT REPORT

Draft for consultation March 2026

Scottish & Southern Electricity Networks

CONTENTS

INTRODUCTION

This is Scottish and Southern Electricity Networks Distribution's (SSEN-D) 2026 Network Development Report (NDR) of the SHEPD licence area for consultation purposes. Stakeholders are invited to provide feedback during

the consultation period to inform the final publication.. The final version reflecting feedback and any updates will be published on 1st May 2026.

Project timescales, capacity data and forecast completion dates presented in the draft are indicative and subject to change in the final publication to reflect the latest network analysis and project development. Part two of the report details interventions signposted in SSEN's published Strategic Development Plans. This data will be refreshed in line with the Long Term Development Statement (LTDS) due to be published in spring 2026. This will include substantially more information on network capacities drawn from the LTDS.

The NDR is part of a suite of 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[1], including our Long-Term Development Statements and Flexibility Services publications, which provide information on our nearer-term 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[2] project. 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.

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

2 ENA NDP Form of Statement Template and Process (22 Dec 2021)

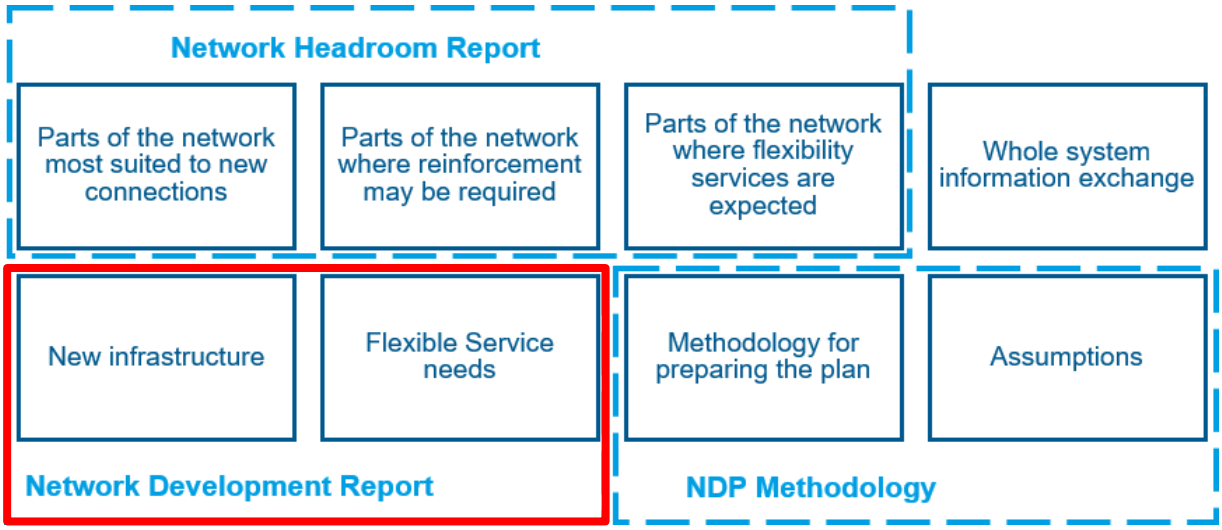


Figure 1: NDP Reporting Structure

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 2036. 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 and accounting for the transitional Regional Energy Strategy Plans (t-RESPs), 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 three sections within the body of this report. These are:

- **Part 1: Flexibility Service Solutions** – Known flexibility opportunities as reported in our latest SLC 31E procurement statement.

- **Part 2: SHEPD Interventions –** Interventions needed in SHEPD 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 have 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. Many of the referenced primary reinforcement projects will be those that have been through the DNOA process and have been assessed as needing network intervention. 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[3]. The four key services utilised across all distribution networks are: Scheduled Utilisation (SU),, Operational Utilisation (OU),, Scheduled Availability + Operational Utilisation (SAOU),, and Variable Availability + Operational Utilisation (VAOU).. Currently, SSEN-D primarily procures Variable Availability + Operational

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

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
Flexibility service products	**Peak Reduction**	This product seeks a reduction in peak power utilised over time. This response can manage peaks in demand.	■ Utilisation Instruction: At Trade	Utilisation
	Scheduled Utilisation	In this product, the time that flexibility is delivered has been pre-agreed in advance with the provider.	■ Utilisation Instruction: At Trade	Utilisation
	Operational Utilisation	This product allows for the use case where the amount of flexibility delivered is agreed nearer to real time.	■ Utilisation Instruction: Real Time or Week Ahead	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.	■ Availability Refinement: Not allowed ■ Utilisation Instruction: Real Time or Day Ahead	Availability + Utilisation
	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.	■ Availability Refinement: Week Ahead or Month Ahead ■ Utilisation Instruction: Real Time or Day Ahead or Week Ahead	Availability + Utilisation

Figure 2: New Standard Flexibility Service Products[4]

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: Aligning Flexible Services Products to ENA

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

4 SLC 31E Flexibility Services Procurement Statement, available in our Flexible 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	Flexible Solutions Flexibility Services - SSEN
Load Connections	SHEPD SEPD	connections@ssen.com	0800 0483516	New Supplies Existing Supplies
Generation Connections (>50kW)	SHEPD SEPD	mcc@sse.com	0345 0724319	Generation Connections
Generation Connections (<50kW)	SHEPD	North.Microgen@sse.com	0345 0724319	Generation Connections Microgeneration connections - SSEN

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 whole.system.distribution@sse.com. Please state “Network Development Plan Feedback” in the subject title.

PART 1: FLEXIBILITY SERVICE SOLUTIONS

This section provides information on the zones that have been identified for Flexibility procurement in 2026/27 for both EHV level, and for HV/LV requirements, comprising smaller zones. The information includes the key information about the zone, as well as the peak capacity required (MW) and forecasted dispatch (MWh). We procure flexibility for both long-term tenders and short-term tenders. Typically, long-term tenders have a 3-year outlook for requirements whereas short-term requirements are within-year, usually as short fall from the long-term requirements. 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. This document and details of any upcoming flexibility requirements can be found on the SSEN Data Portal[5].

To participate in the Bidding rounds listed in this section, flexibility services providers must first sign an Overarching Agreement. For more information on this, please refer to the website or email Flexibility Services team (see Table 2)[6].

2026/27 Short-term Requirements

Our short-term requirements are procured for requirements that fall within-year. These are typically procured in month-ahead and week-ahead timeframes.

Table P1. 1: 2026/27 Short-Term EHV Requirements

Location	Licence Area	Voltage Level	Peak Capacity Required 2026/27(MW)	Dispatch Forecast 2026/27 (MWh)
Barvas	SHEPD	11kV	0.48	0.72
Coshieville	SHEPD	11kV	0.05	1.07
Halkirk	SHEPD	33kV	0.14	0.53
Inveraray	SHEPD	11kV	0.13	0.78
Kepculloch	SHEPD	11kV	0.0047	0.03
Milnathort	SHEPD	11kV	1.6659	17.5

5 Data Assets

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

Stoneywood T1 & T2	SHEPD	11kV	0.322	1.45
Milnathort	SHEPD	11kV	1.17	221.13
Milnathort	SHEPD	11kV	0.2808	176.904

Table P1. 2: 2026/27 Short-Term HV/LV Requirements

Licence Area	Voltage Level	Peak Capacity Required (MW)	Dispatch Forecast (MWh)	Seasonal Requirement	Number of CMZs
SHEPD	11kV	0.57506	118.01	Winter	15

2026/27 Long Term Requirements

Our long-term markets cover requirements up to 3 years into the future. We procure flexibility at this long-term timeframe to ensure the capacity is released and stimulate market liquidity.

Table P1.3: 2026/27 Long-Term Bidding EHV Requirements

Location	Licence Area	Voltage Level	Peak Capacity Required 2028-2030 (MW)	Dispatch Forecast 2028-2030 (MWh)
Ashgrove	SHEPD	11kV	2.349	42.29
Banchory	SHEPD	11kV	2.1454	41.84
Drumrunie	SHEPD	11kV	0.024	0.45
Dufftown	SHEPD	11kV	0.22	0.99
Forres Scheme 2	SHEPD	33kV	2.4177	43.52
Forres Scheme 3	SHEPD	11kV	1.029	12.35
Kepculloch	SHEPD	11kV	0.3767	5.09
Newtonhill	SHEPD	11kV	1.1357	8.52
Nostie Bridge	SHEPD	11kV	0.45	4.9
Oldmeldrum	SHEPD	11kV	0.6208	9.65
Raigmore 2	SHEPD	11kV	0.5001	10.8
Tressady	SHEPD	11kV	0.03	0.18
Broadford	SHEPD	11kV	0.771	10.54
Ashludie	SHEPD	11kV	0.71	1.62
Stoney Wood	SHEPD	11kV	0.15	0.35

Table P1.4: 2026/27 Long-Term HV/LV Requirements

Licence Area	Voltage Level	Peak Capacity Required (MW)	Dispatch Forecast (MWh)	Seasonal Requirement	Number of CMZs
SHEPD	11kV	1.526	580.36	Winter	35
SHEPD	11kV	0.035	8.53	Autumn/Spring	1

PART 2: SHEPD INTERVENTIONS

This section provides information on planned interventions in the SHEPD 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. Many of the referenced primary reinforcement projects will be those that have been through the DNOA process and have been assessed as needing network intervention. Some primary reinforcement projects on the list pre-date the DNOA process but will have been similarly assessed for flexibility needs.

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

The interventions detailed in the NDR focus on load-related reinforcement and system-driven network upgrades required to maintain security of supply and accommodate forecast demand growth. Customer-driver works triggered and funded by specific connections applications are not currently included. We are reviewing how best to incorporate customer-driven works into future editions to provide stakeholders with a more complete view of network development activity.

Figures P2.1 to P2.3 below show the supply areas of each Grid Supply Point (GSP) in the SHEPD licence area. In the GSP-specific sections that follow, only GSPs with network interventions in development / delivery are shown. Supply areas for Primary Substations are available on our Open Data Portal.

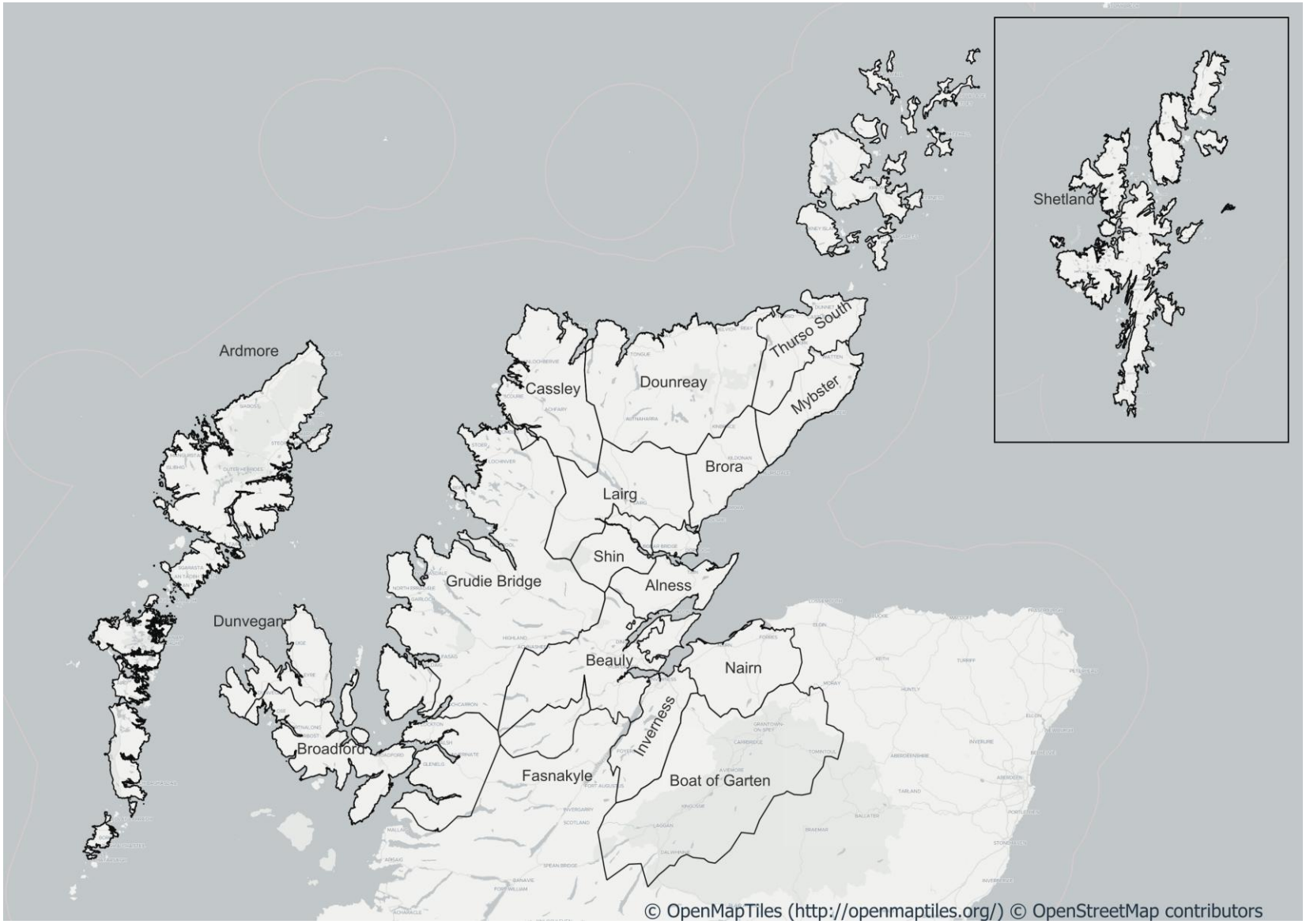


Figure P2.1: GSP Supply Areas in the northwestern portion of the SHEPD licence area.

Figure P2.2: GSP Supply Areas in the eastern portion of the SHEPD licence area.

