



Network Development Report

April 2024



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Network Development Report

We are pleased to share our second Network Development Plan (NDP). The NDP outlines our plans for developing a network that meets the needs of our region as it moves to net zero.

It provides information on future network developments in accordance with our ‘flexibility first’ approach, as well as opportunities for new connections.

Our NDP follows the structure set out by the Energy Networks Association’s (ENA) [form of statement of NDPs](#)¹. As such, it is comprised of three documents:

- 1. NDP Methodology;
- 2. Network Development Report (NDR) – this report; and
- 3. Network Headroom Report (NHR).

About Northern Powergrid

Northern Powergrid is the Distribution Network Operator (DNO) for the Northeast, Yorkshire and northern Lincolnshire and is dedicated to delivering safe, secure, and cost-effective electricity for our communities.

Our operations are divided into two licence areas, the Northeast and Yorkshire. Across these licence areas we power the daily lives of 8 million people and 3.9 million homes and businesses and are responsible for providing reliable and resilient electricity while supporting regional and national net zero goals.

Network Development Report

This document is the Network Development Report (NDR). The purpose of this NDR is to transparently communicate our investment decisions and future network intervention plans to stakeholders, and to highlight areas where Flexibility Services may be required. This benefits our stakeholders by enabling them to factor in how, where and when we plan to develop our network, including our requirements for Flexibility Services into their planning.

This NDR uses a template that groups network development requirements according to the Grid Supply Point (GSP) that they are supplied by. This approach ensures that the data is presented consistently, aiding our stakeholders.

Network development is planned for 35 GSPs out of the total 41, reflecting our significant investment to ensure that the electrical distribution network is available to enable net zero in our region.

The lists of network developments for each GSP are presented in the next two sections, Northern Powergrid Northeast and Northern Powergrid Yorkshire. To help understand the location and characteristics of each GSP, each section includes:

- 1. A map with a pin drop indicating the GSP location and the area it serves (shaded in red);
- 2. The total number of customers that the GSP serves;
- 3. A brief overview of the GSP including voltage;
- 4. The locations of all the network development requirements; and
- 5. Descriptions of all the planned intervention works.

This NDR outlines requirements for load-related, condition, fault level, and connection-driven developments for the next ten years. It covers the whole Northern Powergrid network down to the primary substation level - in line with the office of gas and electricity (Ofgem) standard licence condition SLC25B.

The network developments included in our NDR may change or shift in time because we review our network needs on a continual basis as new information becomes available and to reflect latest view of customers needs.



¹ [https://www.energynetworks.org/assets/images/ON21-WS1B-P5%20NDP%20Form%20of%20Statement%20Template%20and%20Process%20\(22%20Dec%202021\)%20Published.pdf](https://www.energynetworks.org/assets/images/ON21-WS1B-P5%20NDP%20Form%20of%20Statement%20Template%20and%20Process%20(22%20Dec%202021)%20Published.pdf)



Identification of Network Development Requirements

The fault level and condition-based constraints have been identified through a fault level survey and an assessment of asset health indices respectively.

The identification of load-related constraints has been informed by factors such as power generation and the increasing demand for electricity due to low carbon technologies (based on our Best View scenario). Our Best View scenario sets out the most likely pathway to net zero for our region, enabling us to make credible well-informed investment decisions over the next 10 years to support decarbonisation and enhance energy resilience within our communities. More information about our Best View scenario – including building blocks – can be found in our latest [Distribution Future Energy Scenarios](#)².

The substation names used in this NDR are consistent with our other complementary data reports to assist you in obtaining further information such as from our Long Term Development Statement, available on our Open Data Portal: <https://northernpowergrid.opendatasoft.com/pages/home/>

2 <https://northernpowergrid.opendatasoft.com/pages/home/>
3 <https://www.flexiblepower.co.uk/locations/location/northern-powergrid>
4 <https://picloflex.com/dashboard>

‘Flexibility First’ Approach

As we invest in our network to meet growing electricity demand, we are committed to taking a ‘flexibility first’ approach to network reinforcement. Prioritising flexibility involves exploring alternative solutions before adding new assets in response to load-related network constraints. Flexibility Services offer additional network capacity when Flexibility Service Providers (FSP) adjust their electricity usage during peak demand or generation periods. We assess the market for the availability of Flexibility Services to ensure that sufficient services are in place to meet forecast capacity needs. Prioritising flexibility enables us to provide cost-effective solutions that support net zero ambitions.

Substations with potential load-related requirements over the next 10 years are listed in the table titled ‘Upcoming flexibility requirements for future load driven capacity needs’. By providing information about these sites, we are signposting potential areas for future flexibility requirements where we are actively seeking expressions of interest from flexibility services providers.

Our flexibility needs are detailed on the [Flexible Power website](#)³ and [Piclo Flex market platform](#)⁴. We welcome all interested customers in our region who may be able to provide Flexibility Services to Northern Powergrid to contact us via email at flexibility@northernpowergrid.com.

Additional Information

More information on our NDR process can be found in the NDP methodology document. We publish the NDP once every two years as per standard licence condition SLC25B. Therefore the frequency of updates for our NDR is every two years.

Contact us

We invite feedback from stakeholders to improve our decision-making and communication processes as we work towards a flexible, future-ready distribution network. Please contact our System Forecasting team via email at opendata@northernpowergrid.com if you have any feedback or questions.

In providing the planned interventions information in this report, it is important to recognise that the outlined schemes and activities are based on the most up to date information that we have available. The data may change in future years due to a range of factors including revised asset condition assessments indicating intervention may not be necessary.

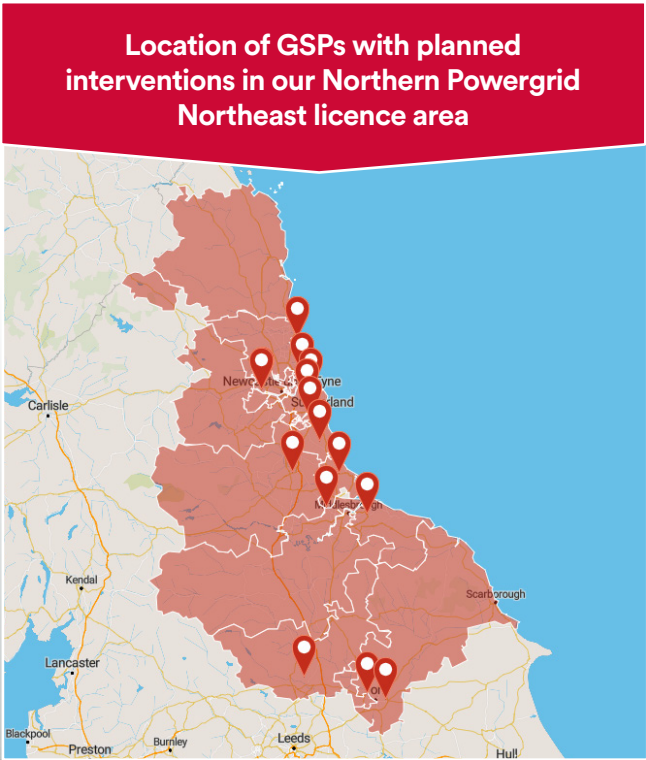


Northern Powergrid Northeast

Northern Powergrid Northeast is one of two licence areas in which we are responsible for the electricity distribution network.

The area stretches from North Yorkshire to Northumberland, serving communities across urban centres like Tyne and Wear and Teesside, and across rural communities in North Yorkshire, County Durham and Northumberland. We are proud to serve the North East and support the region with clean, resilient and reliable power that powers people’s daily lives and enables our region’s net zero ambitions.

This section presents 16 GSPs with planned interventions in our Northern Powergrid Northeast licence area. The specific details for each planned intervention are incorporated in the reports.

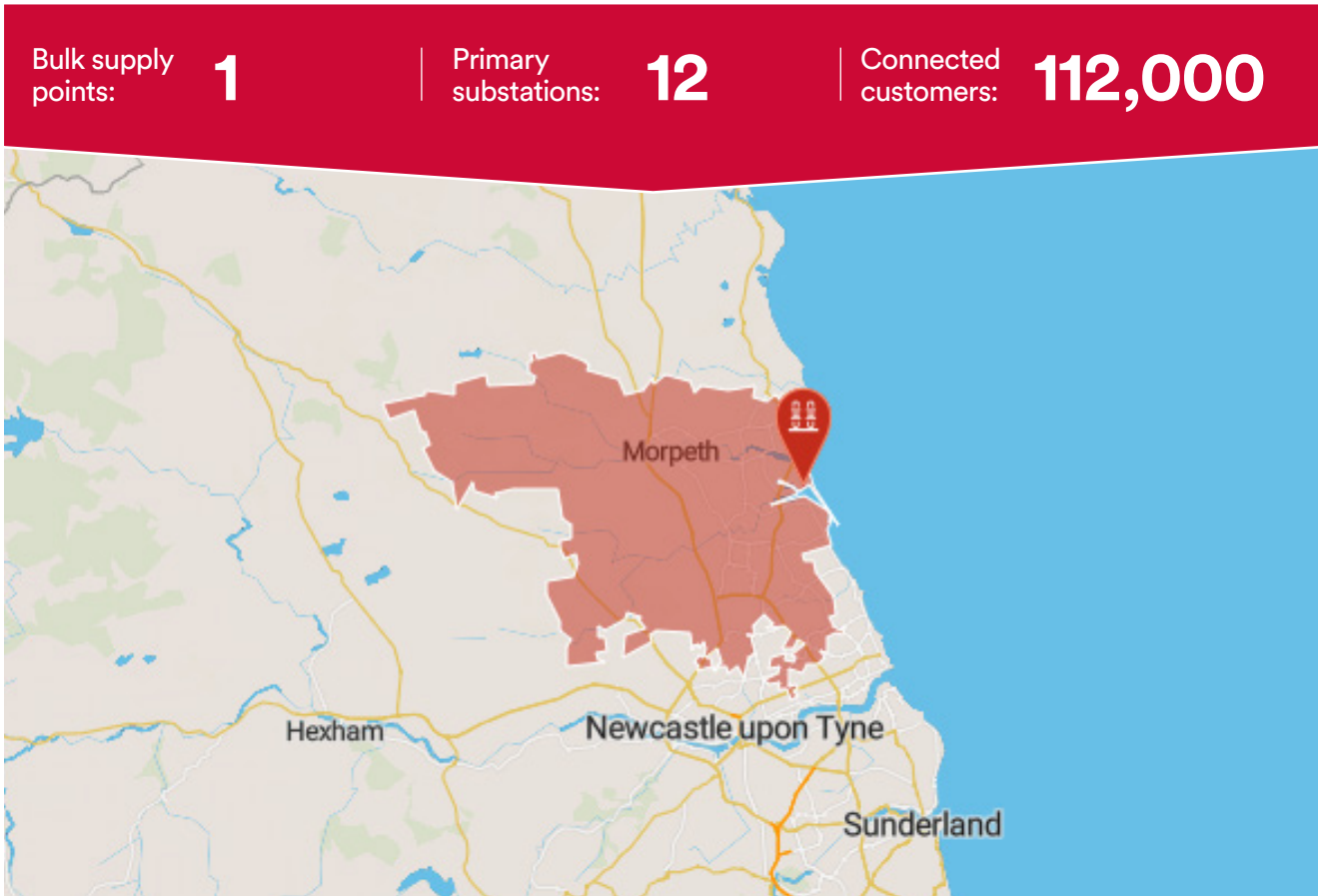


Blyth

275/66kV Grid Supply Point

Licence area
Northeast

Postcode
NE22 7BF

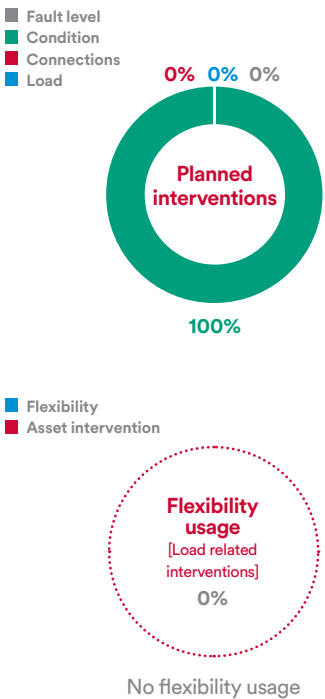


Overview

Blyth 275/66kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘Northumberland, County Durham and Tyne & Wear’ operational region of Northern England within our Northeast licence area. This GSP serves 112,000 customers through 1 bulk supply point (BSP) and 12 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 100% of the BSPs and 58% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Maddison Street 66/11kV	NE24 1DX	Condition	Replacement of 66/11kV transformer T2 and 66kV circuit breaker	0										
Morpeth 66/20kV	NE61 6JT	Condition	Switchgear replacement	2										
Reservoir 66/20kV	NE22 5QP	Condition	Replacement of 20kV switchgear in a new switchroom	0										
Seaton 66/11kV	HU11 5RH	Condition	Replacement of 66kV Circuit Breakers	0										
Ashington 66/11kV	NE63 8UJ	Condition	Replacement of 11kV switchgear	0										
Bedlington Sw 66/20kV	NE22 5DN	Condition	Replacement of 66kV switchgear	0										
Benton Square 66/11kV	NE12 9SR	Condition	Replacement of 66kV switchgear	0										
Bedlington sw 1 (dual circuit) 66kV circuit	NE24 1QP	Condition	Replacement of 0.7km of 66kV underground cable	0										
Bedlington sw 2 (dual circuit) 66kV circuit	NE24 1QP	Condition	Replacement of 0.7km of 66kV underground cable	0										