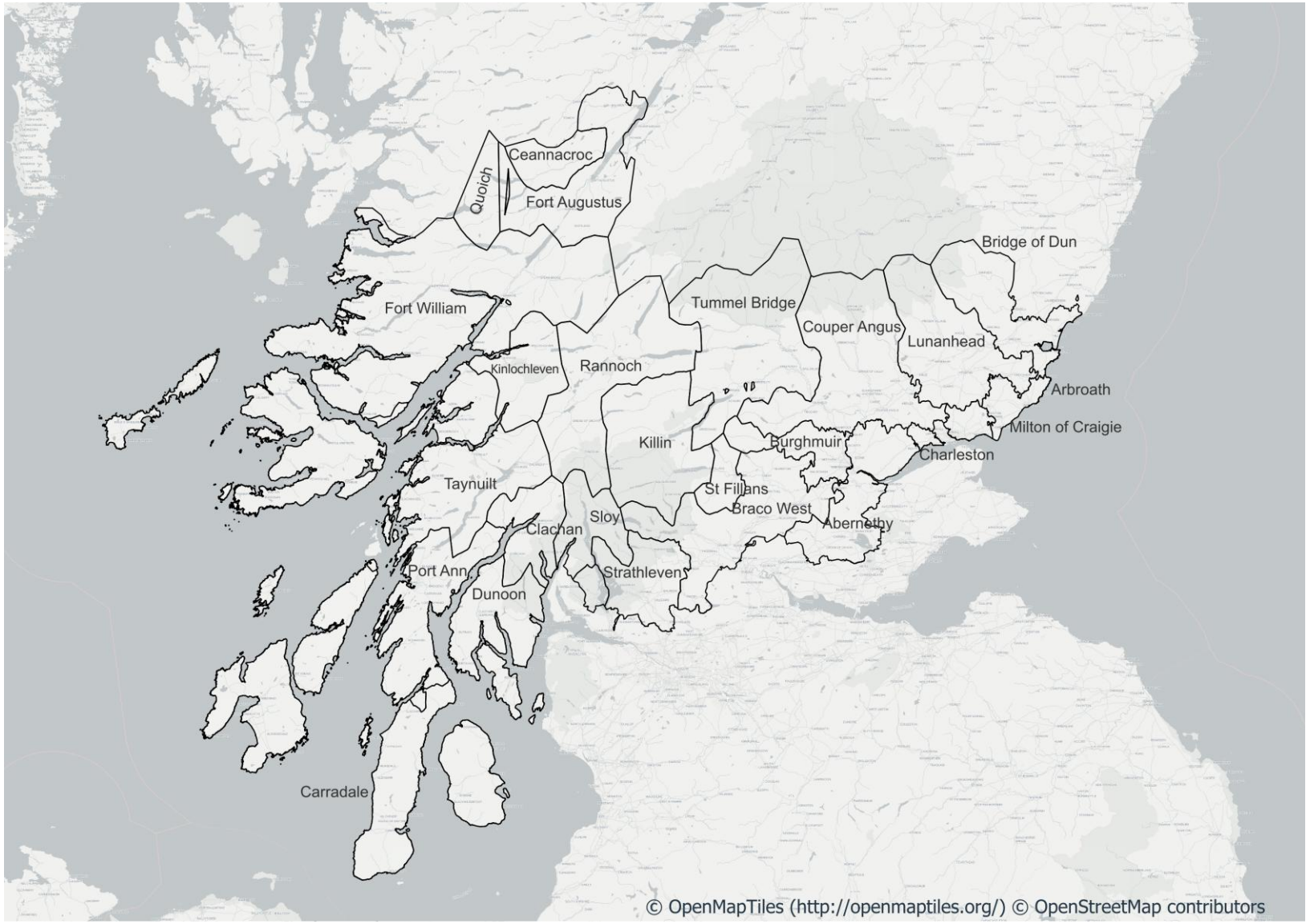


Figure P2.3: GSP Supply Areas in the southwestern portion of the SHEPD licence area.

Reference map: network symbology

Figure P2.4 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 and Primary Substations are represented by yellow and red dots, respectively. 33kV circuits are represented by green lines, and the geographic area supplied by the GSP is denoted by the shaded blue area.

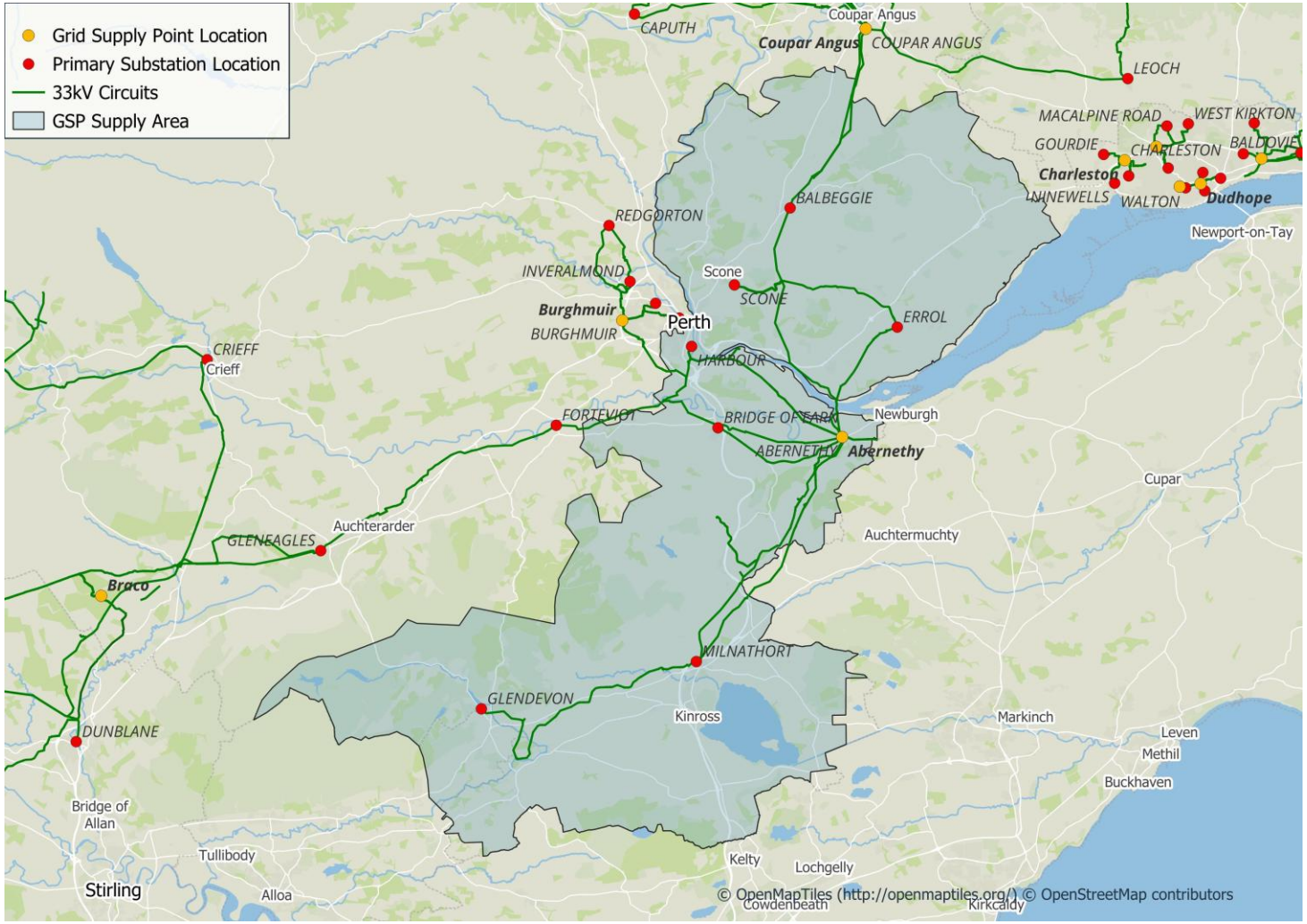
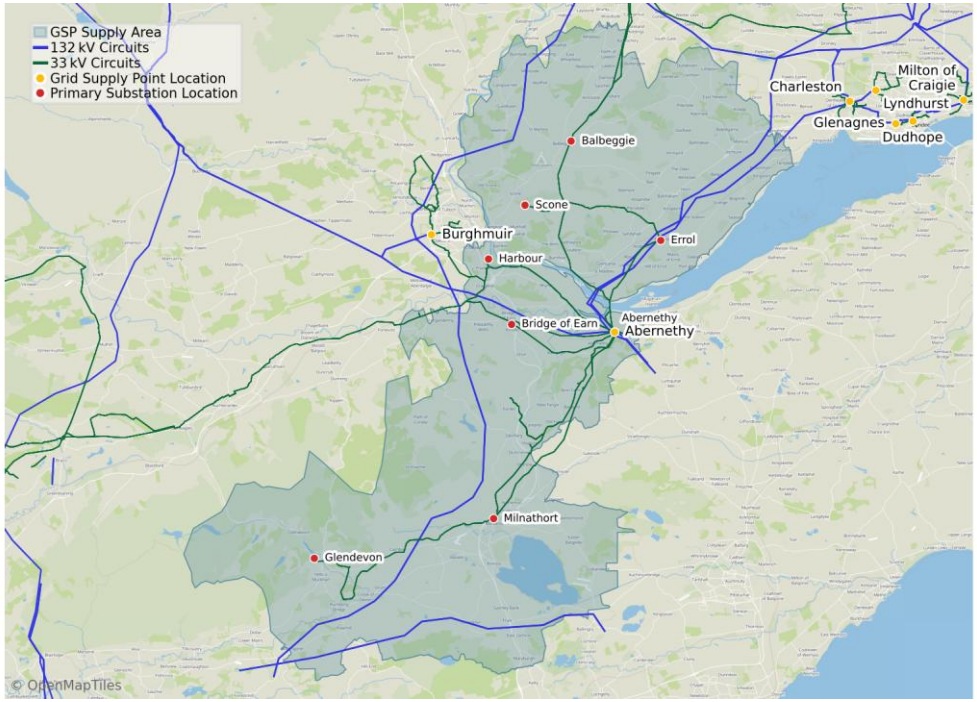


Figure P2.4: Reference map describing symbology for network assets and supply area.

Abernethy



Abernethy GSP Information

This GSP supplies the following primary substations:

- Abernethy
- Balbeggie
- Bridge of Earn
- Errol
- Glendevon
- Harbour
- Milnathort
- Scone

Abernethy GSP is located within the Tayside region of the SHEPD licence area and currently supplies approximately 22,935 customers.

Table P2.1 Abernethy GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Abernethy, Glendevon & Milnathort	33	57.3	-	2029	Replacement of the 2x existing Milnathort 15MVA primary transformers with 20/40MVA units. • Installation of two new 33kV cable circuits from Abernethy GSP 33kV board to a new 8 panel 33kV	CV1 - Primary Reinforcement

					board installed at Milnathort PSS, consisting of 8x new 33kV Circuit Breakers. • Installation of new 11kV switchboard at Milnathort PSS.	
Balbeggie	33/11	5.45	8.85	2026	Replacement of existing 5MVA Primary Transformer with new 15MVA Transformer at Balbeggie primary substation.	CV7 - Asset Replacement
Scone and Errol	33/11	-	-	2026	Replacement of 8x 11kV circuit breakers & EHV batteries at Scone PSS. Replacement of the 11kV switchboard at Errol PSS.	CV7 - Asset Replacement

Ardmore

Ardmore GSP Information

This GSP supplies the following primary substations:

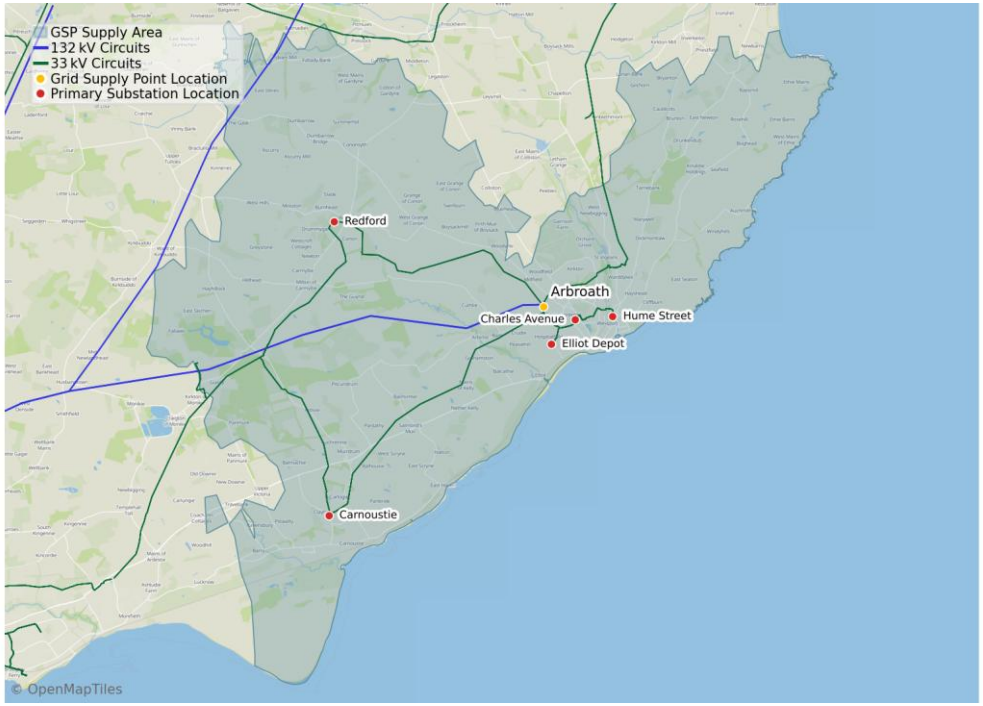
- Aird
- Clachan
- Drimore
- Loch Carnan
- Pollachar

Ardmore GSP is located within the Inner Hebrides region of the SHEPD licence area and currently supplies approximately 4,601 customers.

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

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Clachan	33/11	2.73	8.19	2025/2026	Replace T1 with a 6.3MVA unit and add a 2nd matching transformer	CV1 - Primary Reinforcement
Lochmaddy	33/11	-	-	2028/2029	Construction of a new primary substation at Lochmaddy with a 6.3 MVA transformer;	CV1 – Primary Reinforcement

Arbroath



Arbroath GSP Information

This GSP supplies the following primary substations:

- Arbroath Grid
- Carnoustie
- Charles Avenue
- Elliot Depot
- Hume Street
- Redford

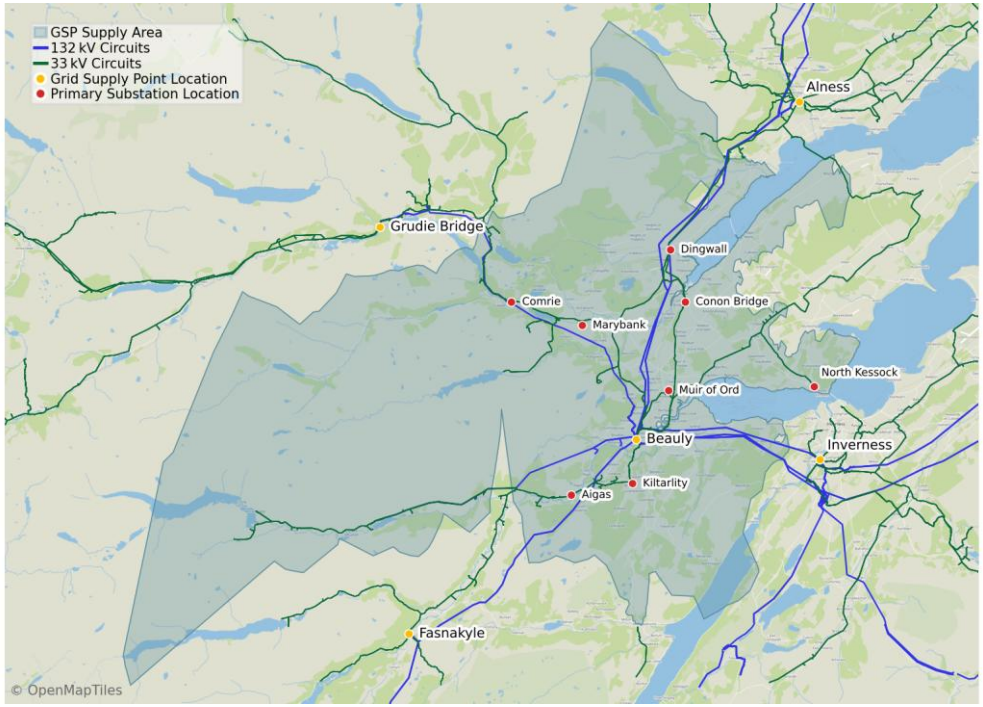
Arbroath GSP is located within the Angus region of the SHEPD licence area and currently supplies approximately 20,400 customers.

Table P2.3 Arbroath GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Arbroath GSP	33/11	N/A	N/A	2029/2030	6.5 km of underground cable upgraded on 1L5 and 2L5, supplying Charles and St Hume PSSs; oil-filled cables replaced.	CV7 - Asset Replacement
Elliot Depot PSS	7.5/12	-	-	2026/2027	PSS transformer upgraded from 7.5/15 to 12/14MVA under a contracted demand project.	CV4 – New Transmission Connection Charges

Arbroath 2 GSP	-	N/A	N/A	TBC	New GSP required for multiple contracted generation projects; current GSP has no remaining distribution options.	CV4 – New Transmission Connection Charges

Beauly



Beauly GSP Information

This GSP supplies the following primary substations:

- Aigas
- Beauly Grid
- Blackstand
- Comrie
- Conon Bridge
- Conon Falls
- Dingwall
- Kiltarlity
- Marybank
- Muir of Ord
- Muirend
- North Kessock

Beauly GSP is located within the Highland region of the SHEPD licence area and currently supplies approximately 18,103 customers.

Table P2.4 Beauly GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Muir of Ord	33/11	-	-	2027	Reinforcement of the two existing 33kV circuits between Beauly and Muir of Ord	CV1 - Primary Reinforcement

Conon Bridge	33/11	-	-	2028	Reinforcement of 0.46km section of 33kV circuit from Beauly GSP to Conon Bridge PSS	CV1 - Primary Reinforcement

Braco

Braco GSP Information

This GSP supplies the following primary substations:

- Callander
- Crieff
- Dunblane
- Forteviot
- Gleneagles
- Kippen

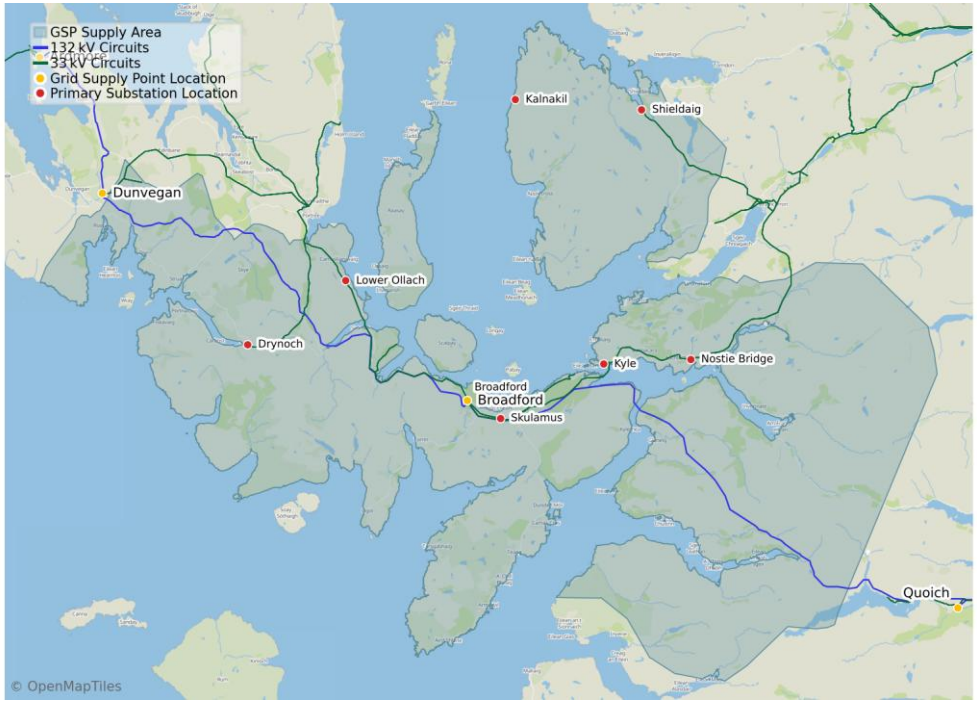
Braco GSP is located within the Perthshire and Stirlingshire region of the SHEPD licence area and currently supplies approximately 20,575 customers.

Table P2.5 Braco GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Callander PSS	33	-	-	2026	Installation of a new 7x panel 33kV indoor switchboard. Removal of the existing 33kV outdoor circuit breakers.	CV1 - Primary Reinforcement
Crieff PSS	33	15	-	2027	Replacement of both existing 15MVA 33kV primary transformers with 24MVA units.	CV7 – Asset Replacement

Dunblane PSS	33	-	-	2026	The removal of 33kV overhead line dual circuit section to Dunblane PSS	CV1 - Primary Reinforcement
Gleneagles	33/11	-	-	2028	Replacement of existing 2x 15MVA primary transformers with 2x 30MVA units.	CV1 - Primary Reinforcement

Broadford



Broadford GSP Information

This GSP supplies the following primary substations:

- Broadford
- Kalnakil
- Kishornhill
- Kyle
- Lower Ollach
- Lusa*
- Nostie Bridge
- Shieldaig
- Skulamus

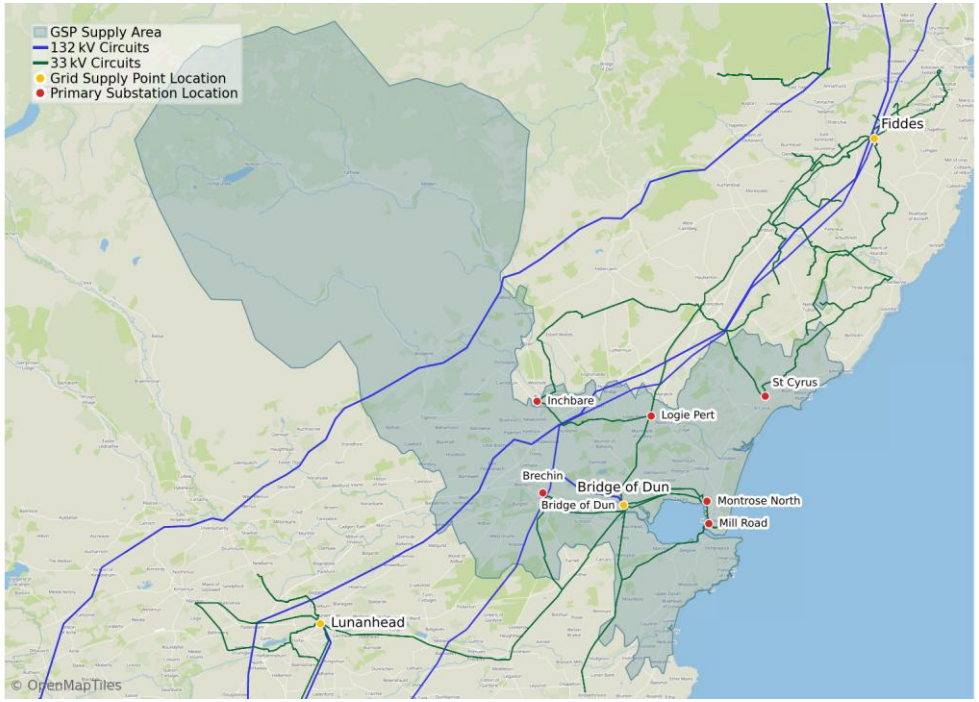
Broadford GSP is located on Skye within the SHEPD licence area and currently supplies approximately 6,079 customers.

Table P2.6 Broadford GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Kyle	33/11	6.5	8.19	2028/2029	Replace both 5MVA transformers with 6.3MVA units	CV7 - Asset Replacement
Skulamus	33/11	-	-	2026	Replacement of existing Skulamus Primary with new indoor 33 kV & 11 kV GIS switchgear and two 6.3 MVA	CV1 – Primary Reinforcement

					transformers; new 33 kV GIS switchroom at Broadford GSP.	
Ruarach	33/11	N/A	N/A	2026	Extend 33 kV circuit by 10.7 km (including short subsea section); establish new Ruarach Primary with 4 MVA transformer, 33 kV CB and 3-panel 11 kV board plus additional 11 kV work.	CV1 – Primary Reinforcement
Achintee	33/11	N/A	N/A	2032	Reinforce 33 kV OHL between Broadford and Skulamus; replace Achintee regulator with 4 MVAr STATCOM.	CV1 – Primary Reinforcement
Sconser	33/11	N/A	N/A	N/A	Extend 33 kV circuit by 0.7 km between Broadford and Dunvegan to connect new indoor Sconser Primary; install 4 MVA transformer, two 33 kV GIS breakers, 3-panel 11 kV board and major 11 kV upgrades for N-1 support.	CV1 – Primary Reinforcement

Bridge of Dun



Bridge of Dun GSP Information

This GSP supplies the following primary substations:

- Bridge of Dun 11kv
- Bridge of Dun Grid
- Inchbare
- Logie Pert
- Mill Rd Montrose
- Montrose North
- St Cyrus
- Bridge of Don

Bridge of Dun GSP is located within the Angus region of the SHEPD licence area and currently supplies approximately 465 customers.

Table P2.7 Bridge of Dun GSP group reinforcement projects in detailed development and delivery

Network Area	Primary/Secondary Voltage (kV)	Released Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Bridge of Dun GSP & Montrose North PSS	33/11	-	2030/2031	Upgrade of 2× PSS transformers from 7.5/15 to 20/40 MVA • Replacement of full 33 kV & 11 kV PSS switchboards • Replacement of 33 kV GSP switchboard • Replacement of overhead line section between Bridge of Dun	CV1 – Primary reinforcement

				GSP and Montrose North PSS with cable + pilot wire	
Bridge of Dun GSP 2	33/11	-	NA	New GSP to be triggered for multiple contracted generation projects as current GSP no longer has distribution options available.	CV4 – New Transmission Connection Charges

Burghmuir

Burghmuir GSP Information

This GSP supplies the following primary substations:

- Burghmuir
- Goodlyburn
- Inveralmond
- Redgorton
- Thimblerow

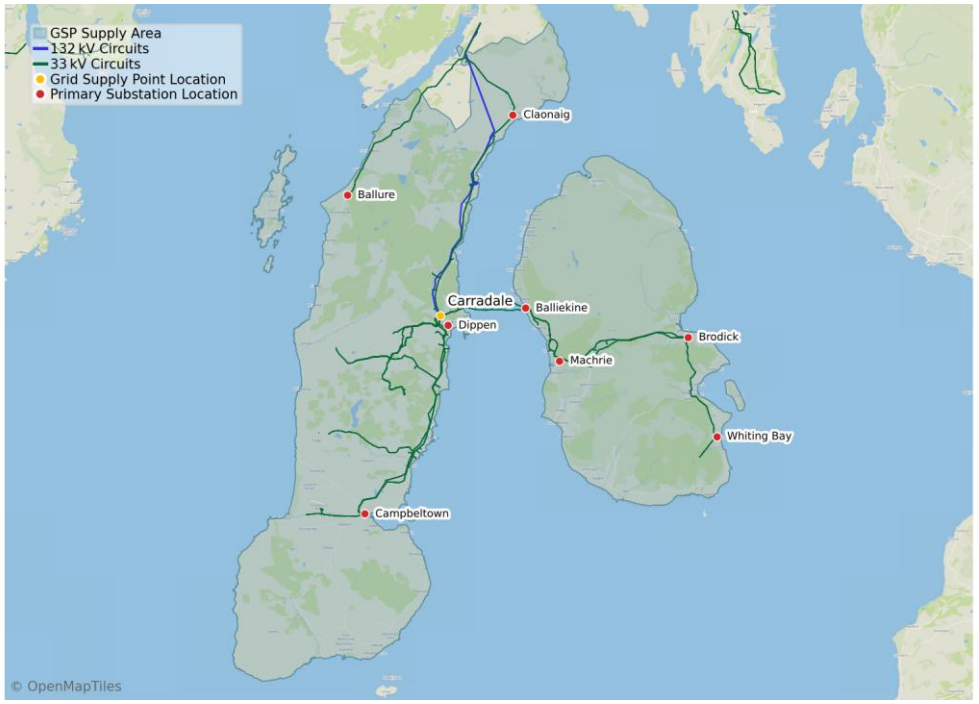
Burghmuir GSP is located within the Perth region of the SHEPD licence area and currently supplies approximately 24,177 customers.