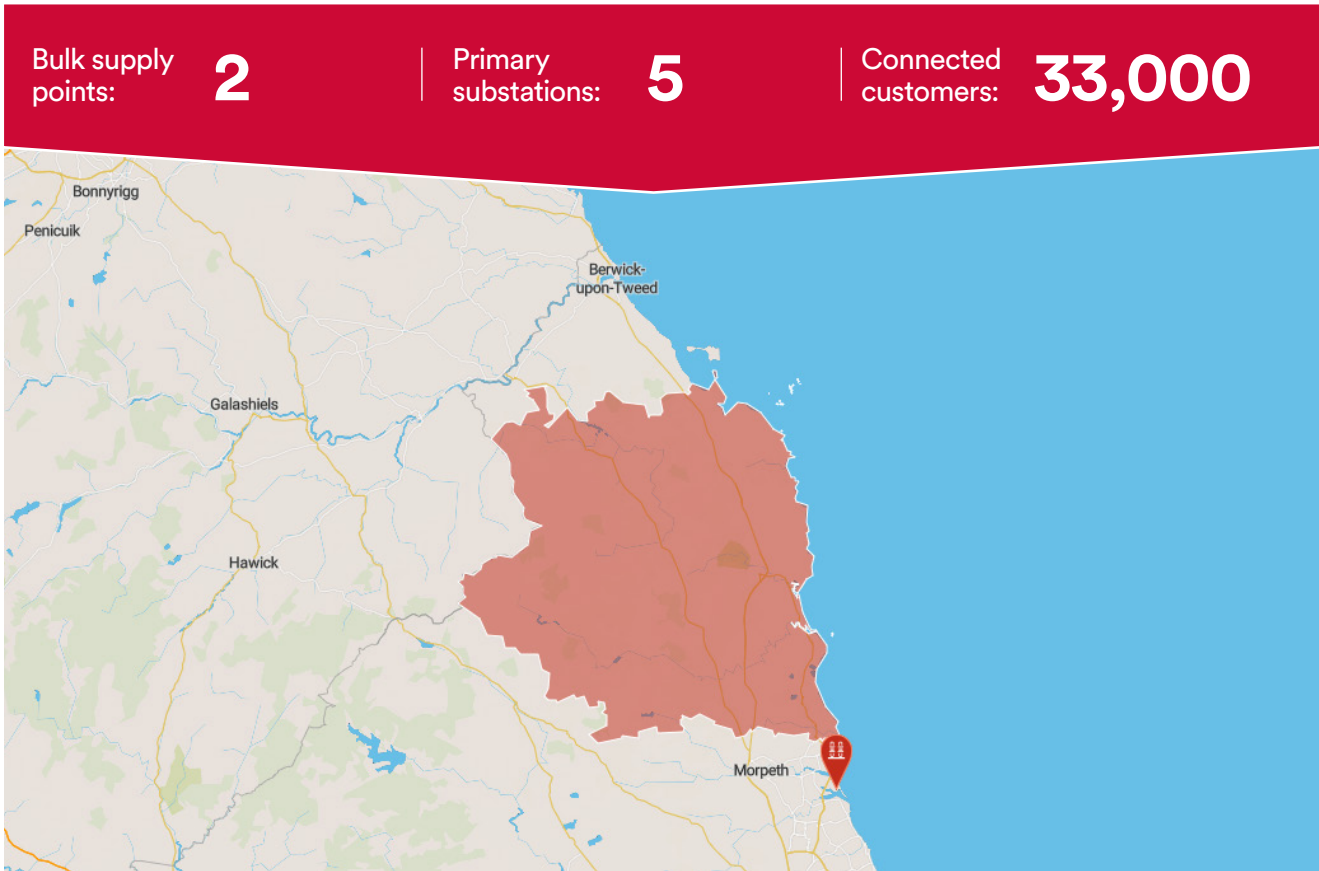
Upcoming flexibility requirements for future load driven capacity needs			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation										
No upcoming flexibility needs												

Blyth

275/132kV Grid Supply Point

Licence area
Northeast

Postcode
NE22 7BF



Overview

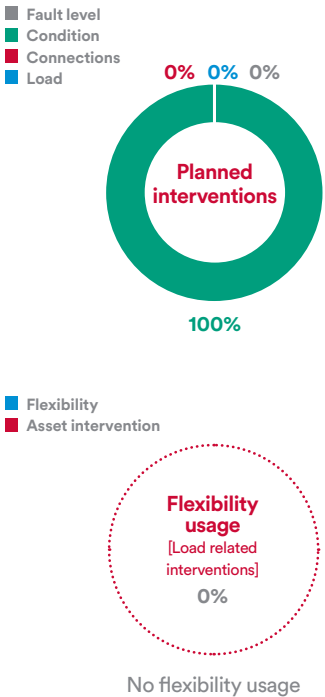
Blyth 275/132kV Grid Supply Point (GSP) is situated in Northern Powergrid's 'Northumberland, County Durham and Tyne & Wear' operational region of Northern England within our Northeast licence area. This GSP serves 33,000 customers through 2 bulk supply points (BSPs) and 5 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 50% of the BSPs and 80% of this GSP's primary substations in the next ten years. This is detailed in the 'Flexibility Services and new infrastructure needs' table.

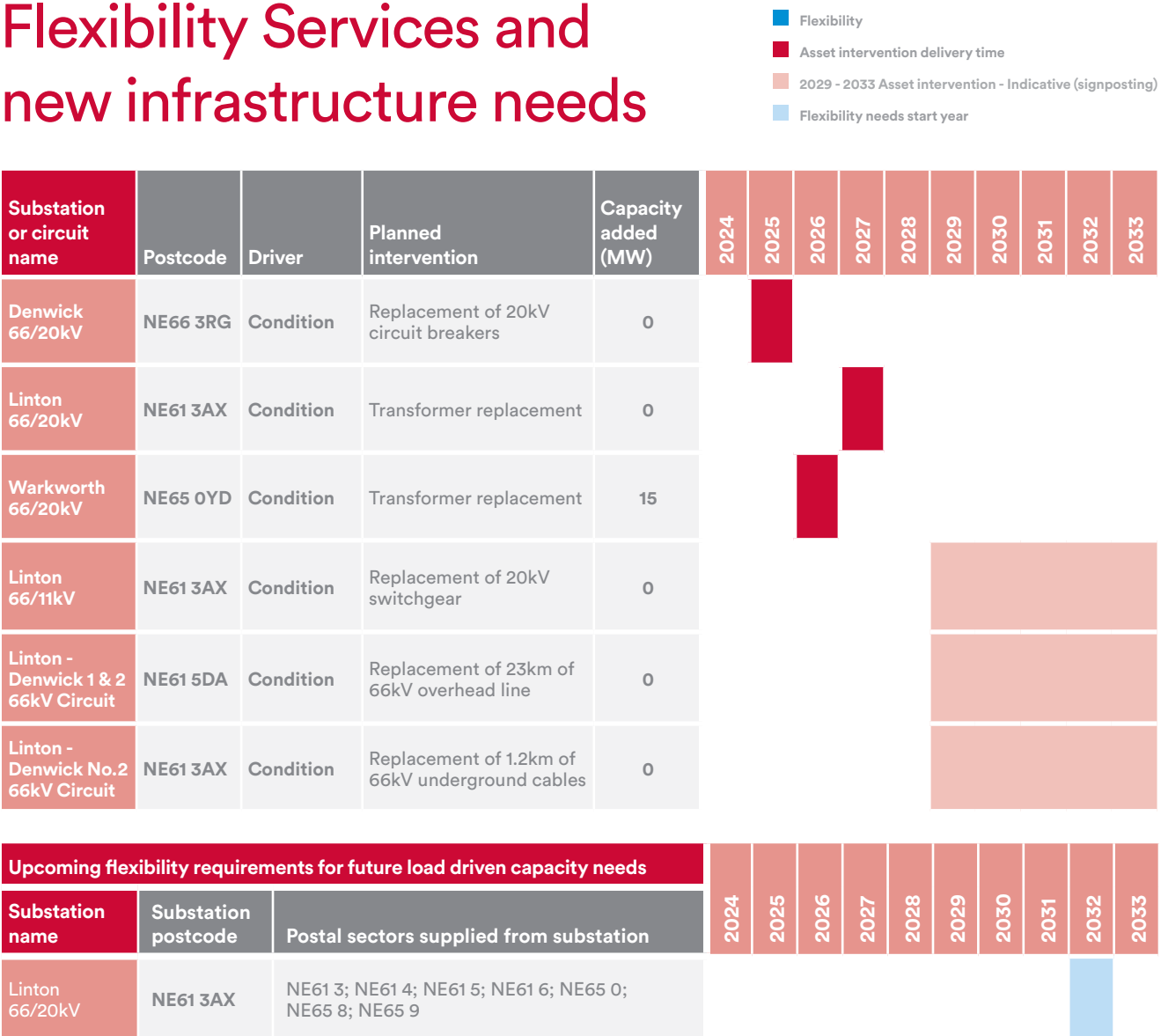
- The distribution of the various types of planned network interventions is illustrated in the 'planned interventions' pie chart.
- The 'flexibility usage' pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our 'flexibility first' approach. The use of flexibility is not applicable to any of the substations within 'The Flexibility Services and new infrastructure needs' table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 1 substation where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the 'Upcoming flexibility requirements for future load driven capacity needs' table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

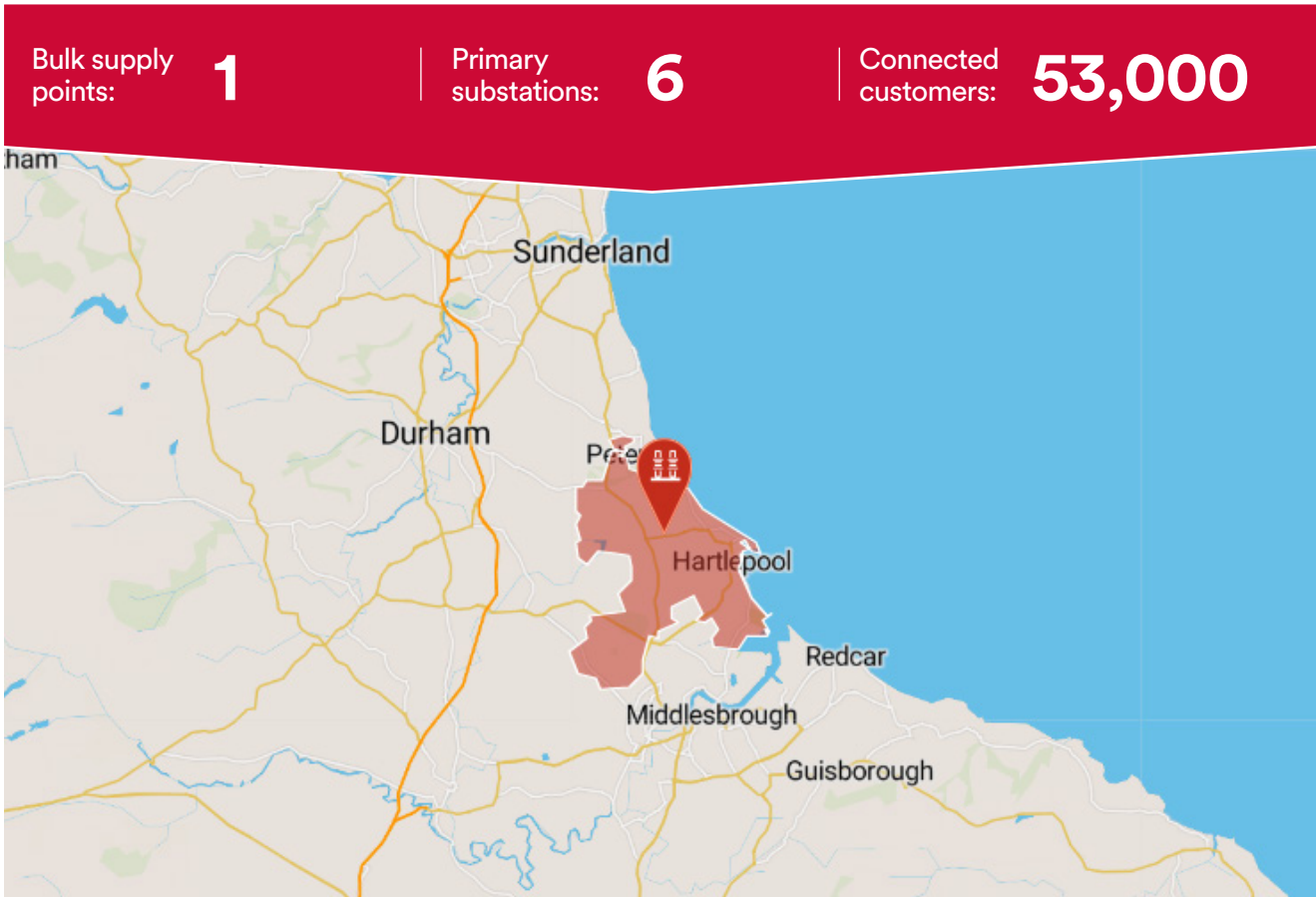


Hartmoor

275/66kV Grid Supply Point

Licence area
Northeast

Postcode
TS27 3BL

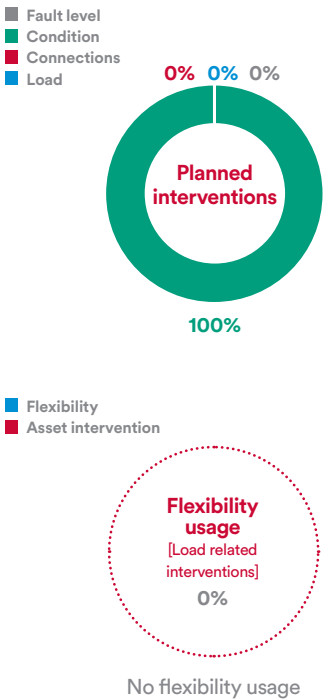


Overview

Hartmoor 275/66kV Grid Supply Point (GSP) is situated in Northern Powergrid's 'Teesside' operational region of Northern England within our Northeast licence area. This GSP serves 53,000 customers through 1 bulk supply point (BSP) and 6 primary substations.

Our network analysis has highlighted the necessity for network intervention works at none of the BSPs and 33% of this GSP's primary substations in the next ten years. This is detailed in the 'Flexibility Services and new infrastructure needs' table.

- The distribution of the various types of planned network interventions is illustrated in the 'planned interventions' pie chart.
- The 'flexibility usage' pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our 'flexibility first' approach. The use of flexibility is not applicable to any of the substations within 'The Flexibility Services and new infrastructure needs' table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

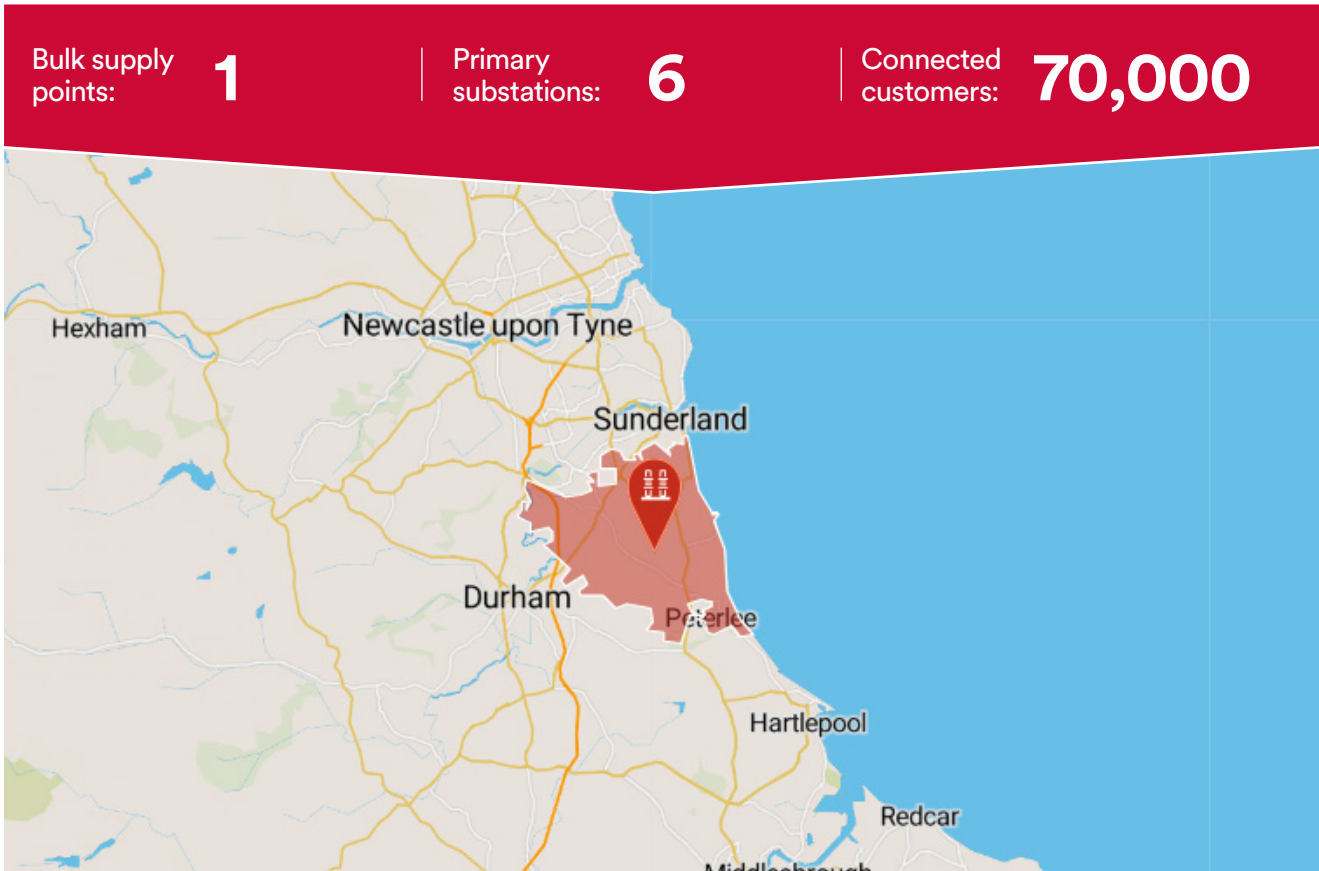
Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Hartmoor 66/20kV	TS27 3BL	Condition	Replacement of 66kV Transformer T2	0										
Hartmoor 66/20kV	TS27 3BL	Condition	Replacement of 66kV switchgear	0										
Peterlee West 66/11kV	DH6 2RA	Condition	Replacement of 66kV switchgear	0										
Upcoming flexibility requirements for future load driven capacity needs					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation												
No upcoming flexibility needs														

Hawthorn Pit Grid

275/66kV Grid Supply Point

Licence area
Northeast

Postcode
DH6 2TX



Overview

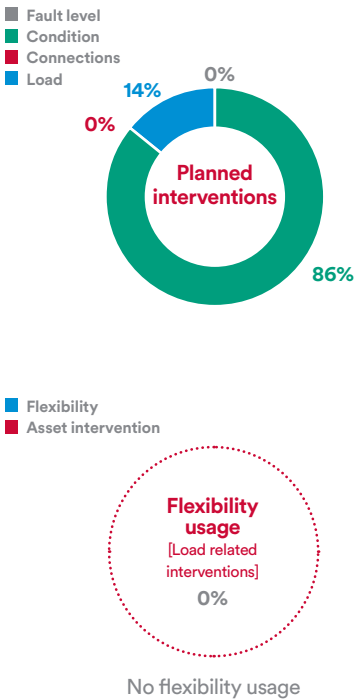
Hawthorn Pit Grid 275/66kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘Northumberland, County Durham and Tyne & Wear’ operational region of Northern England within our Northeast licence area. This GSP serves 70,000 customers through 1 bulk supply point (BSP) and 6 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 100% of the BSPs and 83% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 1 substation where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the ‘Upcoming flexibility requirements for future load driven capacity needs’ table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Hawthorn Pit 66/20kV	DH6 2RX	Condition	Replacement of 20kV switchgear	0.7										
Hawthorn Pit Grid 275/66kV	DH6 2TX	Condition	Replacement of 66kV circuit breakers	0										
Seaham 66/20kV	SR7 0PU	Load	Construction of new 66/20kV primary substation	30										
Stoney Cut 66/20kV	SR7 8RQ	Condition	Replacement of 20kV switchgear	0										
Tunstall 66/11kV	SR3 2NN	Condition	Replacement of 66kV circuit breaker	0										
Herrington Burn 66kV Switching Station	DH4 7AG	Condition	Replacement of 66kV switchgear	0										
Herrington Burn - Hawthorn Pit grid Teed 66kV circuit	DH4 7AG	Condition	Replacement of 0.6km of 66kV underground cable	0										

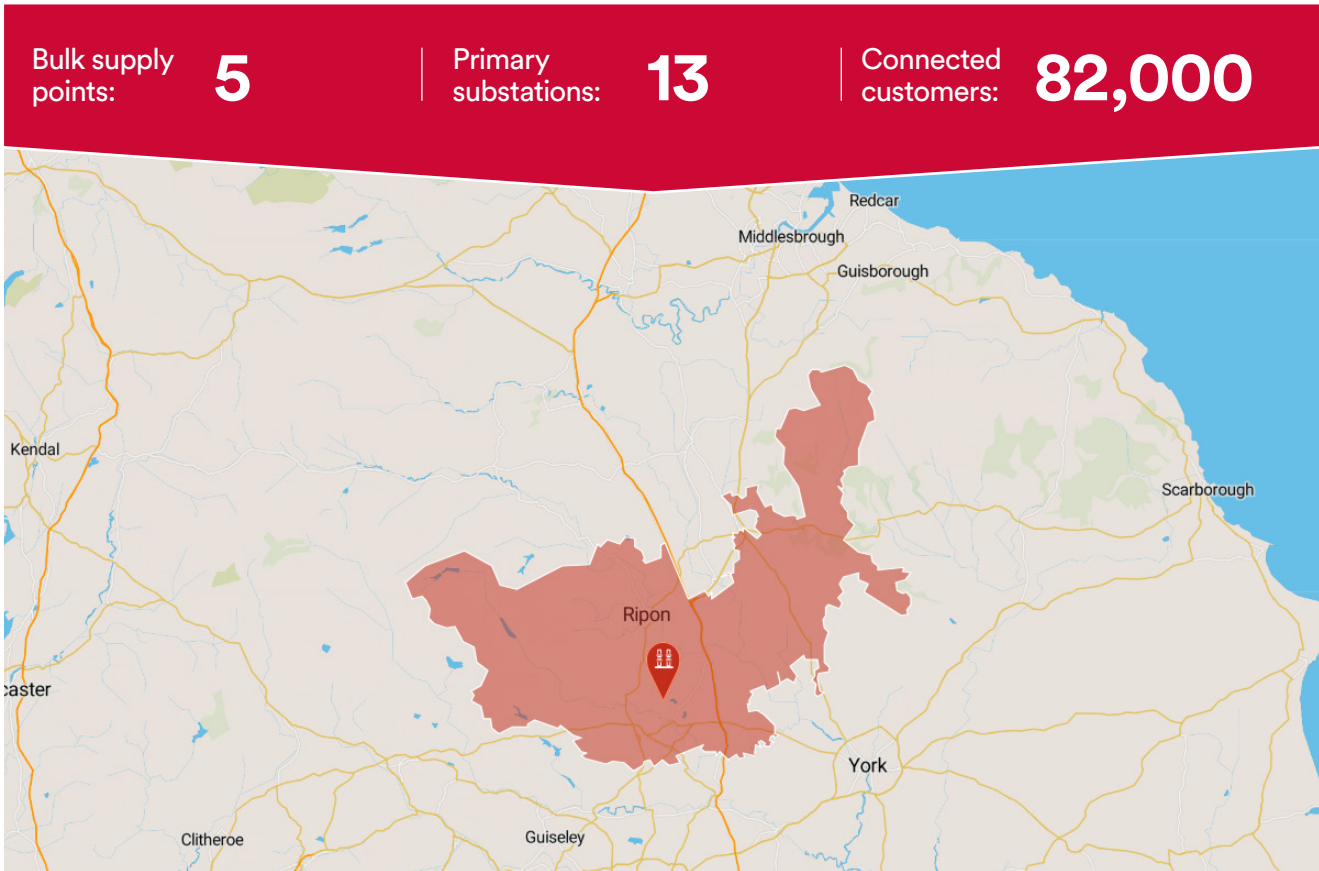
Upcoming flexibility requirements for future load driven capacity needs					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation												
Hawthorn Pit 66/20kV	SR7 9NX	DH4 4; DH5 0; DH5 8; DH5 9; DH6 1; DH6 2; DH6 3; SR2 0; SR3 2; SR7 0; SR7 7; SR7 8; SR7 9; SR8 3												

Knarborough

275/132kV Grid Supply Point

Licence area
Northeast

Postcode
HG5 9JQ



Overview

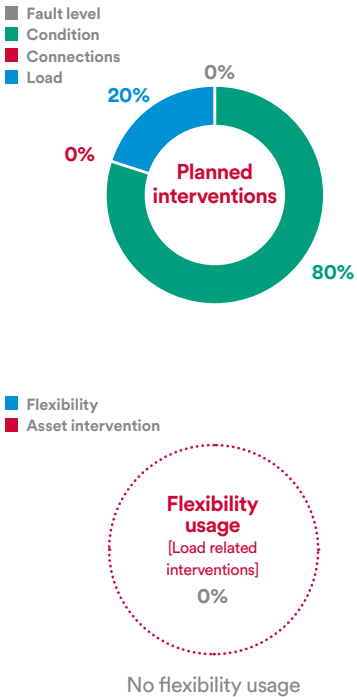
Knarborough 275/132kVGrid Supply Point (GSP) s situated in Northern Powergrid’s ‘North Yorkshire’ operational region of Northern England within our Northeast licence area. This GSP serves 82,000 customers through 5 bulk supply points (BSPs) and 13 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 40% of the BSPs and 31% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 2 substations where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the ‘Upcoming flexibility requirements for future load driven capacity needs’ table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Harrogate - Starbeck 1 & 2 33kV Circuit	HG1 2LA	Condition	Replacement of 9.1km of 33kV underground cable	0										
Oatlands 33/11kV	HG2 8BY	Condition	Replacement of 11kV circuit breakers	0										
Ripon 33/11kV	HG4 1RA	Load	Reinforcement	21.3										
Harrogate - Oatlands 1 & 2 33kV Circuit	HG1 2LA	Condition	Full station upgrade including transformers, switchboards and incoming circuits	0										
Wormald Green - Harrogate 1 & 2 132kV Circuit	HG3 3PS	Condition	Replacement of 8km of 132kV overhead line	0										

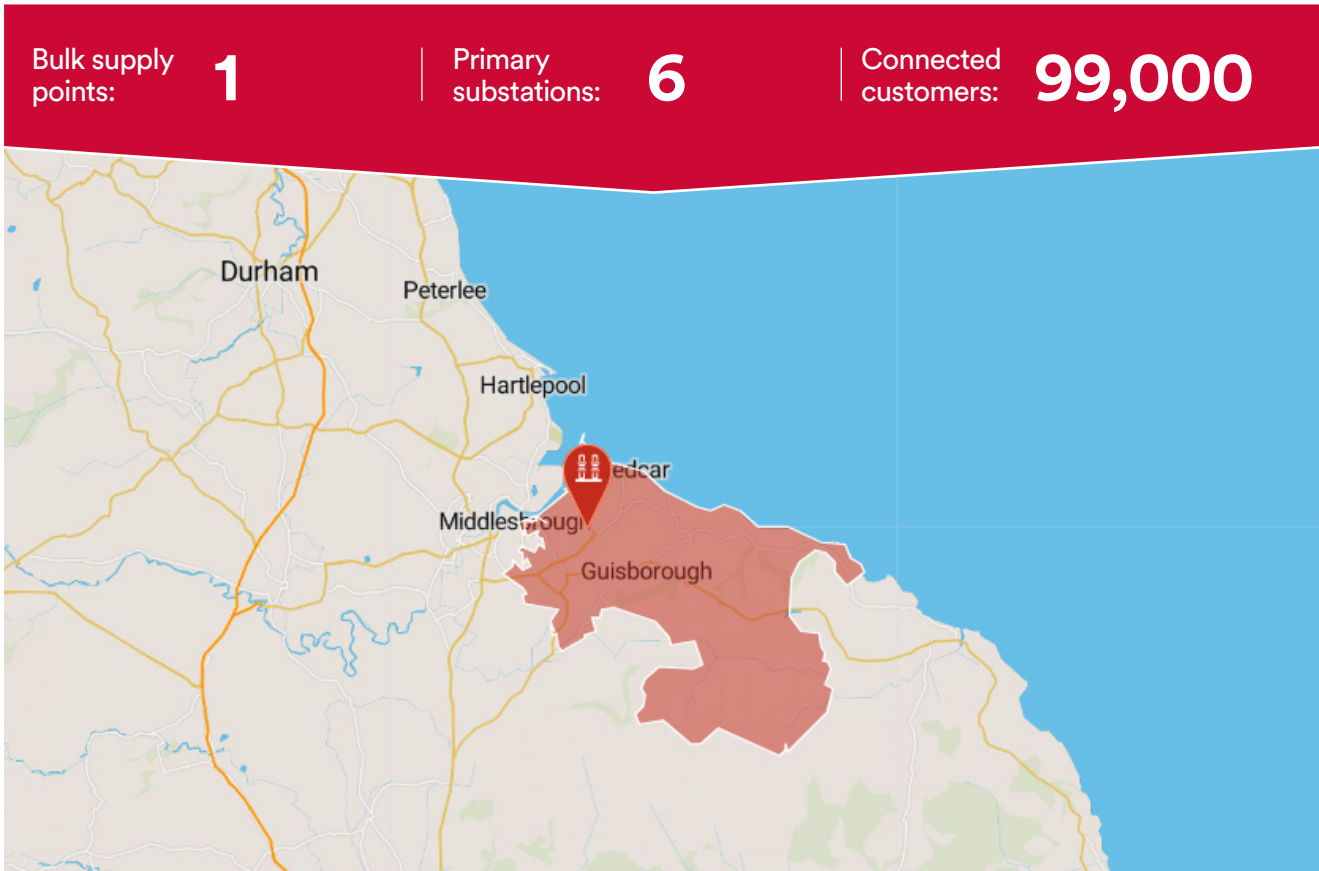
Upcoming flexibility requirements for future load driven capacity needs			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation										
Husthwaite 33/11kV	YO61 4PN	DL6 3; TS9 7; YO51 9; YO60 6; YO61 1; YO61 2; YO61 3; YO61 4; YO61 5; YO62 4; YO62 5; YO6 3; YO7 2; YO7 3										
Starbeck 33/11kV	HG2 7PT	HG1 3; HG1 4; HG2 7; HG2 8; HG3 1; HG3 3; HG5 0; HG5 8; HG5 9										