Table P2.8 Burghmuir GSP group reinforcement projects in detailed development and delivery

Network Area	Primary/Secondary Voltage (kV)	Released Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Burghmuir – Inveralmond - Redgorton	33	23.6	2026/2027	Reinforcement of 7.5km 33kV underground cable between Burghmuir GSP – Inveralmond PSS. • 6.35km 33kV OHL conductor reinforcement + 96 pole replacements between Inveralmond PSS – Redgorton PSS.	CV1 - Primary Reinforcement

				• Installation of a new 7 panel 33kV switchboard at Inveralmond PSS.	

Carradale



Carradale GSP Information

This GSP supplies the following primary substations:

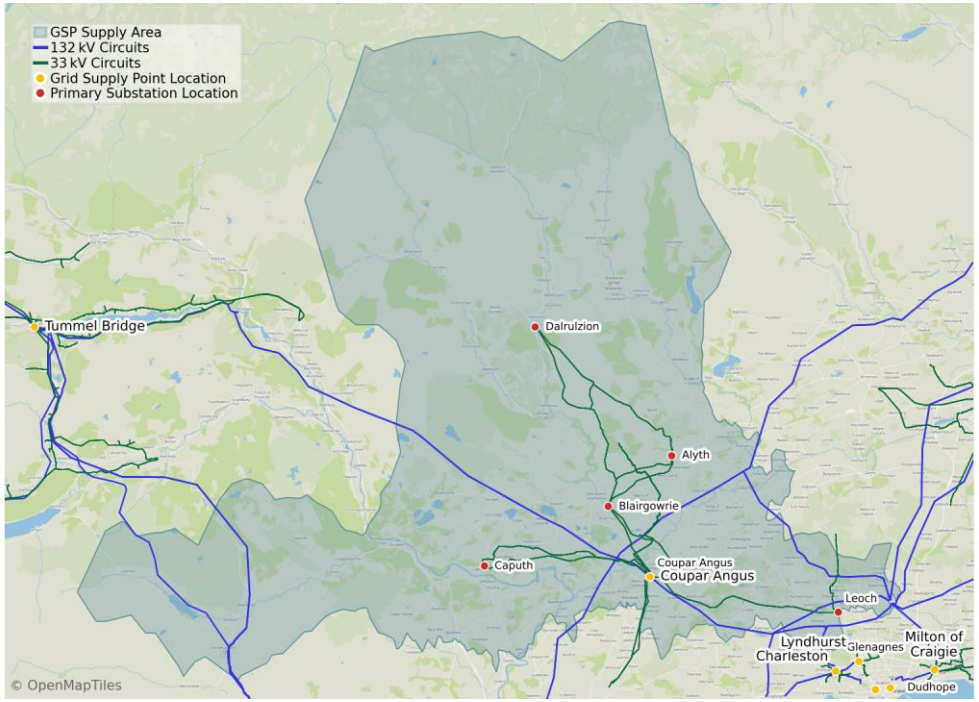
- Balliekine
- Ballure
- Brodick
- Campbeltown
- Claonaig
- Dippen
- Machrie
- Whiting Bay

Carradale GSP is located on the Mull of Kintyre in the SHEPD licence area and currently supplies approximately 9,743 customers.

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

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Machrie	33/11	2.73	5.2	2026/2027	Install 2x4Mvar STATCOMs at a new Brodick 33kV switching station and a 2nd 33/11kV transformer at Machrie substation	CV1 - Primary Reinforcement
Balliekine	33/11	-	-	2027	Install new primary at Lochranza to split and interconnect the current Brodick - Balliekine 11kV and tee-off the 33kV network	CV1 - Primary Reinforcement

Couper Angus



Couper Angus GSP Information

This GSP supplies the following primary substations:

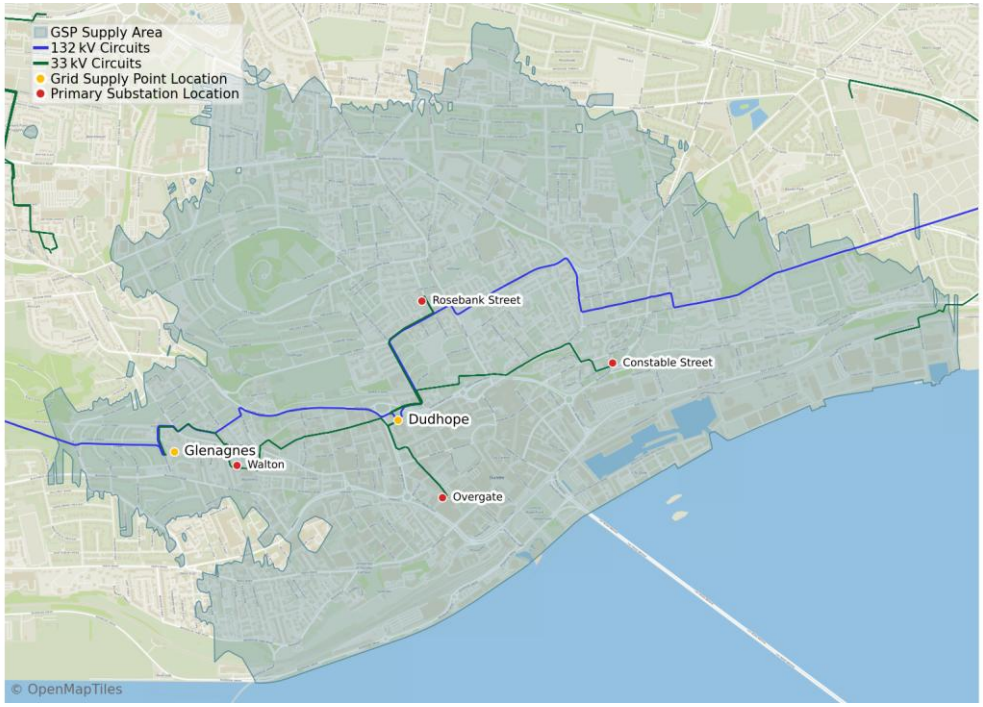
- Alyth
- Blairgowrie
- Caputh
- Couper Angus
- Couper Angus Grid
- Darluzion
- Leoch

Couper Angus GSP is located on the Mull of Kintyre in the SHEPD licence area and currently supplies approximately 16,107 customers.

Table P2.10 Couper Angus GSP reinforcement projects in detailed development and delivery

Circuits	Primary/Secondary Voltage (kV)	Existing Rating (MVA)	Updated Rating (MVA)	Forecast Completion Date	Project Description	Driver
Couper Angus	33/11	N/A	N/A	2026	• Replacement of existing 8MVA primary transformer with 15MVA unit. • Replacement of 7 panel 11kV switchboard.	CV7 - Asset Replacement

Dudhope



Dudhope GSP Information

This GSP supplies the following primary substations:

- Constable Street
- Overgate
- Rosebank Street
- Walton

Dudhope GSP is located within the Dundee region of the SHEPD licence area and currently supplies approximately 26,955 customers.

Table P2.11 Dudhope GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Overgate PSS	-	30		2026/2027	Upgrade of PSS transformers from three 15/21 MVA units to two 15/30 MVA units.	CV7 - Asset Replacement
Dudhope GSP	-	-		2030/2031	GSP switchboard replaced in a new switchroom building for a contracted generation project.	CV1 – Primary Reinforcement

Dunoon

Dunoon GSP Information

This GSP supplies the following primary substations:

- Bruchag
- Colintraive
- Dunoon
- Glendaruel
- Innellan
- Kames
- Newton
- Otter Ferry
- Rothesay
- Sandbank

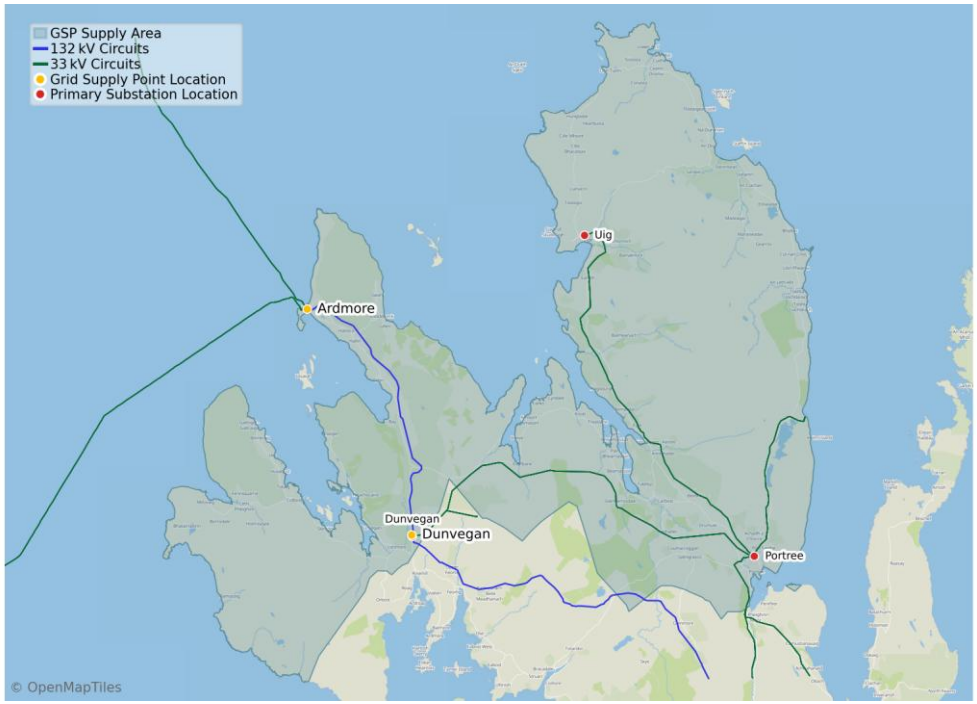
Dunoon GSP is located within the Argyll & West region of the SHEPD licence area and currently supplies approximately 15,867 customers.

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

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Rothesay	33/11	24	14.55	2025/2026	• Replace both 12/24MVA transformers with 7.5/15MVA units • Replace existing Craigagoul 33kV switching station with	CV7 - Asset Replacement

					• switchboard, comprising of 10 x 33kV breakers and two 8MVAr STATCOMs.	

Dunvegan



Dunvegan GSP Information

This GSP supplies the following primary substations:

- Drynoch
- Dunvegan Grid
- Portree
- Uig

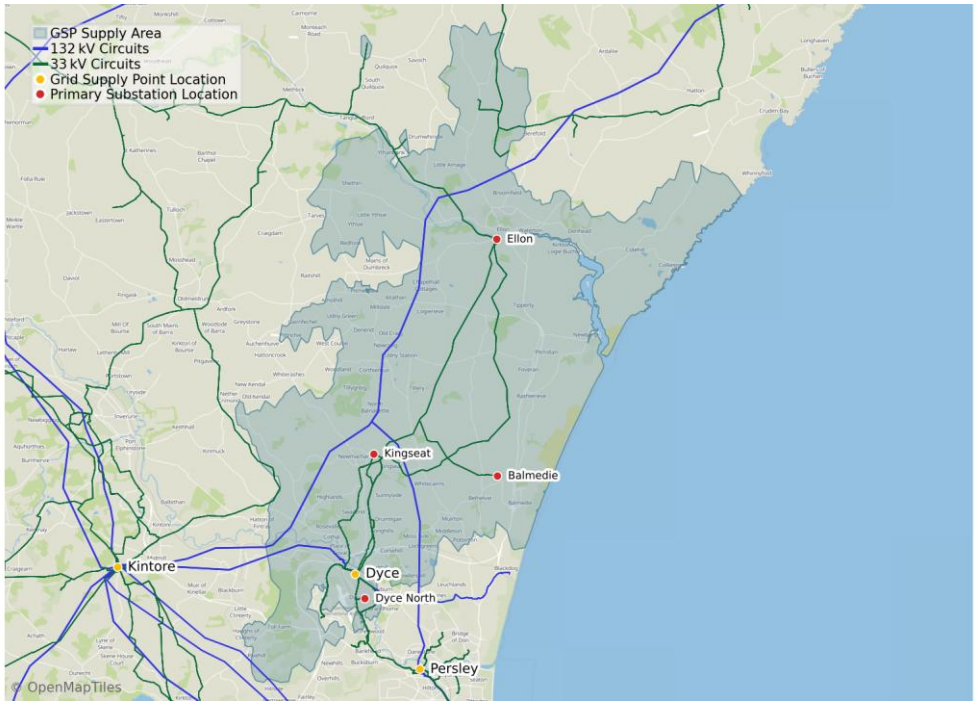
Dunvegan GSP is located within outer Hebrides region of the SHEPD licence area and currently supplies approximately 5,438 customers.

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

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Dunvegan	33	-	-	2028/2029	• 33kV circuit reinforcement between Ben Aketil tee and	CV1 - Primary Reinforcement

					Portree busbar on Dunvegan - Portree circuit. • Install dynamic compensation equipment. • Establish new 33kV connection from Storr Lochs hydro circuit (out of Portree) to a new Primary substation Brogaig Primary	

Dyce



Dyce GSP Information

This GSP supplies the following primary substations:

- Balmedie
- Dyce North
- Ellon
- Harvest Avenue
- Kingseat
- Stoneywood T3

Dyce GSP is located within the Aberdeen region of the SHEPD licence area and currently supplies approximately 16,481 customers.