Lackenby

275/66kV Grid Supply Point

Licence area
Northeast

Postcode
TS6 7QR



Overview

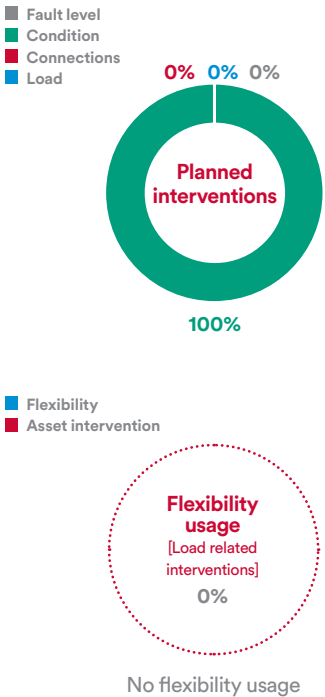
Lackenby 275/66kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘Teesside’ operational region of Northern England within our Northeast licence area. This GSP serves 99,000 customers through 1 bulk supply point (BSP) and 6 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 100% of the BSPs and 50% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 1 substation where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the ‘Upcoming flexibility requirements for future load driven capacity needs’ table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Lackenby - Guisborough Feeder 2 66kV Circuit	TS6 7QR	Condition	Replacement of 0.9km of 66kV underground cable	0										
Lackenby - Prissick 2 66kV Circuit	TS6 7QR	Condition	Replacement of 1km of 66kV underground cable	0										
Spencerbeck 66/11kV	TS3 8TE	Condition	Replacement of 66kV circuit breakers	0										
Guisborough 66/11kV	TS14 6GQ	Condition	Replacement of 66kV Transformer T1&T2	0										

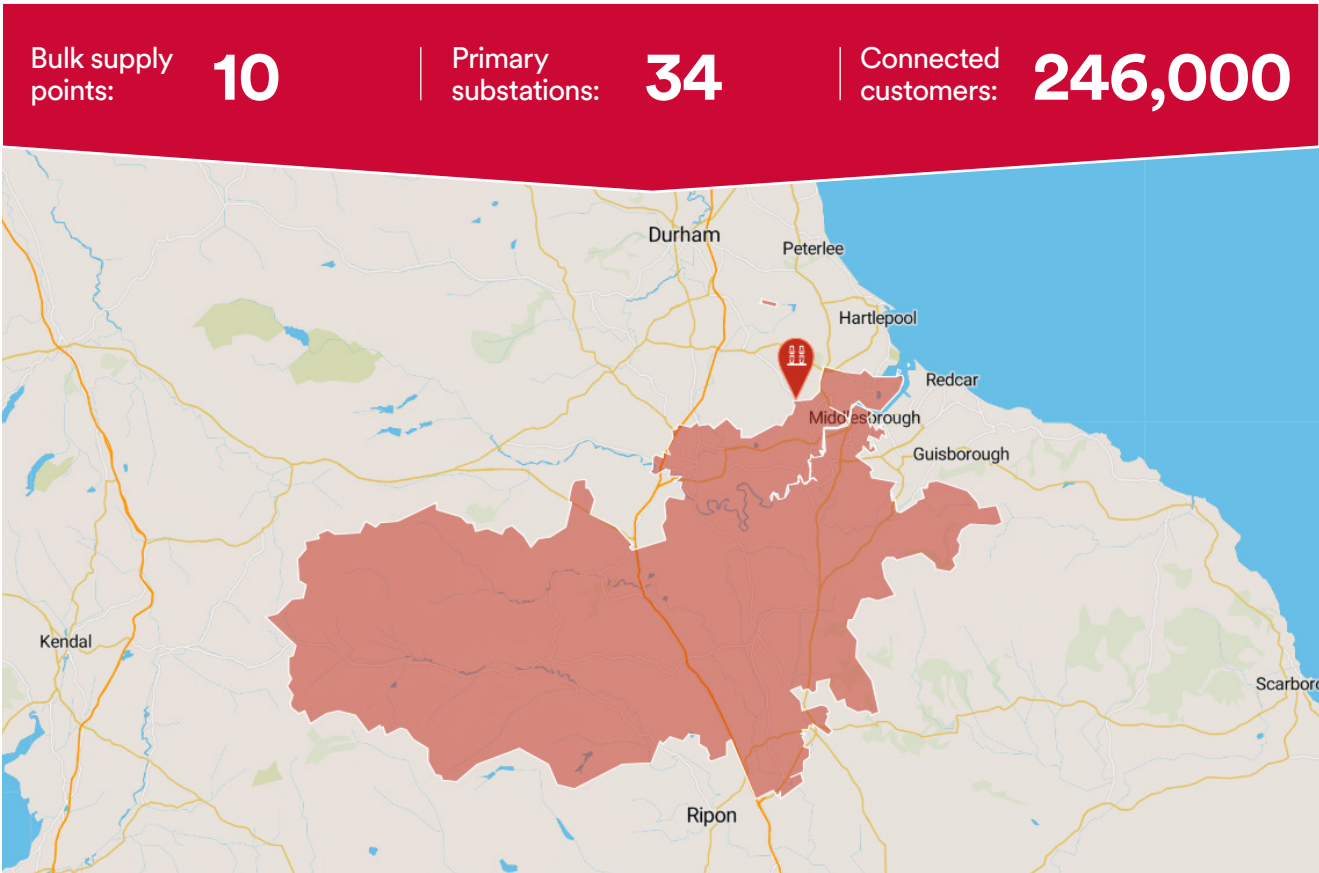
Upcoming flexibility requirements for future load driven capacity needs					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation												
Grangetown 66/11kV	TS6 7AS	TS10 4; TS10 5; TS1 1; TS11 8; TS14 6; TS3 6; TS6 0; TS6 6; TS6 7; TS6 8; TS6 9; TS7 0; TS9 6												

Norton

275/132kV Grid Supply Point

Licence area
Northeast

Postcode
TS21 1EG



Overview

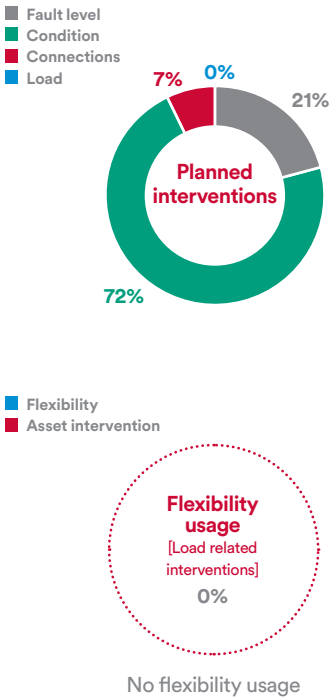
Norton 275/132kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘Teesside’ operational region of Northern England within our Northeast licence area. This GSP serves 246,000 customers through 10 bulk supply points (BSPs) and 34 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 30% of the BSPs and 32% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

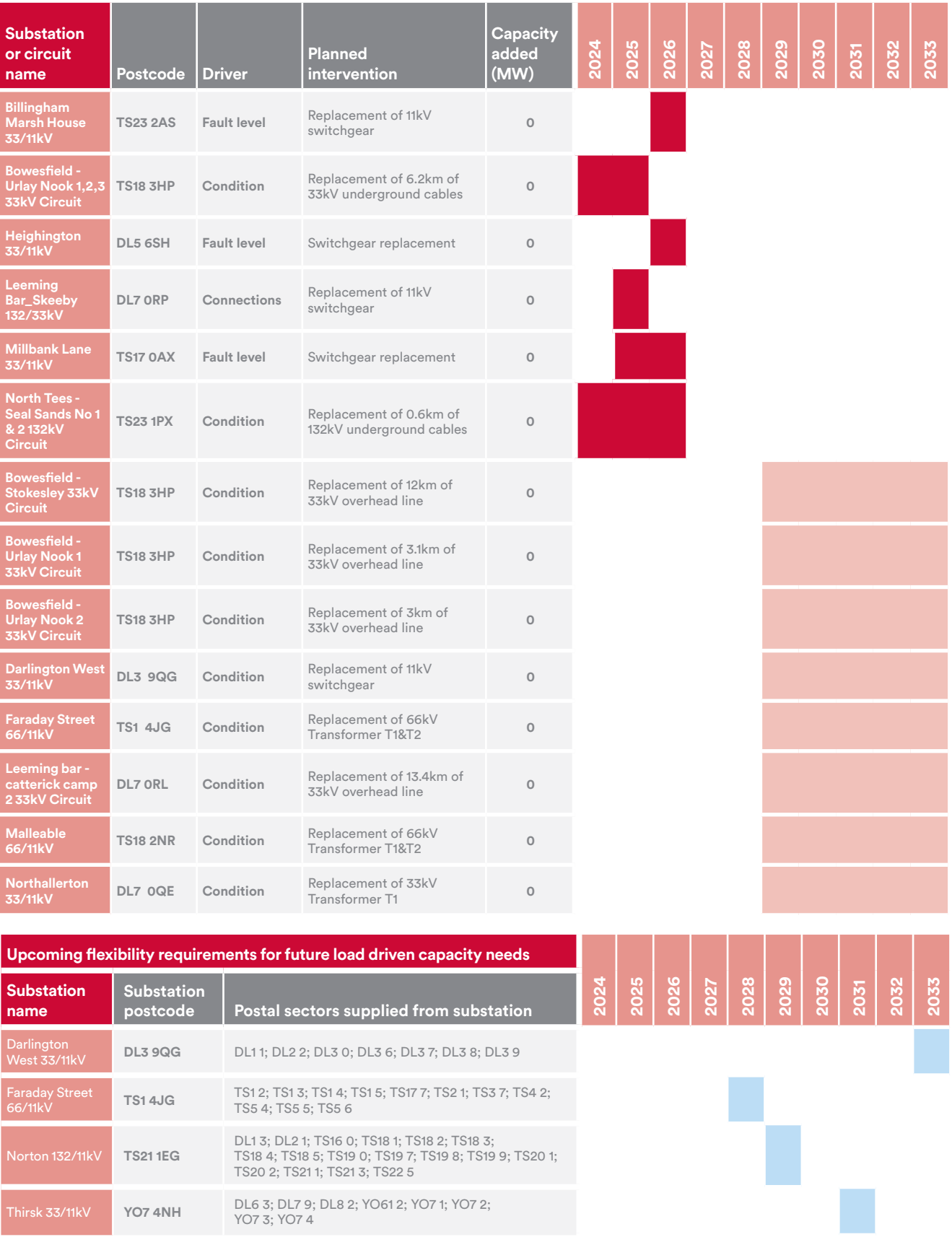
- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 4 substations where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the ‘Upcoming flexibility requirements for future load driven capacity needs’ table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

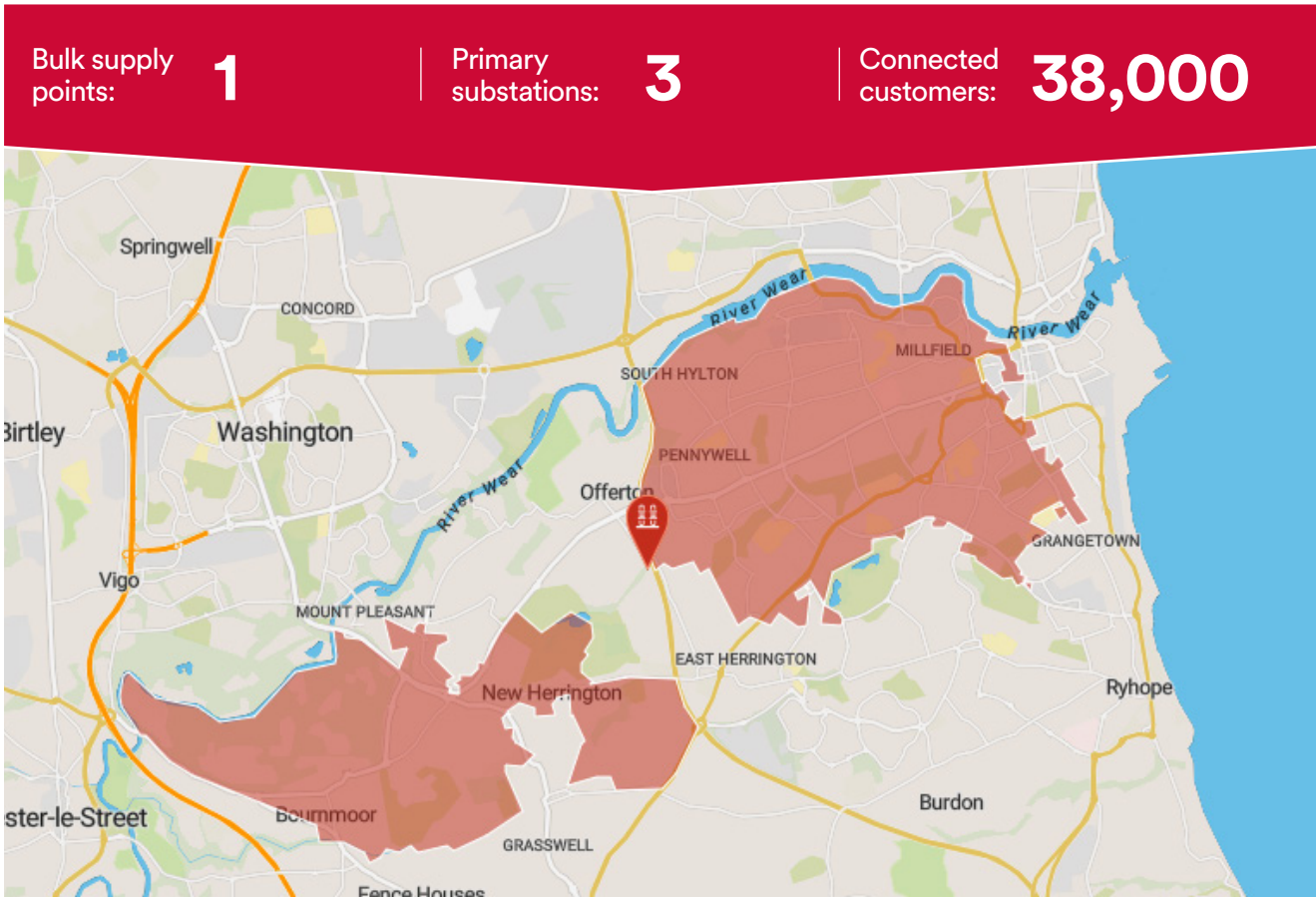


Offerton

275/33kV Grid Supply Point

Licence area
Northeast

Postcode
SR4 9NR

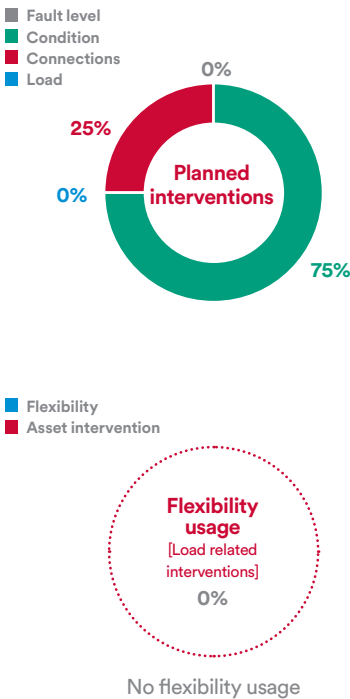


Overview

Offerton 275/33kV Grid Supply Point (GSP) is situated in Northern Powergrid's 'Northumberland, County Durham and Tyne & Wear' operational region of Northern England within our Northeast licence area. This GSP serves 38,000 customers through 1 bulk supply point (BSP) and 3 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 100% of the BSPs and 67% of this GSP's primary substations in the next ten years. This is detailed in the 'Flexibility Services and new infrastructure needs' table.