Table P2.14 Dyce GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Kingseat	33/11	5	14.55	2025/2026	Replace the existing 2 x 5MVA transformers with 7.5/15MVA transformers.	CV1 - Primary Reinforcement
Ellon	33/11	12.5	-	2027/2028	Replace the existing 2 x 12.5MVA transformers with 2 x 20/40MVA. Existing conductor re-specified at 65c to avoid thermal overloads. Construct a new switchroom and switchboard. Install a 4MVAR STATCOM at Ellon PSS. Modify the normal running arrangement by closing the normal open point on the Ellon PSS bus	CV1 - Primary Reinforcement

Elgin

Elgin GSP Information

This GSP supplies the following primary substations:

- Ashgrove
- Bilbohall
- Burghead
- Cumming Street
- Elgin
- Fochabers
- Kinloss
- Lhanbryde
- Lossiemouth

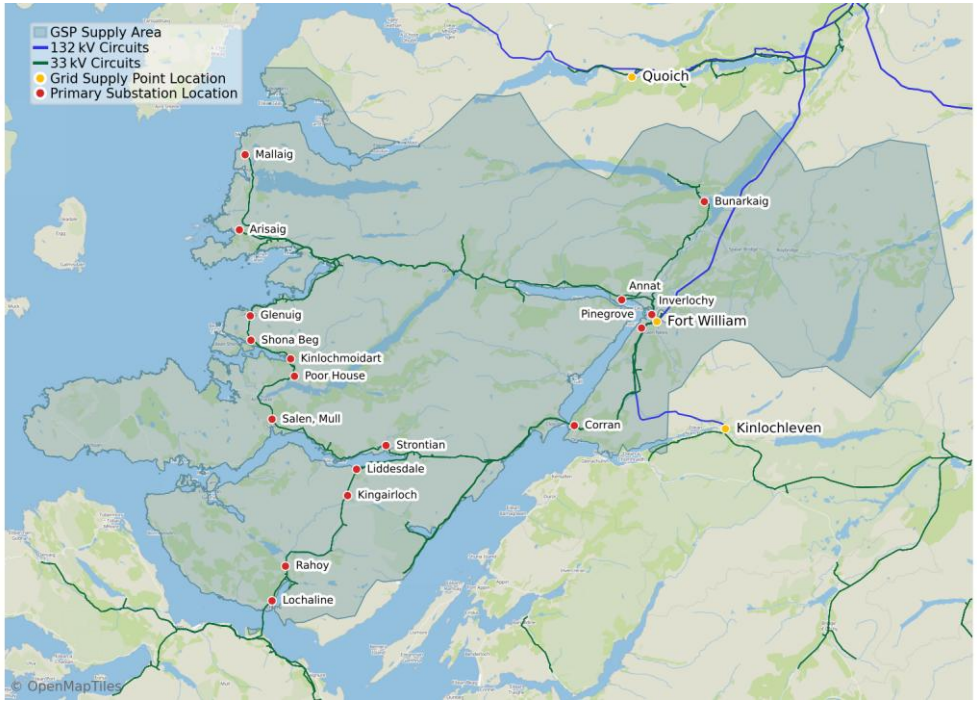
Elgin GSP is located within the Elgin region of the SHEPD licence area and currently supplies approximately 26,364 customers.

Table P2.15 Elgin GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Ashgrove	33/11	10	23.28	2028	Upgrade existing Ashgrove PSS transformer from 10MVA to 20/40MVA. • Addition of a second 20/40MVA transformer at Ashgrove PSS. • Upgrade of 33kV switchboard at Ashgrove PSS.	CV1 - Primary Reinforcement

					• Upgrade and extend 33kV switchboard at Elgin GSP . • Addition of 2x 33kV dedicated UG cable circuits from Elgin GSP to Ashgrove Primary substation,	
Elgin GSP and Bilbohall PSS	33/11	12	23.28	2028	• Addition of a second 12/24MVA transformer at Bilbohall PSS. • Addition of a 33kV UG cable circuit from Bilbohall and Cumming Street PSS. • Existing fault thrower replaced with 2 x CBs	CV1 - Primary Reinforcement
Elgin GSP	-	-	-	2029	•Replacing OHL up to P17 with 630mm2 Al UG cable. • Replacing OHL from P17-37 with 150mm2 HDCu running at 75deg C.	CV1 - Primary Reinforcement

Fort William



Fort William GSP Information

This GSP supplies the following primary substations:

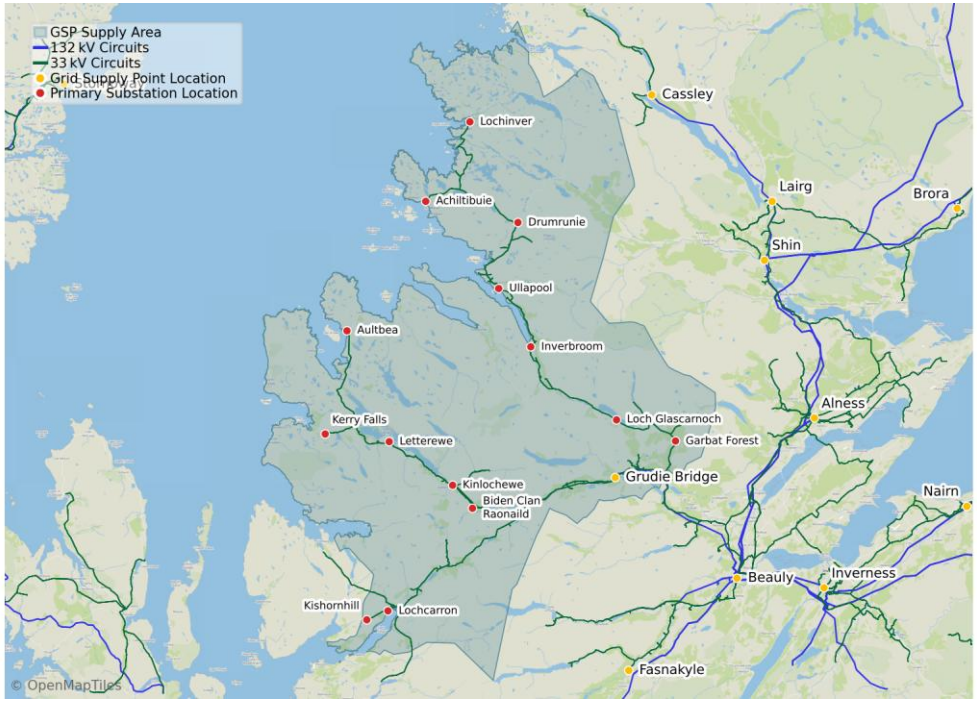
- Annat
- Arisaig
- Corran
- Fishnish
- Glenuig
- Inverlochy
- Kingairloch
- Kinlochmoidart
- Liddesdale
- Lochaline
- Mallaig
- Pinegrove
- Poor House
- Rahoy
- Salen 2
- Shona Beg
- Strontian

Fort William GSP is located within the Highland region of the SHEPD licence area and currently supplies approximately 11,308 customers.

Table P2.16 Fort William GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Salen 2	33/11	2.5	-	2027	Reinforcement of Salen 2 primary transformer. Establish a new 1 x 4MVA primary substation in the vicinity of Loch Mudle (Salen 3 primary substation)	CV1 - Primary Reinforcement
Fort William GSP	33/11	-	-	2028	Reinforcement of Fort William 33KV circuits 3L5 and 6L5.	CV1 - Primary Reinforcement
Inverlochy primary substation	33/11	-	-	2028	Connecting Inverlochy PSS via 2 x new dedicated 33kV cable circuits. Reinforcement of the 2 x 33kV Inverlochy primary transformers.	CV1 - Primary Reinforcement
Lochailort Regulator site	33/11	-	-	2026	Installation of 2 x 4MVAr STATCOMs & 5 x 33kV circuit breakers at Lochailort regulator site.	CV1 - Primary Reinforcement

Grudie Bridge



Grudie Bridge GSP Information

This GSP supplies the following primary substations:

- Achiltibuie
- Aultbea
- Biden Clan Raonaild
- Conon Falls
- Drumrunie
- Garbat Forest
- Grudie Bridge
- Inverbroom
- Kerry Falls
- Kinlochewe
- Letterewe
- Loch Glascarnoch
- Lochcarron
- Lochinver
- Ullapool

Grudie Bridge GSP is located within the Highland region of the SHEPD licence area and currently supplies approximately 5,237 customers.

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

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Achiltibuie	33/11	-	-	2027/2028	Installation of 2 x 4MVA STATCOMs at Achiltibuie.	CV1 - Primary Reinforcement
Ullapool	33/11	2.5	5.2	2029	Reinforce the 33/11kV transformer with a rating of 2.5MVA with a 4MVA transformer.	CV7 - Asset replacement

Harris

Harris GSP Information

This GSP supplies the following primary substations:

- Stockinish
- Tarbert

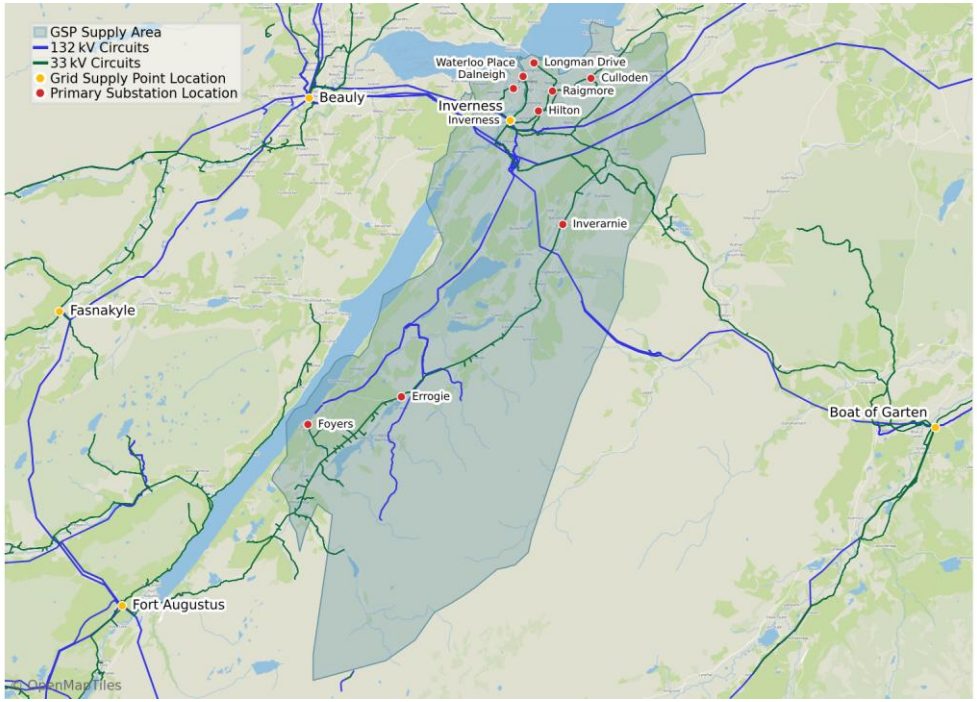
Harris GSP is located within on the Western Isles within the SHEPD licence area and currently supplies approximately 1,627 customers.

Table P2.18 Harris GSP reinforcement projects in detailed development and delivery.

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Harris	33	29.3	35.4	2026/2027	Reinforce the 33kV Overhead Line which connects into the Ardmore – Harris circuit. This Overhead Line is the weak link since the subsea cable was upgraded following the last fault event.	CV1 – Primary Reinforcement

					The proposal is to uprate the line to operate at 75deg operation	

Inverness



Inverness GSP Information

This GSP supplies the following primary substations:

- Culloden
- Dalneigh
- Errogie
- Foyers
- Hilton
- Inverarnie
- Inverness
- Longman Drive
- Raigmore
- Waterloo Place

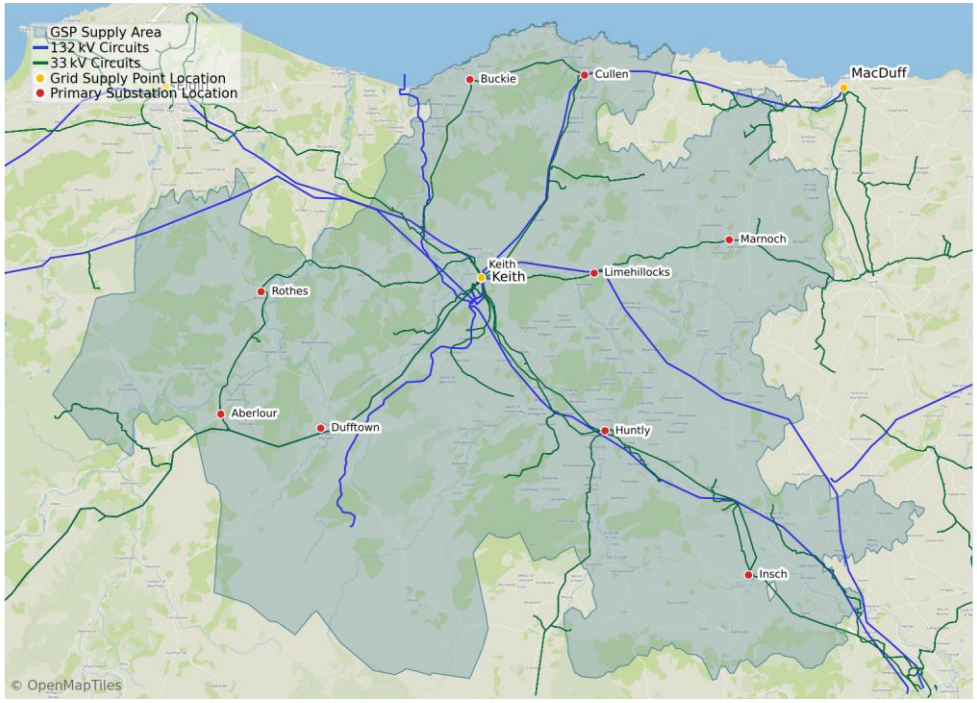
Inverness GSP is located within the Inverness region of the SHEPD licence area and currently supplies approximately 37,100 customers.