- The distribution of the various types of planned network interventions is illustrated in the 'planned interventions' pie chart.
- The 'flexibility usage' pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our 'flexibility first' approach. The use of flexibility is not applicable to any of the substations within 'The Flexibility Services and new infrastructure needs' table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

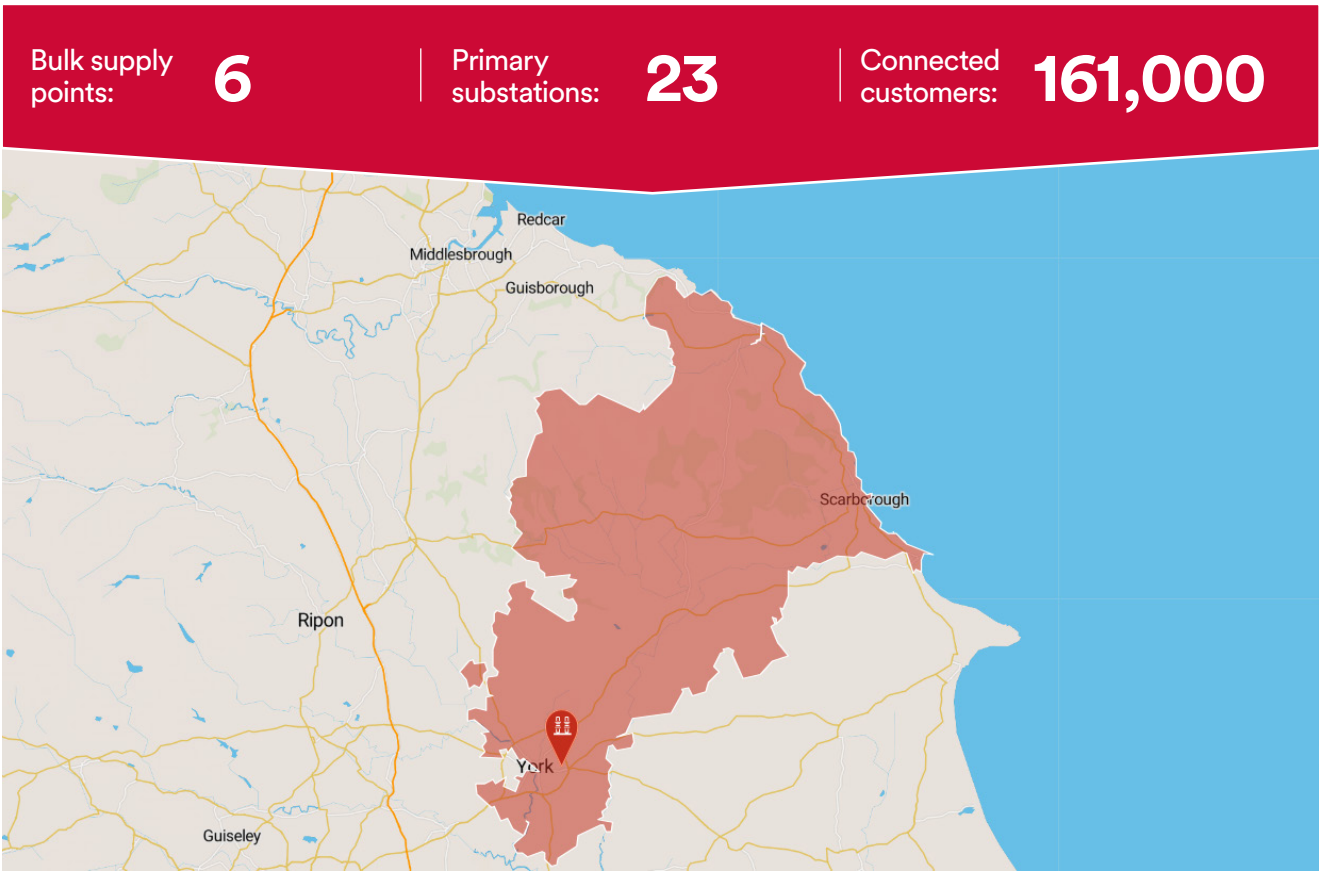
Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Offerton 275/33kV	SR4 9NR	Connections	Replacement of 33kV switchboard	0										
Mount Road 33/11kV	SR4 7LJ	Condition	Replacement of 33kV switchgear	0										
Pallion Trading 33/11kV	SR4 6SN	Condition	Replacement of 33kV Transformer T1	0										
Pallion Trading 33/11kV	SR4 6SN	Condition	Replacement of 11kV switchgear	0										
Upcoming flexibility requirements for future load driven capacity needs														
Substation name	Substation postcode	Postal sectors supplied from substation			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
No upcoming flexibility needs														

Osballdwick

400/132kV Grid Supply Point

Licence area
Northeast

Postcode
YO10 3WA



Overview

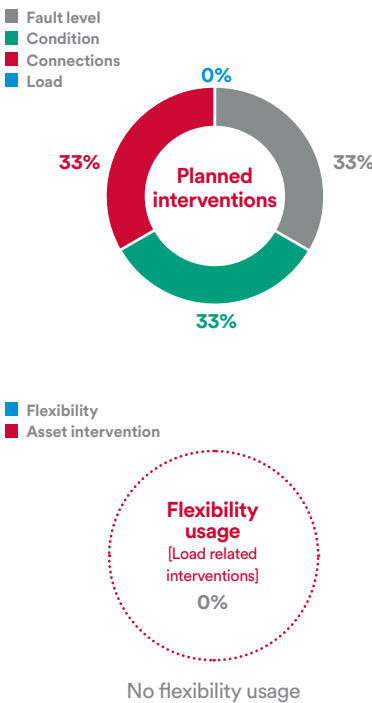
Osballdwick 400/132kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘North Yorkshire’ operational region of Northern England within our Northeast licence area. This GSP serves 161,000 customers through 6 bulk supply points (BSPs) and 23 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 33% of the BSPs and 4% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 1 substation where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the ‘Upcoming flexibility requirements for future load driven capacity needs’ table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Eastfield 33/11kV	YO11 3NF	Fault level	Switchgear replacement	0										
Osballdwick 400/132kV	YO10 3WA	Connections	Creation of new 132kV GIS compound	0										
Scarborough Grid - North Street 2 33kV Circuit	YO11 2YH	Condition	Replacement of 2.4km of 33kV underground cable	0										

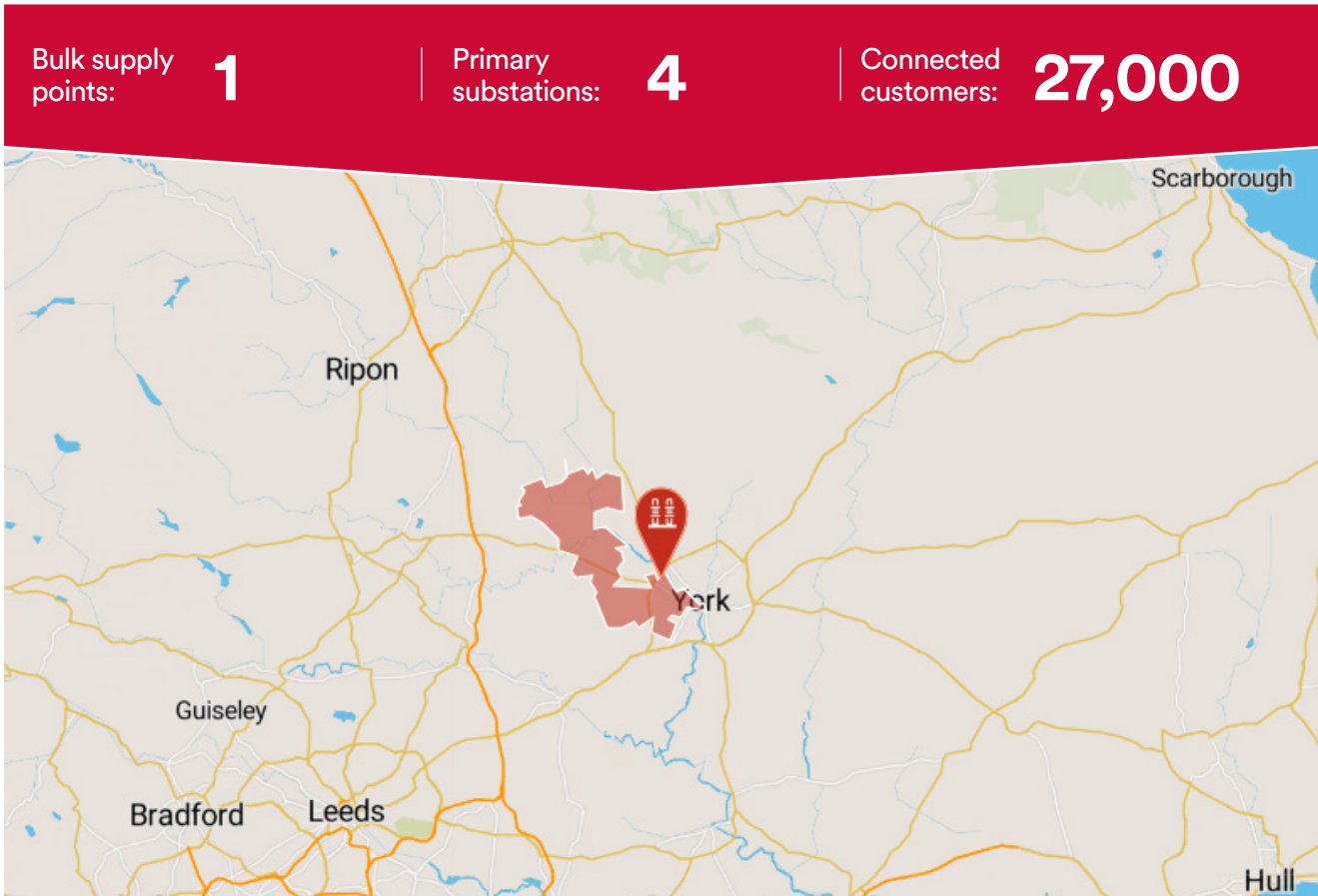
Upcoming flexibility requirements for future load driven capacity needs					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation												
Haxby Road T2 T3 33/11kV	YO31 8FZ	YO30 6; YO30 7; YO31 8; YO31 9; YO32 2; YO32 3; YO32 4; YO32 9												

Poppleton

275/33kV Grid Supply Point

Licence area
Northeast

Postcode
YO26 6GB

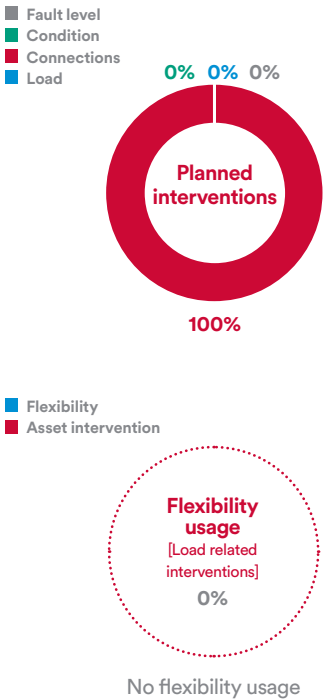


Overview

Poppleton 275/33kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘North Yorkshire’ operational region of Northern England within our Northeast licence area. This GSP serves 27,000 customers through 1 bulk supply point (BSP) and 4 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 100% of the BSPs and none of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Poppleton 275/33kV	YO26 6GB	Connections	Replacement of 33kV switchboard	0										

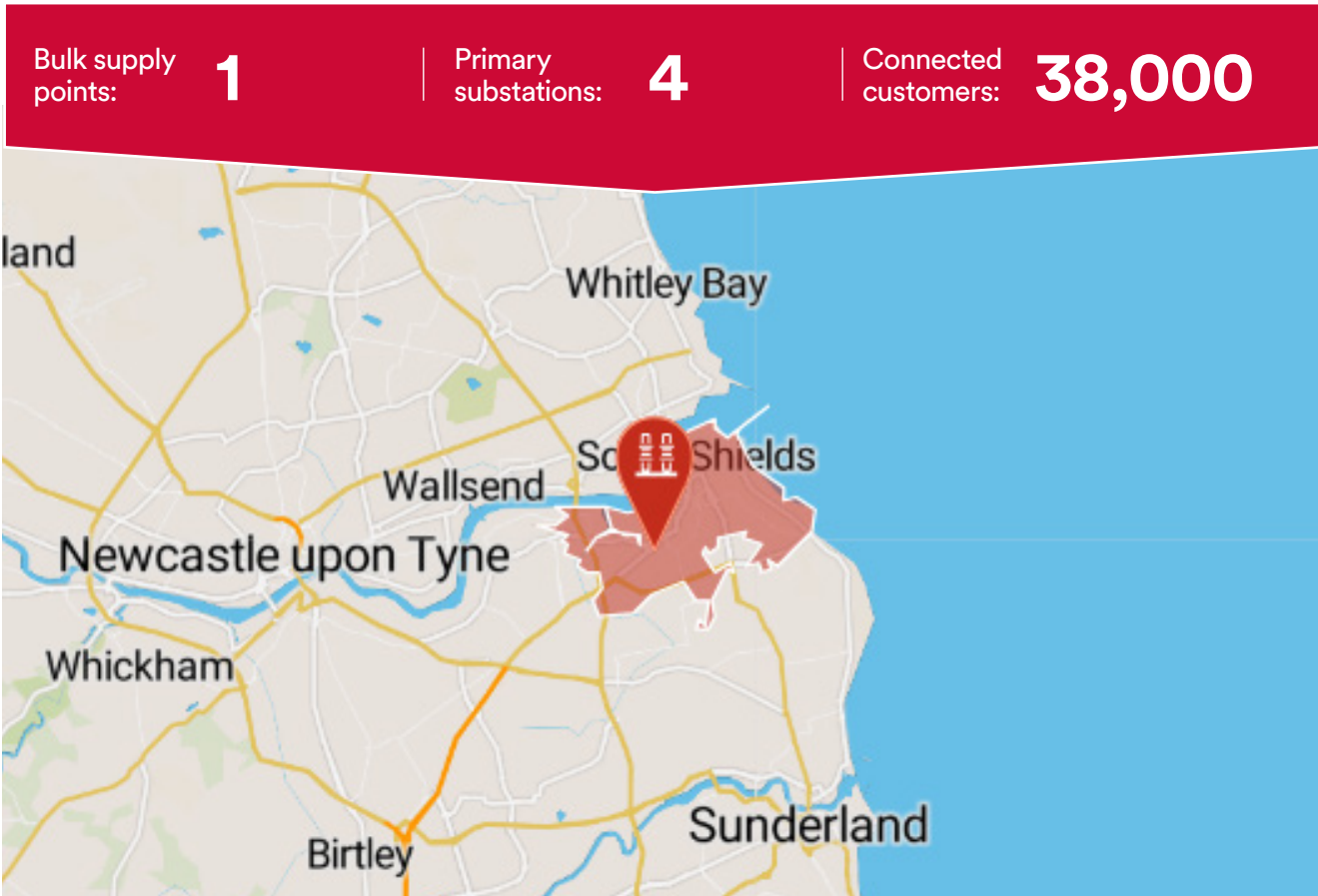
Upcoming flexibility requirements for future load driven capacity needs					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation												
No upcoming flexibility needs														

South Shields

275/33kV Grid Supply Point

Licence area
Northeast

Postcode
NE34 9BT

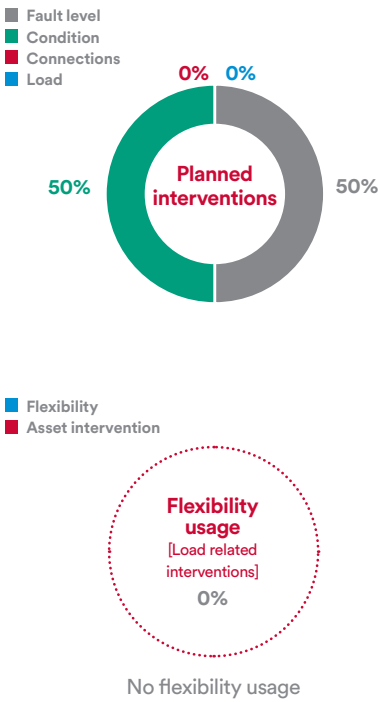


Overview

South Shields 275/33kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘Northumberland, County Durham and Tyne & Wear’ operational region of Northern England within our Northeast licence area. This GSP serves 38,000 customers through 1 bulk supply point (BSP) and 4 primary substations.

Our network analysis has highlighted the necessity for network intervention works at none of the BSPs and 25% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Garwood Street 33/11kV	NE33 5AG	Fault level	Replacement of switchgear	0										
Karrow 33/11kV	NE32 5LD	Condition	Replacement of 11kV switchgear	0										

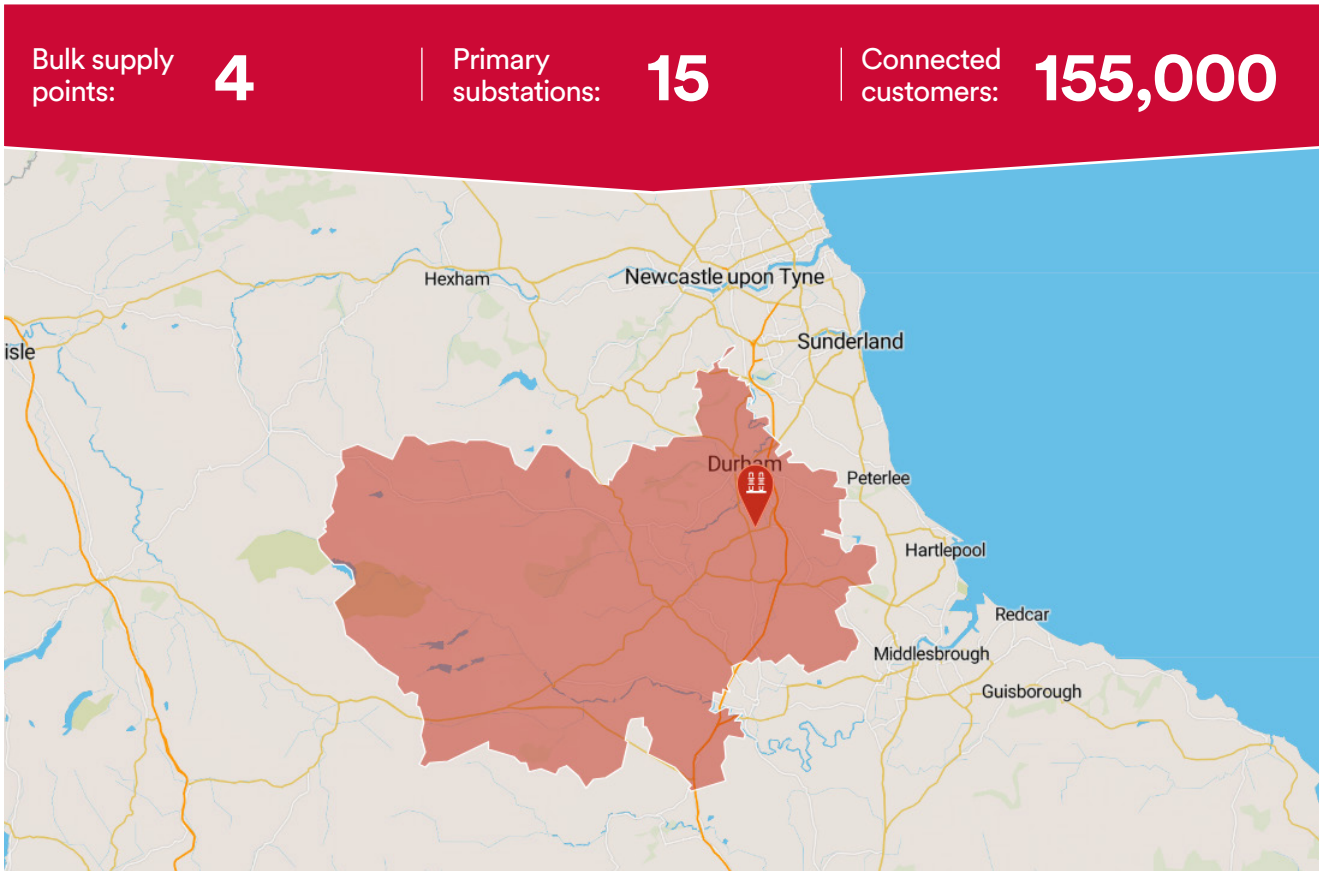
Upcoming flexibility requirements for future load driven capacity needs					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation			No upcoming flexibility needs									

Spennymoor

275/132kV Grid Supply Point

Licence area
Northeast

Postcode
DH6 5JY



Overview

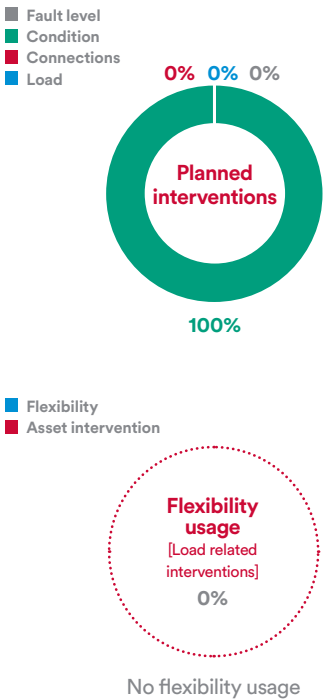
Spennymoor 275/132kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘Northumberland, County Durham and Tyne & Wear’ operational region of Northern England within our Northeast licence area. This GSP serves 155,000 customers through 4 bulk supply points (BSPs) and 15 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 100% of the BSPs and 20% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 1 substation where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the ‘Upcoming flexibility requirements for future load driven capacity needs’ table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Belmont 66/11kV	DH1 2HN	Condition	Replacement of 66kV circuit breakers	0										
Fishburn 66/20kV	TS29 6JN	Condition	Asset replacement	0										
Belmont - Spennymoor 66kV Circuit	DH1 2HL	Condition	Replacement of 1.1km of 66kV underground cable	0										
Durham East 66/11kV	DH1 5SU	Condition	Replacement of 11kV switchgear	0										
Fylands Bridge 66/11kV	DL14 9TA	Condition	Replacement of 20kV switchgear	0										
Potter House - Belmont 1 Teed 66kV Circuit	DH1 5FF	Condition	Replacement of 1.9km of 66kV overhead line	0										
Potter House - Belmont 2 Teed 66kV Circuit	DH1 5FF	Condition	Replacement of 1.8km of 66kV overhead line	0										
Potter House - High Flatts 66kV Circuit	DH1 5FF	Condition	Replacement of 12.4km of 66kV overhead line	0										
Tee To High Flatts 66kV Circuit	DH2 2LR	Condition	Replacement of 7.7km of 66kV overhead line	0										
Toronto - Eastgate Cement 2 (Part Dual Circuit) 66kV Circuit	DL14 7RJ	Condition	Replacement of 17.1km of 66kV overhead line	0										
Toronto - Eastgate Cement 2 66kV Circuit	DL14 7RJ	Condition	Replacement of 12.3km of 66kV overhead line	0										

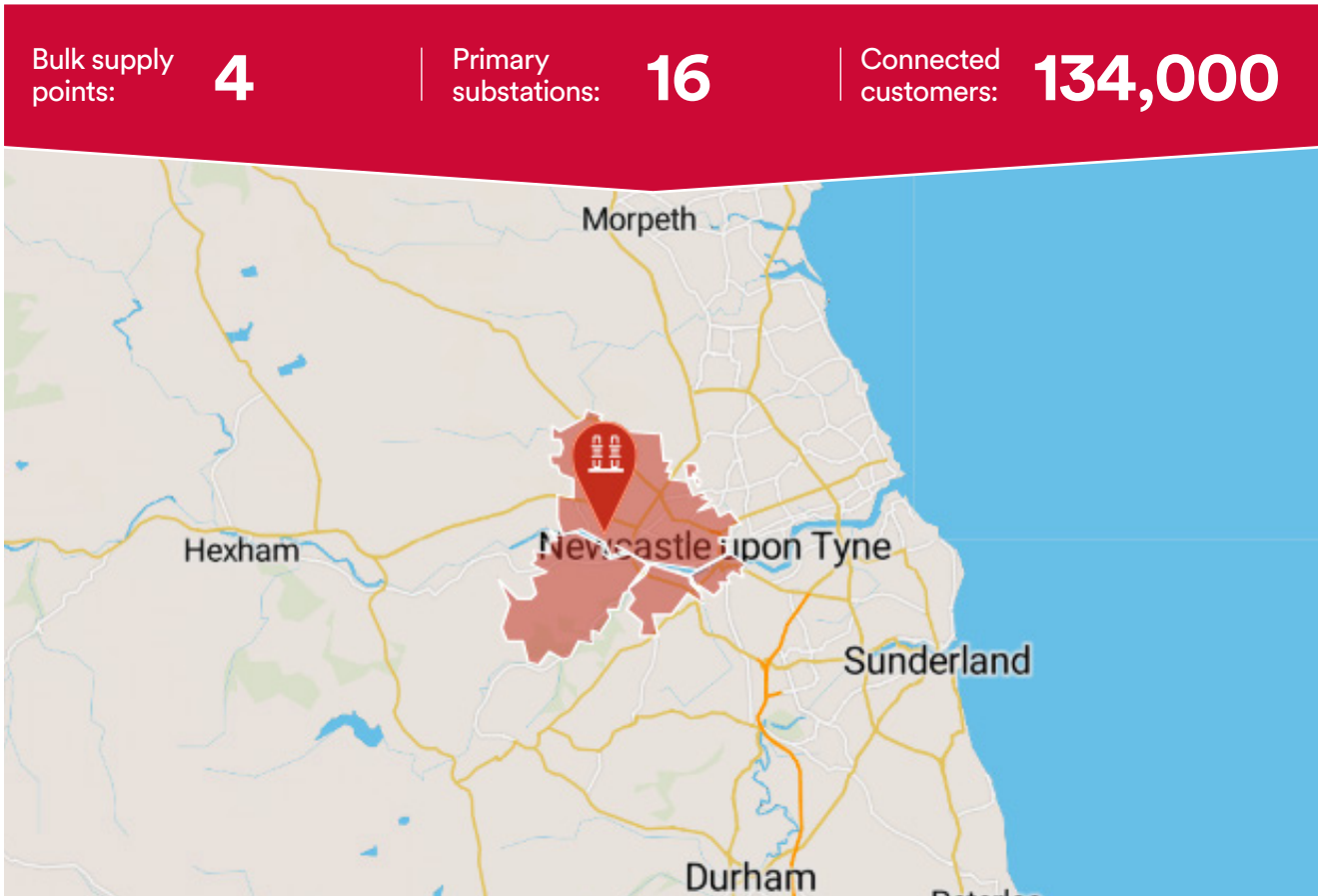
Upcoming flexibility requirements for future load driven capacity needs			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation										
Spennymoor 66/20kV	DH6 5JX	DH1 2; DH1 3; DH2 3; DH6 4; DH6 5; DH7 8; DL14 1; DL14 7; DL14 8; DL16 6; DL16 7; DL17 0; DL17 8; DL17 9; DL4 2										

Stella North

275/132kV Grid Supply Point

Licence area
Northeast

Postcode
NE15 8QF

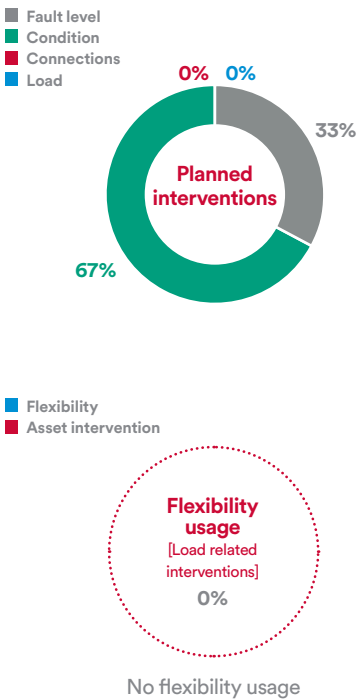


Overview

Stella North 275/132kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘Northumberland, County Durham and Tyne & Wear’ operational region of Northern England within our Northeast licence area. This GSP serves 134,000 customers through 4 bulk supply points (BSPs) and 16 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 25% of the BSPs and 13% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