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

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Culloden	33/11	15	23.28	2028	Reinforce the two existing 33/11kV transformers from 2 x 7.5/15MVA units to 2 x 15/30MVA units	CV1 - Primary Reinforcement

Longman Drive	33/11	-	23.28	2026	Construction of a new primary substation, Longman Drive PSS. The new substation will consist of 2 x 12/24MVA transformers and will be fed using two new 33kV circuits from Waterloo Place PSS.	CV1 - Primary Reinforcement
Waterloo Place	33/11	23	38.1	2027	Reinforce the two existing 33/11kV transformers from 2 x 11.5/23MVA units to 2 x 20/40MVA units	CV1 - Primary Reinforcement
New Primary Substation and 33kV circuit rerouting		-	-	2030	Construction of a new primary substation, Longman Drive PSS. The new substation will consist of 2 x 12/24MVA transformers and will be fed using two new 33kV circuits from Waterloo Place PSS.	CV1 - Primary Reinforcement

Keith



Keith GSP Information

This GSP supplies the following primary substations:

- Aberlour
- Buckie
- Cullen
- Dufftown
- Huntly
- Insch
- Keith
- Limehillocks
- Marnoch
- Rothes

Keith GSP is located within the North Caledonia region of the SHEPD licence area and currently supplies approximately 26,381 customers.

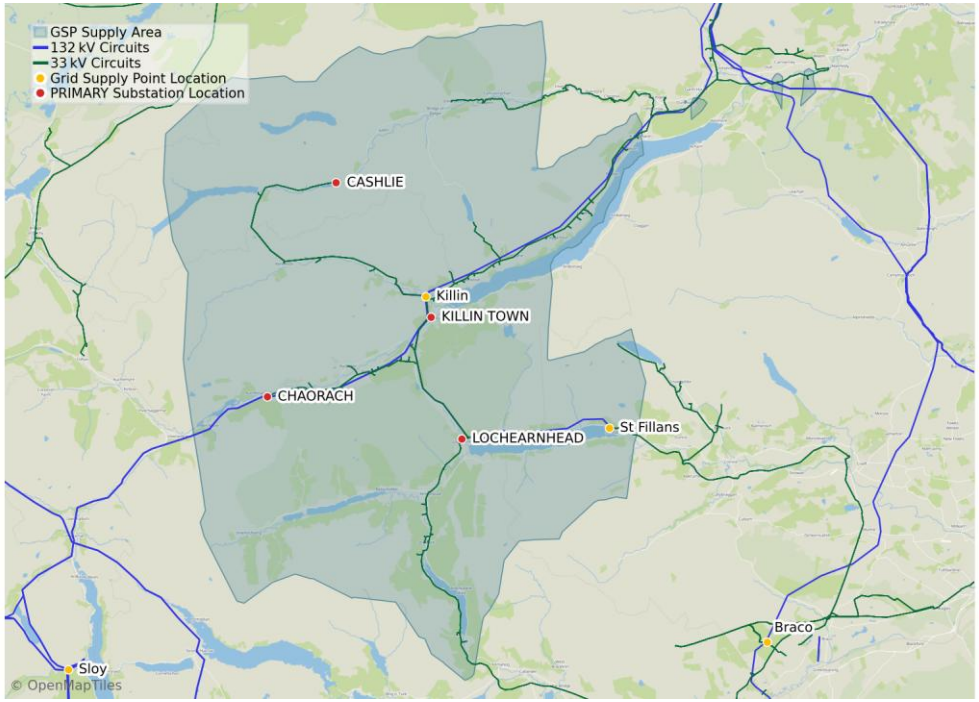
Table P2.20 Keith GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver

Insch	33/11	7.5	14.55	2027	33kV network reconfiguration to transfer Insch PSS and associated 33kV network to the new Rothienorman GSP (including Dummuies, Greenmyre and glens of Foundland windfarms). • Upgrade existing transformers from 5/7MVA to 7.5/15MVA. • Upgrade of 33kV switchboard)	CV1 - Primary Reinforcement
Marnoch	33/11	-	-	2030	Upgrade existing transformer T2 from 5MVA to 2050 DFES demand (to be confirmed) and replace fault thrower with a circuit breaker. Replace circuit breaker at T1	CV7 – Asset Replacement
Keith GSP	33	-	-	2029	Reinforce multiple sections on the Keith 304 circuit, which includes: • Replacing UG Cable up to P1 with 500mm2 Al. • Replacing OHL from P1-95 with 150mm2 HDCu running at 75deg C	CV1 - Primary Reinforcement
Keith GSP & Buckie PSS (Circuit 303 and 304)	33	-	-	2029	The relocation/installation of a new PSS to replace the existing Buckie PSS consisting of: • 2 x 20/40 MVA transformers. • Building for 11kV and 33kV switchgear. • Installation of 2 x 2.5MVar shunt reactors a27/03/2026nd PSS batteries.	CV1 - Primary Reinforcement

Keith 2 GSP 33kV circuits	33	-	-	2027	Upgrade 8MVAr STATCOM to 12MVAr, required to address voltage issues.	CV1 - Primary Reinforcement
Dufftown	33/11	-	-	2030	Replace both 5MVA transformers with 7.5/15MVA units	CV1 - Primary Reinforcement

Killin



Killin GSP Information

This GSP supplies the following primary substations:

- Ardchyle
- Cashlie
- Chaorach
- Killin Grid
- Killin Town
- Lochearnhead
- Lubnaig

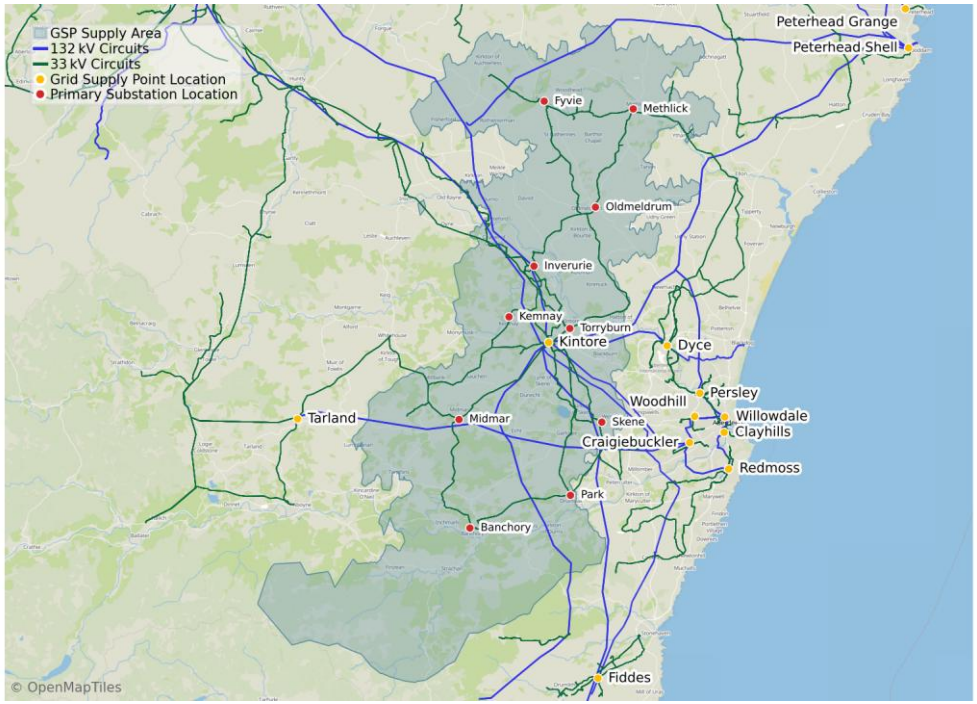
Killin GSP is located within the Perthshire region of the SHEPD licence area and currently supplies approximately 1,783 customers.

Table P2.21 Killin GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Lochay	33/11	-	-	2028	Replacement of existing 2.5MVA T3 Primary Transformer with a 5MVA unit.	CV7- Asset Replacement

					New 3 panel 33kV switchboard.	
Lochearnhead				2028	Replacement of the existing 4MVA primary transformer with a 6.3MVA unit.	CV7- Asset Replacement

Kintore



Kintore GSP Information

This GSP supplies the following primary substations:

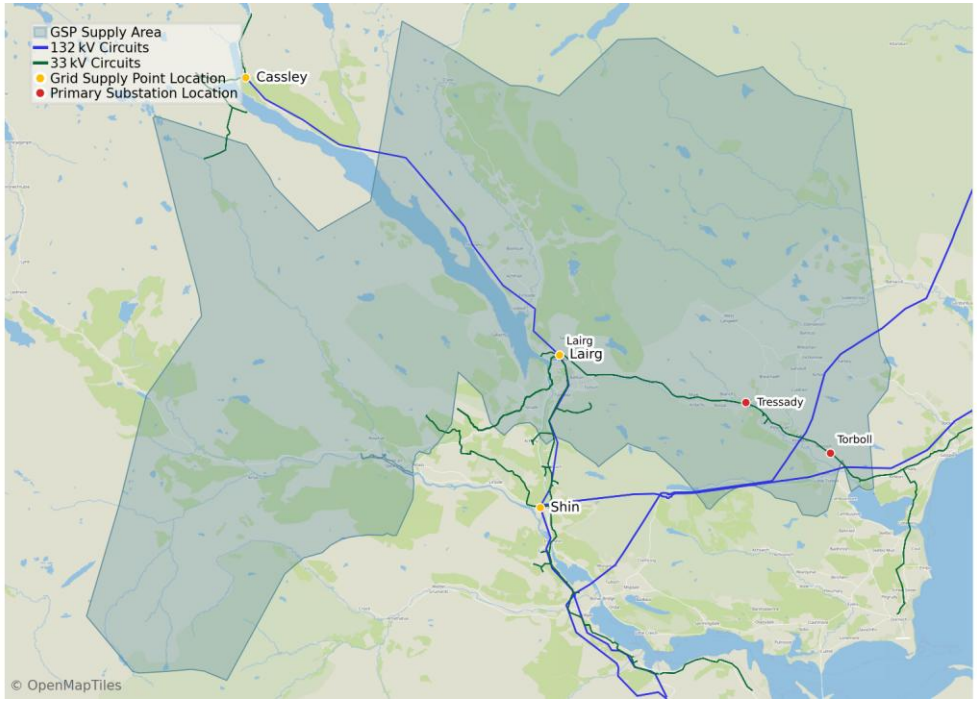
- Banchory
- Fyvie
- Inverurie
- Kemnay
- Methlick
- Midmar
- Oldmeldrum
- Park
- Skene
- Torryburn

Kintore GSP is located within the Aberdeenshire region of the SHEPD licence area and currently supplies approximately 33,997 customers.

Table P2.22 Kintore GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Methlick	33/11	5	8.19	2026/2027	Integration of Methlick from Kintore to Rothienorman GSP	CV1 - Primary Reinforcement
Fyvie	33/11	-	-	2026/2027	Integration of Fyvie from Kintore to Rothienorman GSP	CV1 - Primary Reinforcement
Midmar	33/11	-	-	2026/2027	Reinforcement the existing 1 x 33/11kV transformer with 2 x 33/11kV transformer upgrades.	CV1 - Primary Reinforcement
Banchory	33/11	14	-	2028/2029	Reinforcement of the two existing 33/11kV transformers	CV1 - Primary Reinforcement
Skene	33/11	-	-	2026/2027	Reinforcement of cable section with sufficient cable from Kintore GSP to Skene PSS	CV1 - Primary Reinforcement
Banchory PSS / Kintore GSP	-	-	-	2028/2029	Reinforce cable with 500Al cable from Banchory to Kintore GSP	CV1 - Primary Reinforcement
Rothienorman GSP / Kintore GSP	-	-	-	2028/2029	There will be 2 new NOPs between Rothienorman and Kintore under the new arrangement	CV1 - Primary Reinforcement

Lairg



Lairg GSP Information

This GSP supplies the following primary substations:

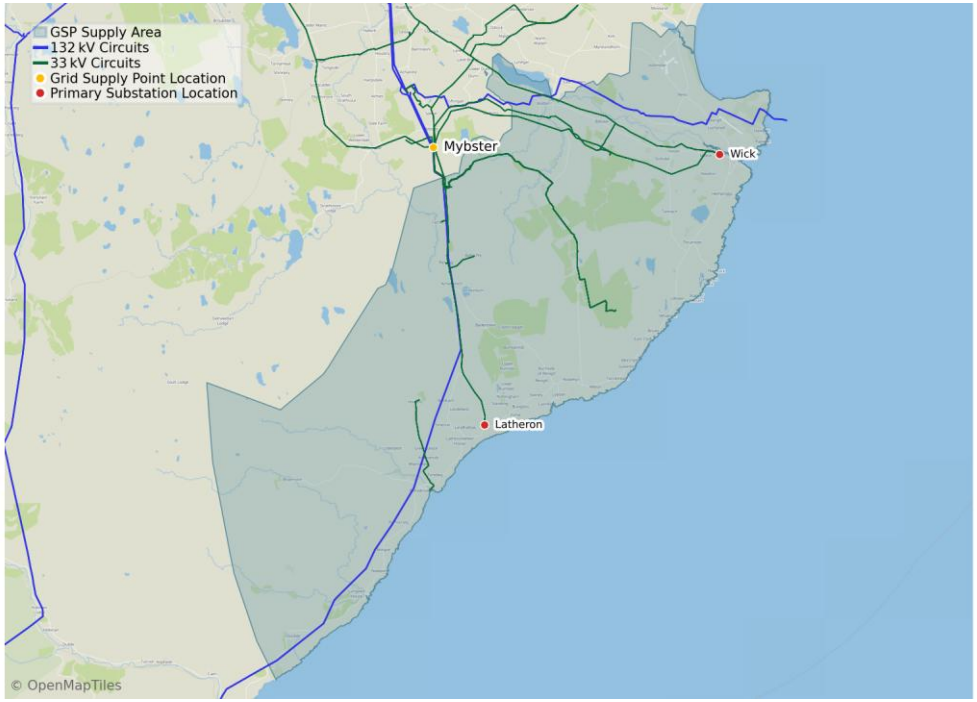
- Lairg
- Torboll
- Tressady

Lairg GSP is located within the Sutherland region of the SHEPD licence area and currently supplies approximately 1,153 customers.