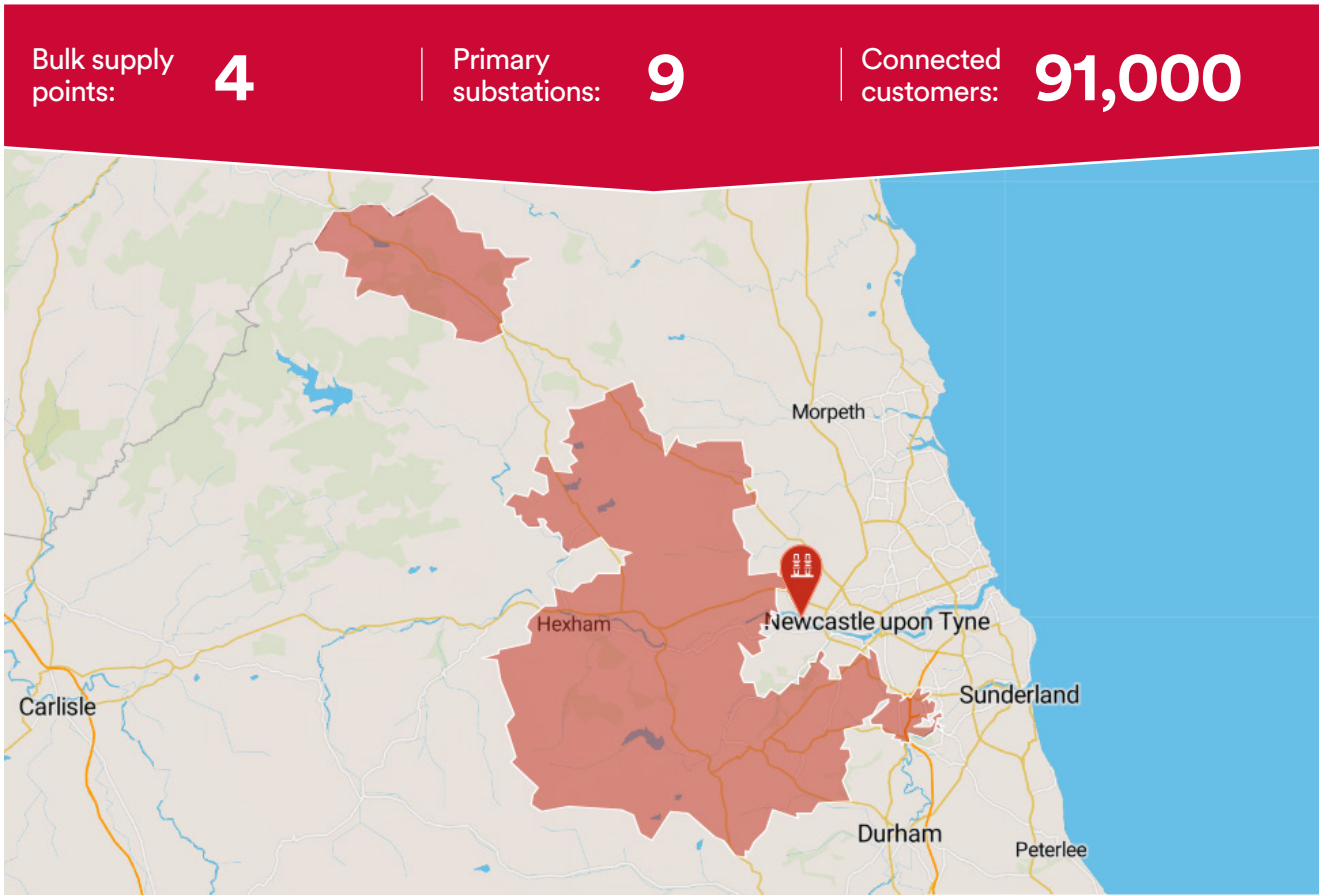
Substation or circuit name					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	Postcode	Driver	Planned intervention	Capacity added (MW)										
Bensham 66/11kV	NE8 2XY	Fault level	Replace 11kV switchboard	0										
Dunston 66/20kV	NE11 9DH	Condition	Replace 20kV switchgear in a new switchroom	0										
Dunston - Ravensworth 2 Teed 66kV circuit	NE11 9DH	Condition	Replacement of 8.1km of 66kV overhead line	0										
Upcoming flexibility requirements for future load driven capacity needs														
Substation name	Substation postcode	Postal sectors supplied from substation			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
No upcoming flexibility needs														

Stella South

275/132kV Grid Supply Point

Licence area
Northeast

Postcode
NE21 4FF

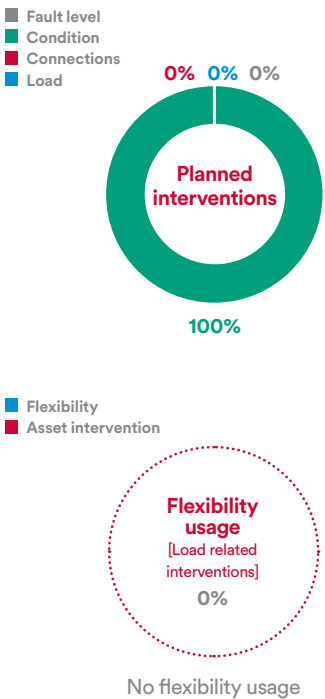


Overview

Stella South 275/132kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘Northumberland, County Durham and Tyne & Wear’ operational region of Northern England within our Northeast licence area. This GSP serves 91,000 customers through 4 bulk supply points (BSPs) and 9 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 25% of the BSPs and 33% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

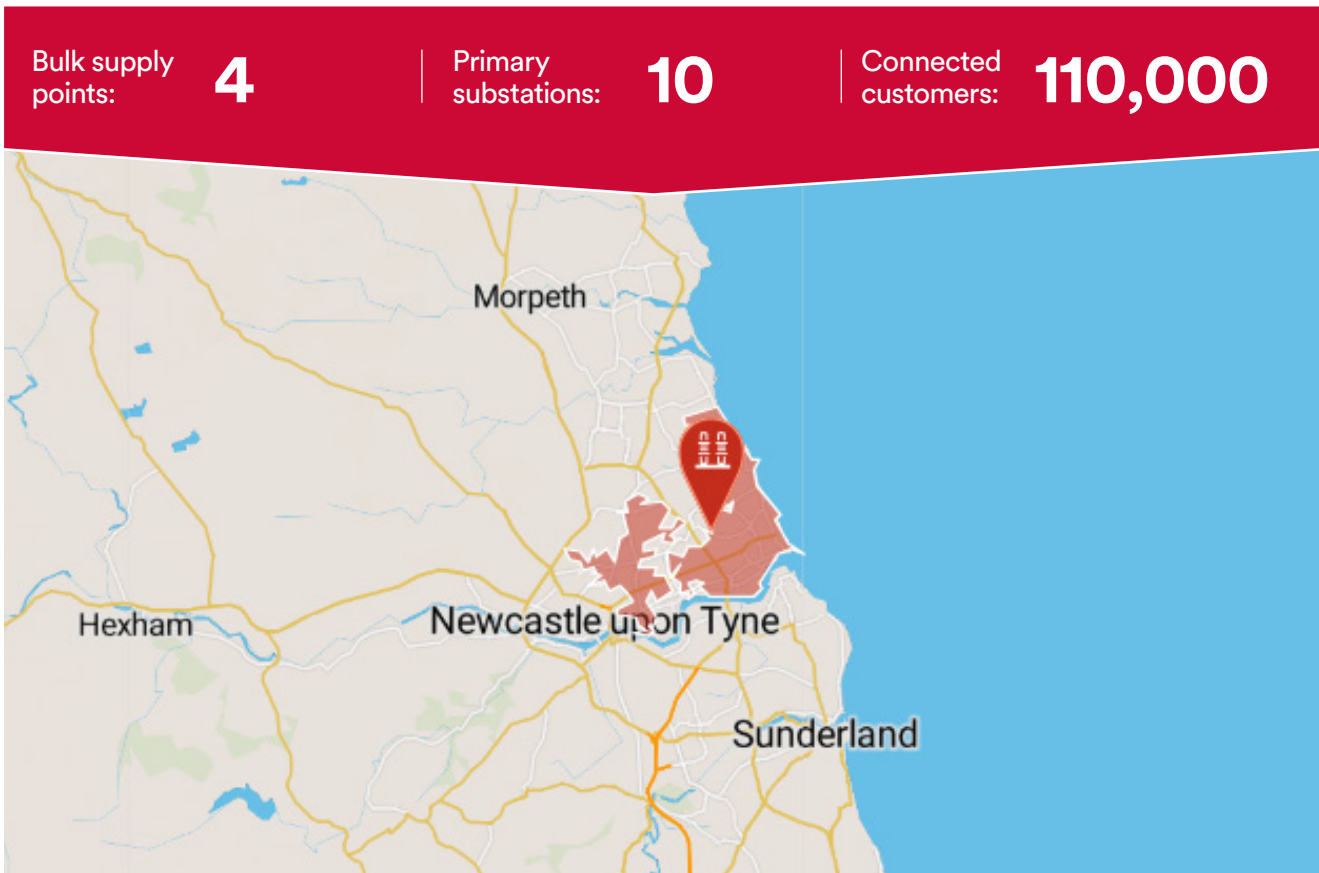
Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Annfield 66/20kV	DH9 7XW	Condition	Asset replacement	2										
Coalburns 132/66kV	NE40 4JP	Condition	Asset replacement	0										
West Wylam 66/20kV	NE42 5EX	Condition	Replace 20kV switchgear in a new switchroom	0										
Annfield 66/11kV	DH9 7XW	Condition	Replacement of 20kV switchgear	0										
Birtley Grove 66/11kV	DH3 1JH	Condition	Replacement of 11kV switchgear	0										
Team Valley 66/20kV	NE11 0SX	Condition	Replacement of 20kV switchgear	0										
Upcoming flexibility requirements for future load driven capacity needs														
Substation name	Substation postcode	Postal sectors supplied from substation			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
No upcoming flexibility needs														

Tynemouth

275/132kV Grid Supply Point

Licence area
Northeast

Postcode
NE27 0QG



Overview

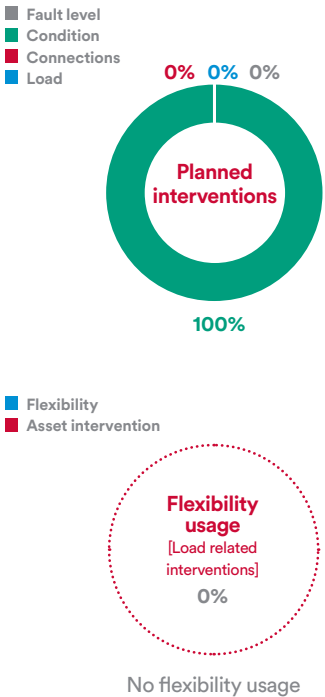
Tynemouth 275/132kV Grid Supply Point (GSP) is situated in Northern Powergrid's 'Northumberland, County Durham and Tyne & Wear' operational region of Northern England within our Northeast licence area. This GSP serves 110,000 customers through 4 bulk supply points (BSPs) and 10 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 75% of the BSPs and 30% of this GSP's primary substations in the next ten years. This is detailed in the 'Flexibility Services and new infrastructure needs' table.

- The distribution of the various types of planned network interventions is illustrated in the 'planned interventions' pie chart.
- The 'flexibility usage' pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our 'flexibility first' approach. The use of flexibility is not applicable to any of the substations within 'The Flexibility Services and new infrastructure needs' table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 1 substation where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the 'Upcoming flexibility requirements for future load driven capacity needs' table.

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Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Gosforth Metro 1 33kV Circuit	NE3 1XL	Condition	Replacement of 0.1km of 33kV underground cable	0										
Howdon 33/11kV	NE28 0JX	Condition	Replace 11kV switchgear in a new switchroom	0										
Tee to Fossway 66kV Circuit	NE6 4AN	Condition	Replacement of 2.1km of 66kV underground cable	0										
Killingworth 33/11kV	NE12 6QQ	Condition	Replacement of 33kV Transformer T1&T2	0										
Pandon - Gosforth 1 & 2 33kV circuit	NE2 1XE	Condition	Replacement of 7.1km of 33kV underground cable	0										

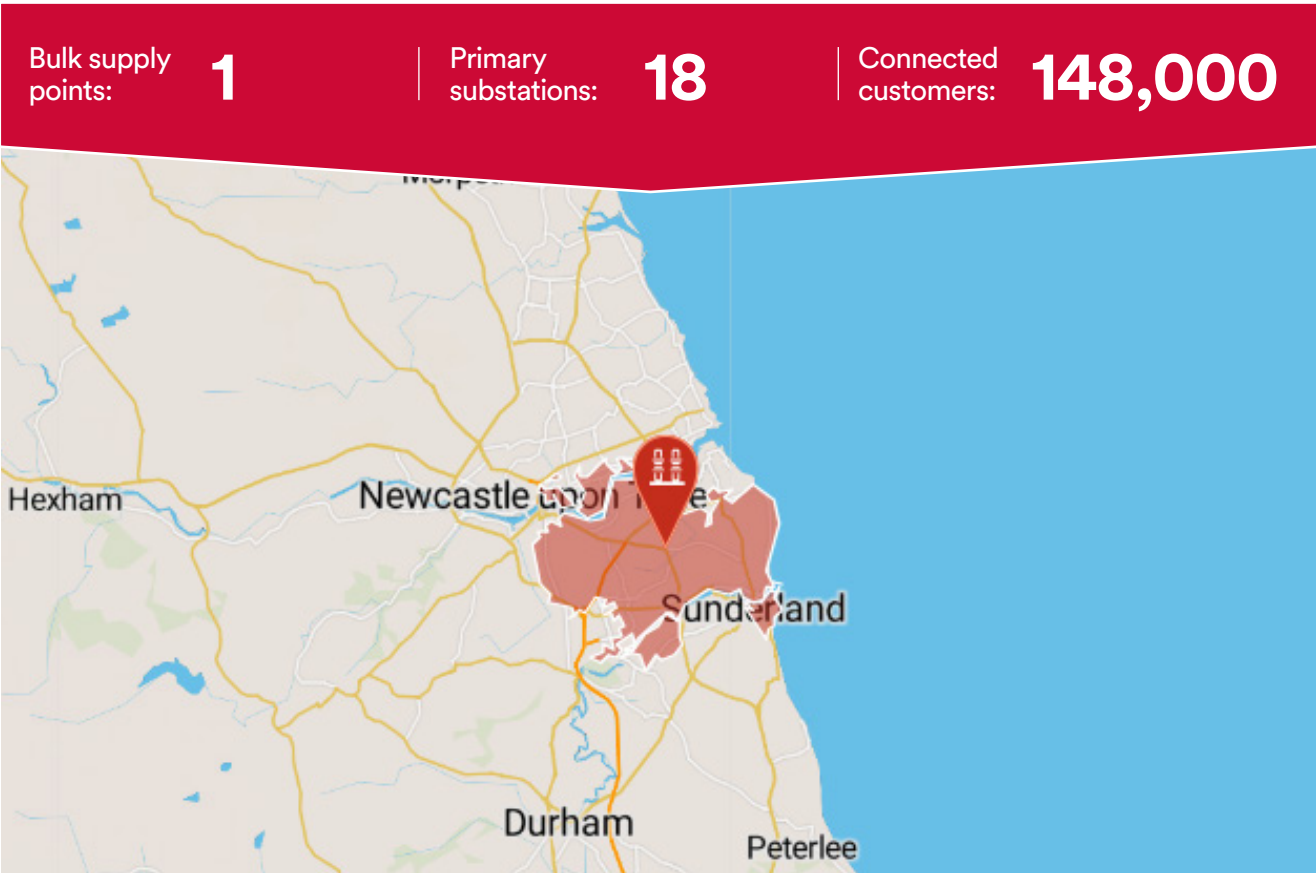
Upcoming flexibility requirements for future load driven capacity needs					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation												
Monkseaton 33/11kV	NE25 9AF	NE25 0; NE25 8; NE25 9; NE26 1; NE26 2; NE26 3; NE26 4; NE27 0; NE29 8												