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

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Lairg	33/11	-	-	2029	Installation of a new 2500A switchboard	CV1 - Primary Reinforcement
Lairg	33/11	-	-	2029	Installation of one additional 33/11kV 4 MVA transformer	CV1 - Primary Reinforcement
North Tressady (New)	33/11	-	-	2030	Installation of a new pole-mounted 33/11 kV 315 kVA transformer (North Tressady).	CV1 - Primary Reinforcement

Mybster



Mybster GSP Information

This GSP supplies the following primary substations:

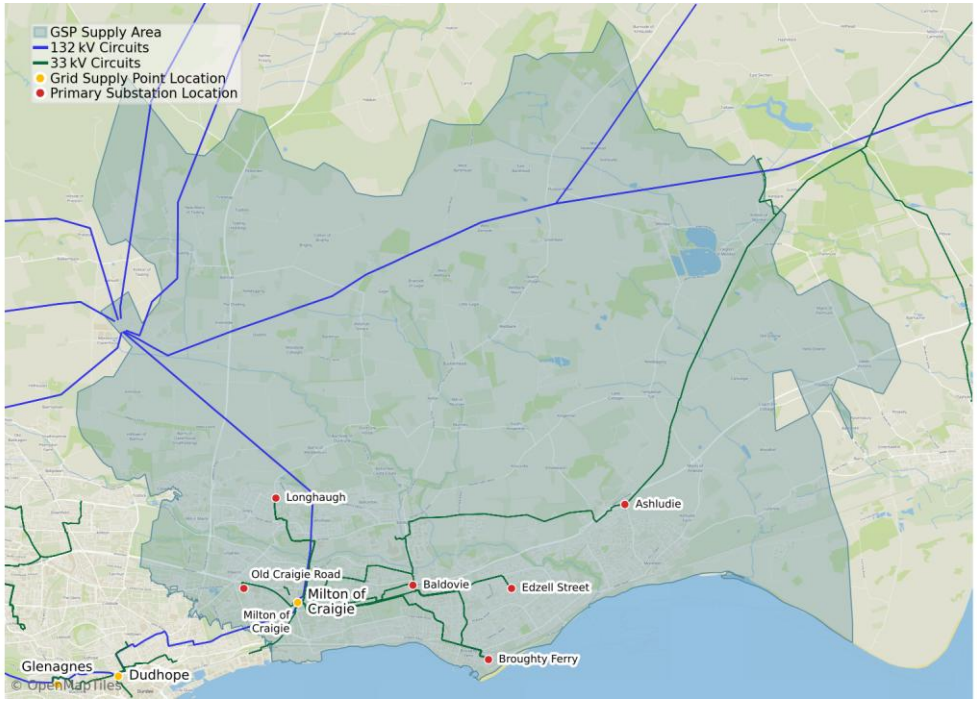
- Latheron
- Wick

Mybster GSP is located within the Highlands region of the SHEPD licence area and currently supplies approximately 6,572 customers.

Table P2.24 Mybster GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Dornoch PSS	33/11	N/A	8 MVA	2029	Due to site access constraints the existing transformer cannot be upgraded; proposal for a second Dornoch PSS with one 8 MVA transformer, one 33 kV incoming feed and two 11 kV outgoing feeders.	CV1 – Primary Reinforcement

Milton of Craigie



Milton of Craigie GSP Information

This GSP supplies the following primary substations:

- Ashludie
- Baldovie
- Broughty Ferry
- Edzell Street
- Longhaugh
- Milton of Craigie
- Old Craigie Road

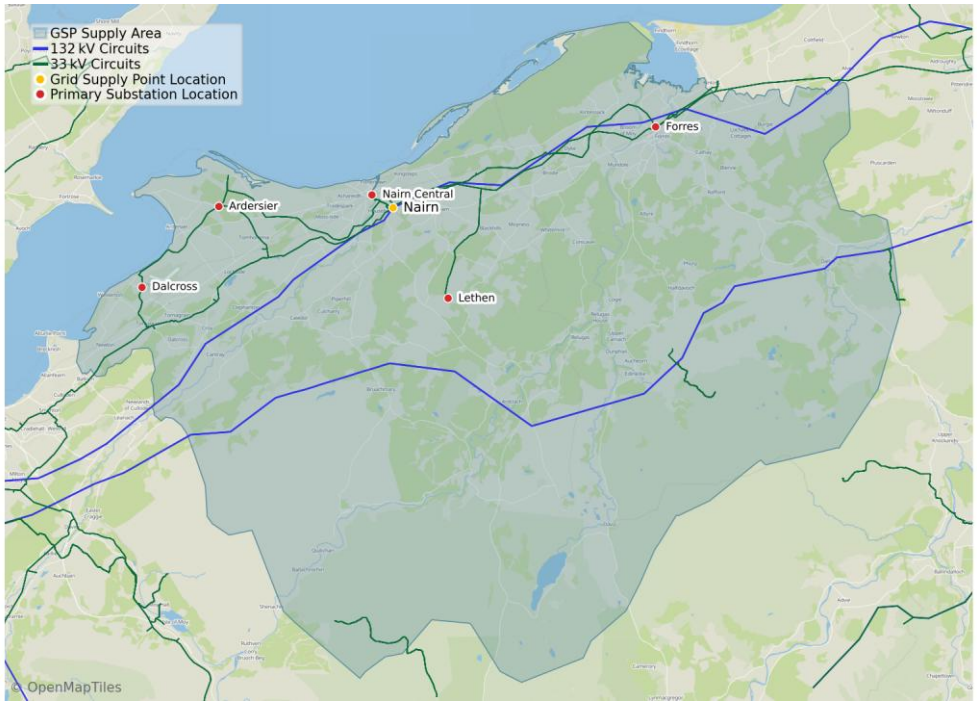
Milton of Craigie GSP is located within the Dundee region of the SHEPD licence area and currently supplies approximately 31,900 customers.

Table P2.25 Milton of Craigie GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Ashludie	33/11	13	29.1	2028/2029	Works include: • 2 x PSS transformers upgraded from 10 to 15/30MVA. • All 33kV and 11kV PSS switchboard replaced. • Addition of 2 x PSS batteries required for SCADA and protection.	CV1 – Primary Reinforcement

Milton of Craigie	33/11	-	-	2028/2029	Upgrade existing PSS transformer T2 from 7.5/15 to 12/24MVA to match T1	CV1 – Primary Reinforcement

Nairn



Nairn GSP Information

This GSP supplies the following primary substations:

- Ardersier
- Dalcross
- Forres
- Lethen
- Nairn Central
- Nairn Grid

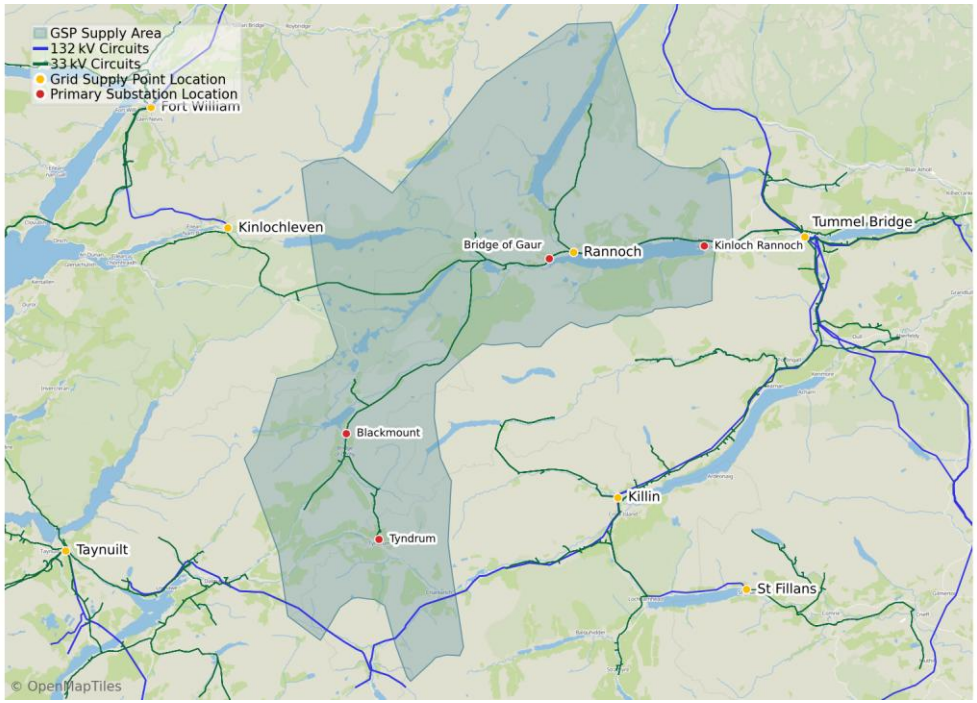
Nairn GSP is located within the Dundee region of the SHEPD licence area and currently supplies approximately 16,100 customers.

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

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Forres	33/11	-	-	2030	Reinforce the existing 2 x 7.5/15MVA transformers with 2 x 20/40MVA transformers	CV1 – Primary Reinforcement

Ardersier/Nordbord	33/11	-	-	2029	Reinforcement of a 0.45km section of a 33kV circuits between Inverness GSP and Ardersier PSS.	CV1 – Primary Reinforcement

Rannoch



Rannoch GSP Information

This GSP supplies the following primary substations:

- Blackmount
- Bridge of Gaur
- Kinloch Rannoch
- Tyndrum

Rannoch GSP is located within the Highlands region of the SHEPD licence area and currently supplies approximately 506 customers.

Table P2.27 Rannoch GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Bridge of Gaur	33/11	0.5	1	2030	Replacement of existing 1MVA 33kV primary transformer with a	CV7 - Asset Replacement

					higher rated unit (MVA rating TBC by Investment management). Installation of 1x new 33kV circuit breaker. Replacement of 1x 11kV Pole mounted circuit breaker (PMCB). 11kV/LV alteration works outside PSS.	

Shetland

Shetland GSP Information

This GSP supplies the following primary substations:

- Brae
- Firth
- Gremista
- Gutcher
- Mid Yell
- Sandwick
- Scalloway
- Sumburgh
- Tumblin
- Unst
- Voe

Shetland GSP is located on the Shetland islands within the SHEPD licence area and currently supplies approximately 14,438 customers.

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

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Gremista	33/11	N/A	N/A	2025/2026	Replacement of existing 33 kV outdoor circuit breakers with a	CV1 – Primary Reinforcement

					new indoor 33 kV switchboard. Includes reconnection of all existing 33 kV feeders, generators, and associated primary substation circuits.	
Firth	33/11	N/A	N/A	2027	Installation of a new 33 kV cable circuit and new outdoor switchgear/switchboard at Firth Primary to form a 33 kV ring network.	CV1 – Primary Reinforcement
Scalloway	33/11	1	7.76	2027/2028	Add a 2nd 8MVA transformer	CV1 - Primary Reinforcement
Sandwick	33/11	2.8	7.76	2027/2028	Add a 2nd 8MVA transformer	CV1 - Primary Reinforcement
Sumburgh Primary	11	-	-	2029	Installation of an 11kV voltage regulator	CV1 - Primary Reinforcement
Mid Yell	33		-	2027	installation of new 33kV switchboard and Statcom at Mid Yell.	CV1 - Primary Reinforcement
Brae	11	-	-	2027	11kV Overhead Line reinforcement. New 11kV overhead Line spur to Fethaland Lighthouse. New HV switching station	Worst Served Customer (WSC)
Gutcher	11	-	-	2027	11kV Overhead Line and subsea cable reinforcement and creation of 11kV ring network to the island of Fetlar.	Worst Served Customer (WSC)
New Primary Substation	11	-	-	2027	New primary substation between Gutcher and Unst, to be located on Unst and integrated into the existing 33kV and 11kV networks with auto-changeover/APRS schemes	Worst Served Customer (WSC)

Stornoway

Stornoway GSP Information

This GSP supplies the following primary substations:

- Arnish
- Barvas
- Battery Point
- Callanish
- Coll
- Gisla
- Laxay
- Maaruig

Stornoway GSP is located in the Western Isles region of the SHEPD licence area and currently supplies approximately 12,455 customers.

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

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver

Battery Point	33/11	-	-	2026/2027	Replace all three 4/8MVA transformers with two 15/30MVA units	CV7 - Asset Replacement
Stornoway	33	-	-	2026/2027	Add a 4MVA STATCOM to Stornoway 305 to alleviate forecast voltage issues.	CV1 - Primary Reinforcement
Stornoway	33	-	-	2028	Build a second 33kV circuit from Stornoway Grid to Barvas primary, including new 33kV teed circuit to Coll primary	CV19- Worst Served Customers
Gisla	33	1	-	2027	Replace existing single 1MVA transformer with two 2.5MVA transformers. New two panel 33kV Board, new 6 panel 11kV board and new 33kV line from Stornoway to Gisla	CV1 – Primary Reinforcement
Laxay	33	-	-	2027	New 33kV feeder from Stornoway GSP total 6.2km of new 33kV OHL to a new 33kV board. Replace existing single 2.5MVA transformer with two 6.3MVA transformer. Upgrade 11kV board and establish new 11kV feeder.	CV1 – Primary Reinforcement
Barvas	11	1	-	2028	Replace existing single 2.5MVA transformer with two 6.3MVA. Install two new gas insulated 33kV breakers and a new 5 panel indoor 11kV switchboard also some 11kV circuit upgrades. Note that this project is dependent on a second circuit to Coll from Stornoway mentioned earlier	CV1 – Primary Reinforcement
Coll	11	2.5	-	2028	Replace at Coll Primary existing single 1MVA transformer with two 6.3MVA transformers	CV1 – Primary Reinforcement

Battery Point Primary	33/11	16	29.1	-	Replace three 8MVA Transformers with two 30MVA emergency rated transformers. New 33kV gas insulated switchboard to replace air insulated switchboard.	CV7- Asset Replacement
Battery Point DEG	-	-	-	-	Relocate DEG at Battery Point to Arnish primary substation	CV15 – Quality of Supply
Stornoway Grid	33	0.23	-	-	Replace 33kV switchboard with new gas insulated switchgear	CV7- Asset Replacement

Strathleven

Strathleven GSP Information

This GSP supplies the following primary substations:

- Aberfoyle
- BlairInnans
- Drymen
- Kepculloch
- Killearn
- Strathleven

Strathleven GSP is located within the Southern highland region of the SHEPD licence area and currently supplies approximately 5,839 customers.

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

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Kepculloch	33/11	-	-	2029/2030	Upgrade existing 2 x 5/6.25MVA to 7.5/15MVA.	CV1- Primary Reinforcement

Strichen

Strichen GSP Information

This GSP supplies the following primary substations:

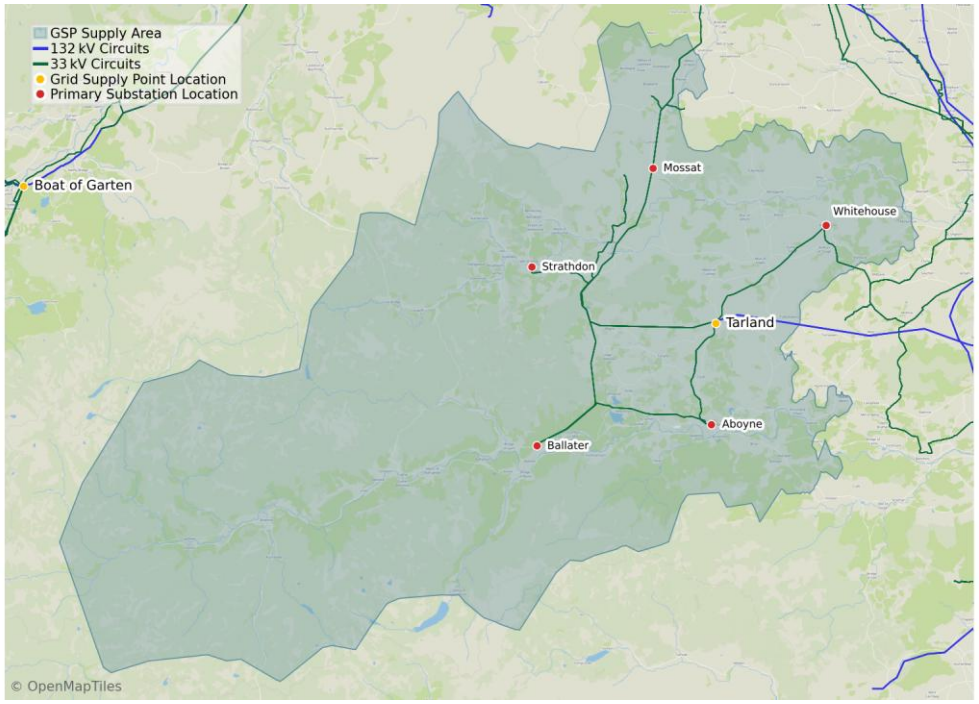
- Hatton
- Maud
- Mintlaw
- New Pitsligo
- Stoneyhill
- Strichen

Strichen GSP is located within the Aberdeenshire region of the SHEPD licence area and currently supplies approximately 9,613 customers.

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

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
New Pitsligo	33/11	2.5	8.19	2029/2030	Replace both 2.5MVA transformers with 6.3MVA units	CV1 - Primary Reinforcement
Strichen	33/11	-	-	2029/2030	Reinforce existing 33kV circuit with underground cable	CV1 - Primary Reinforcement

Tarland



Tarland GSP Information

This GSP supplies the following primary substations:

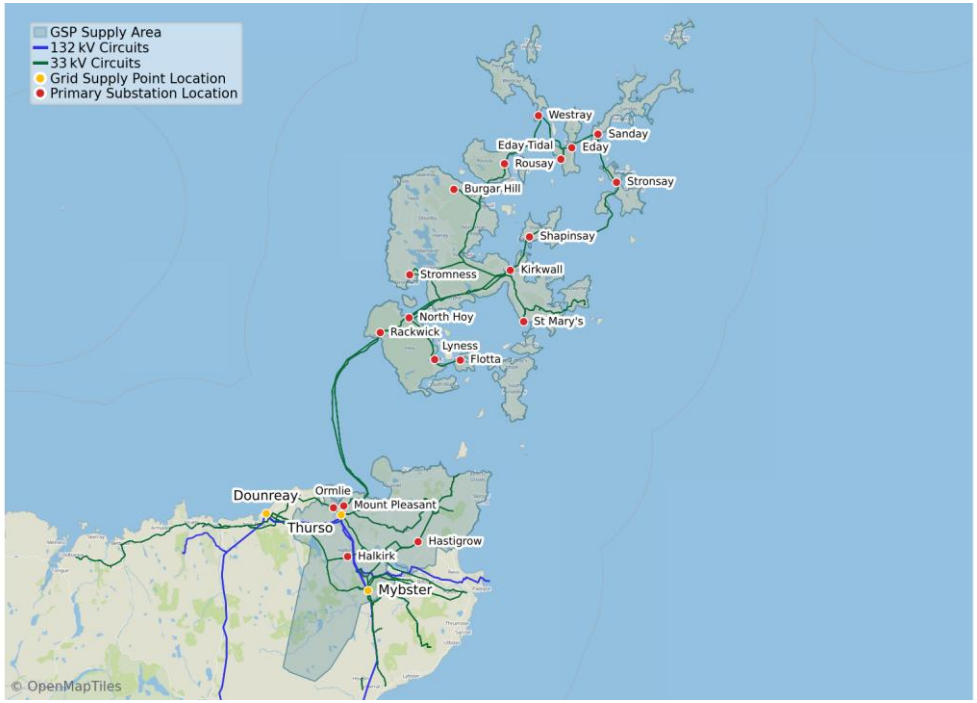
- Aboyne
- Ballater
- Mossat
- Strathdon
- Whitehouse
- Braemar*

Tarland GSP is located within the Aberdeenshire region of the SHEPD licence area and currently supplies approximately 10,237 customers.

Table P2.32 Tarland GSP group reinforcement projects in detailed development and delivery

Network Area	Primary/Secondary Voltage (kV)	Released Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Aboyne & Ballater	33	15.6	2027/2028	Separate Aboyne Primary from the Tarland 33kV ring and establish a new Primary Substation in Braemar.	CV1 - Primary Reinforcement
Aboyne/ Ballater/ new Braemar PSSs	33/11	-	2028/2029	Replace the existing 2 x 2.5MVA transformers with 2 x 8MVA transformers and new 33kV switchgear Extend existing GSP switchroom to accommodate 2 x CBs. • Isolate Aboyne PSS from the existing ring circuit arrangement with Ballater PSS, by installing two new cable circuits, and close the ring to the west of Aboyne	CV1 - Primary Reinforcement
Mossat	33/11	-	2028/2029	Replace the existing 2 x 2.5MVA transformers with 2 x 8MVA transformers and new 33kV switchgear.	CV1 - Primary Reinforcement

Thurso South



Thurso South GSP Information

This GSP supplies the following primary substations:

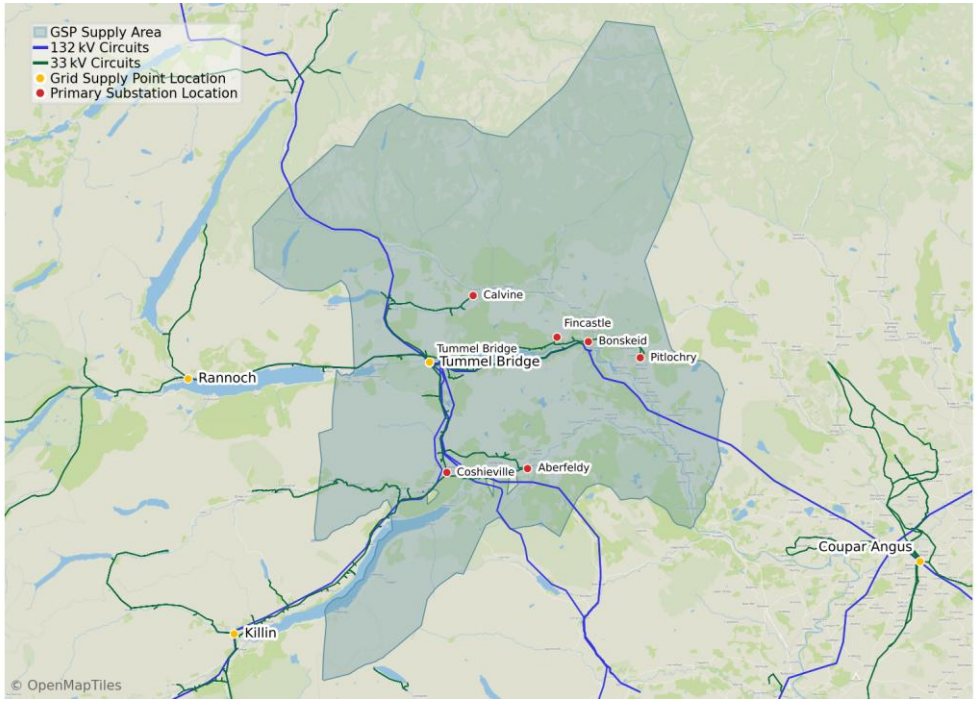
- Burgarhill
- Eday
- Eday Tidal
- Flotta
- Forss
- Halkirk
- Hastigrow
- Kirkwall
- Lyness
- Mount Pleasant
- North Hoy
- Ormlie
- Rackwick
- Rousay
- Sanday
- Shapinsay
- South Ronaldsay*
- St Marys
- Stromness
- Stronsay
- Westray

Thurso South GSP is located within the Caithness region of the SHEPD licence area and currently supplies approximately 22,709 customers.

Table P2.33 Thurso South GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Shapinsay	33	-	-	2028/2029	33kV cable reinforcement	CV1 – Primary Reinforcement
Ormlie	33/11	7.5	14.55	2025/2026	Add a 2nd matching transformer to Ormlie	CV1 - Primary Reinforcement
Mount Pleasant	33/11	7.5	14.55	2025/2026	Add a 2nd matching transformer to Mount Pleasant	CV1 - Primary Reinforcement
Lyness	33/11	1	1	2027/2028	Replace the single 1MVA transformer with a 2.5MVA unit	CV7 - Asset Replacement
Sanday	33/11	1	1	2026/2027	Replace the single 1MVA transformer with a 2.5MVA unit	CV7 - Asset Replacement

Tummel Bridge



Tummel Bridge GSP Information

This GSP supplies the following primary substations:

- Aberfeldy
- Bonskeid
- Calvine
- Fincastle
- Kinloch Rannoch
- Pitlochry
- Tummel Bridge

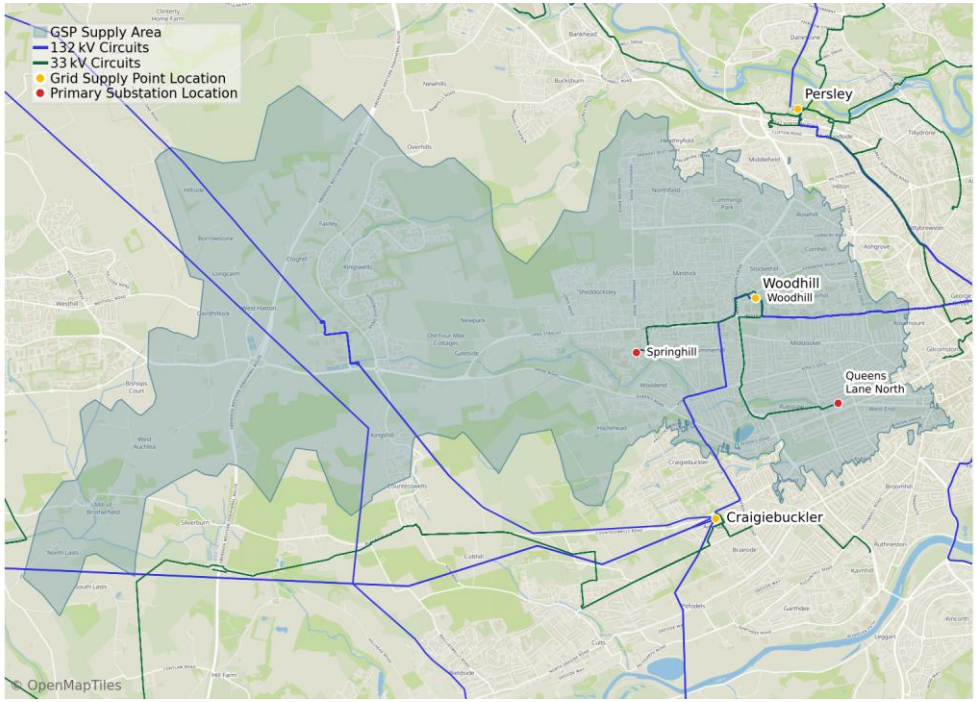
Tummel Bridge GSP is located within the Perthshire region of the SHEPD licence area and currently supplies approximately 6,836 customers.

Table P2.34 Tummel Bridge GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Tummel Bridge – Errochty	33	21	90	2026/2027	Creation of a new Errochty GSP comprising of: • 2x 90MVA grid transformers. • 11 panel indoor 33kV switch room (Including 1x	CV1 - Primary Reinforcement

					33kV bus section circuit breaker and 1x circuit breaker to facilitate connection of the proposed Taymouth PSS • Diversion of the 5x existing 33kV circuits from Tummel Bridge GSP to the new Errochty GSP. • Install a new 33kV circuit from the new Errochty GSP -Tummel Primary, which will be disconnected from the existing 4H0 33kV circuit currently feeding Tummel Power Station.	
Bonskied	33/11	1	1	2026	Replacement of the existing 5MVA Bonskeid primary transformer with a 6.3MVA unit.	CV7 - Asset Replacement
Coshieville	33/11	2.5	-	2026	Replace the single 2.5MVA transformer with a 6.3MVA unit	CV1 - Primary Reinforcement
Calvine	33/11	1	-	2029	Replace the single 2.5MVA transformer with a 6.3MVA unit	CV1 - Primary Reinforcement

Woodhill



Woodhill GSP Information

This GSP supplies the following primary substations:

- Queens Lane North
- Springhill
- Woodhill

Woodhill GSP is located within the Aberdeen region of the SHEPD licence area and currently supplies approximately 28,559 customers.

Table P2.35 Woodhill GSP reinforcement projects in detailed development and delivery

Substation Name	Primary/Secondary Voltage (kV)	Existing Capacity (MVA)	Updated Capacity (MVA)	Forecast Completion Date	Project Description	Driver
Queens Lane North	33/11	12.13	29.1	2029/2030	Replace the existing 10/12.5MVA transformers with 15/30MVA units.	CV7 - Asset Replacement
Springhill	33/11	21	38.1	2027/2028	Replace the existing 2 x 21MVA transformers with 20/40MVA transformers.	CV1 – Primary Reinforcement

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