West Boldon

275/66kV Grid Supply Point

Licence area
Northeast

Postcode
NE36 0BG



Overview

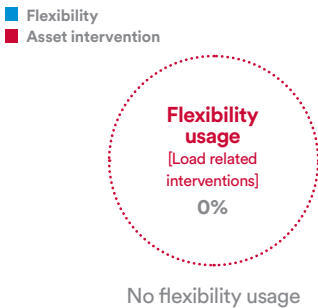
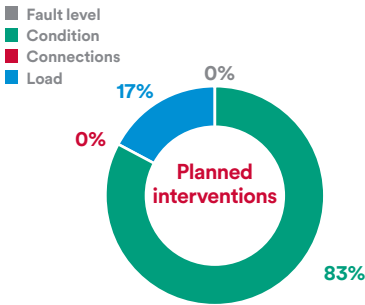
West Boldon 275/66kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘Northumberland, County Durham and Tyne & Wear’ operational region of Northern England within our Northeast licence area. This GSP serves 148,000 customers through 1 bulk supply point (BSP) and 18 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 100% of the BSPs and 39% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 1 substation where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the ‘Upcoming flexibility requirements for future load driven capacity needs’ table.

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Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Hebburn 66/5.75kV	NE31 1BJ	Load	Network rationalisation	15.4										
High Barmston 66/11kV	NE38 8TE	Condition	Asset replacement	19.9										
Leam Central - Hebburn West 66kV Circuit	NE10 8NQ	Condition	Replacement of 1.3km of 66kV underground cable	0										
Temple Park 66/11kV	NE34 8TG	Condition	Replacement of 66kV circuit breaker	0										
Wardley 66/5.75kV	NE31 1UF	Load	Network rationalisation	15.4										
Boldon Downhill 66/20kV	NE36 0AS	Condition	Replacement of 20kV switchgear	0										
Carr Hill - West Boldon 1 & 2 66kV circuit	NE10 9SY	Condition	Replacement of 7km of 66kV overhead line	0										
Carr Hill 66/11kV	NE10 9SY	Condition	Replacement of 11kV switchgear	0										
Hebburn - Benton Square Teed 66kV circuit	NE31 1BD	Condition	Replacement of 1.6km of 66kV overhead line	0										
Hebburn - Benton Square Teed 66kV circuit	NE31 1BD	Condition	Replacement of 1.3km of 66kV underground cable	0										
Temple Park - West Southwick (part dual circuit) 66kV circuit	NE34 8TH	Condition	Replacement of 1.2km of 66kV underground cable	0										
Usworth - West Boldon Teed 66kV circuit	NE37 3HY	Condition	Replacement of 2.5km of 66kV overhead line	0										

Upcoming flexibility requirements for future load driven capacity needs					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation												
High Barmston 66/11kV	NE38 8QA	DH4 7; NE37 2; NE37 3; NE38 7; NE38 8; NE38 9; SR4 9; SR5 3												

Northern Powergrid Yorkshire

Northern Powergrid Yorkshire is one of two licence areas in which we are responsible for the electricity distribution network.

We are proud to serve a region that includes some of the UK's most populous cities of Leeds and Sheffield, rural communities spread across national parks and areas of outstanding natural beauty, and industrial centres leading the way on the transition towards a green economy.

We are committed to supporting this region with resilient, reliable and low carbon electricity and are taking actions to prepare our network to support our communities across Yorkshire and northern Lincolnshire.

This section presents 19 GSPs with planned interventions in our Northern Powergrid Yorkshire licence area. The specific details for each planned intervention are incorporated in the reports.

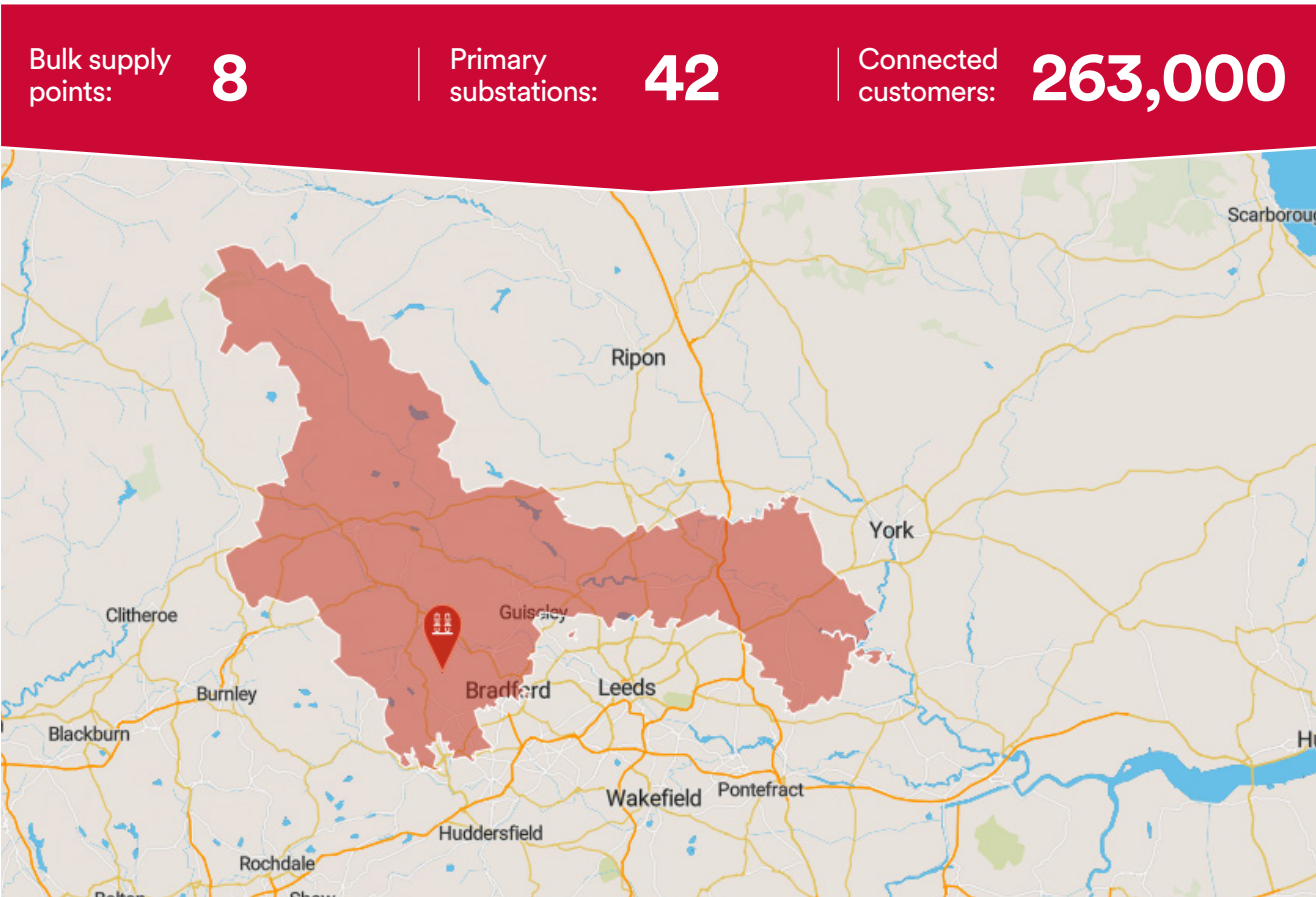


Bradford West

275/132kV Grid Supply Point

Licence area
Yorkshire

Postcode
BD15 0BZ

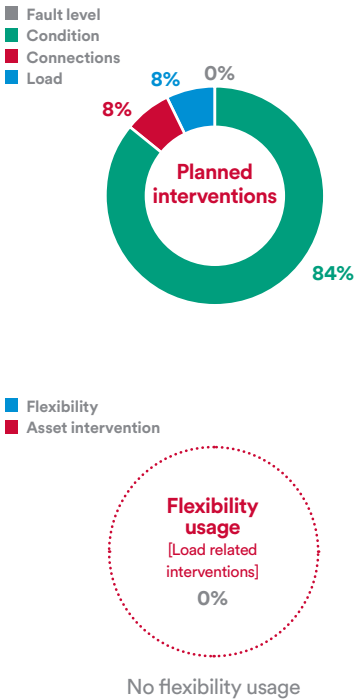


Overview

Bradford West 275/132kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘West Yorkshire’ operational region of Northern England within our Yorkshire licence area. This GSP serves 263,000 customers through 8 bulk supply points (BSPs) and 42 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 38% of the BSPs and 21% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

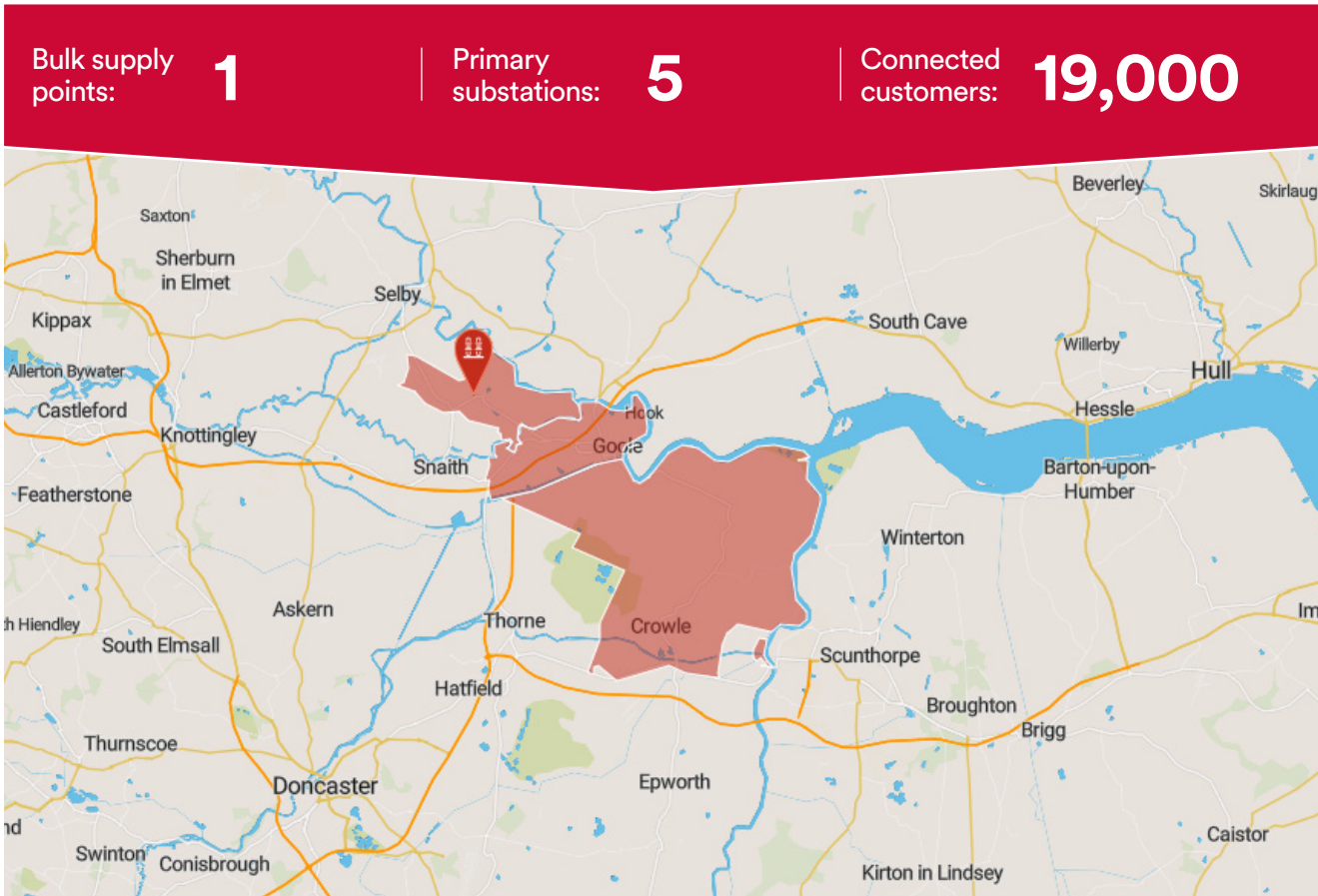
Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Bolton Road 33/11kV	BD20 0JS	Condition	Replacement of transformer T1 and T2	14.7										
Bradford West 400/132kV	BD15 0BZ	Connections	Replacement of 132kV switchgear	0										
Crosshills 33/11kV	BD20 7AH	Condition	Replacement of Transformers	14.7										
Manchester Road 33/11kV	BD5 0QJ	Condition	Replacement of 11kV Switchgear	0										
Silsden 132/33kV	BD20 0LF	Load	Replacment of 132/33kV transformers, 132kV switchgear and the 33kV switchgear	0										
Bradford West-Keighley 132kV Circuit	BD13 2LX	Condition	Replacement of 0.7km of 132kV underground cable	0										
Chelker Reservoir 33/11kV	LS29 0JS	Condition	Replacement of 11kV switchgear	0										
Four Lane Ends 33/11kV	BD8 0LJ	Condition	Replacement of 33kV switchgear	0										
Furness Avenue 33/11kV	WF8 3JA	Condition	Replacement of 33kV switchgear	0										
Gaisby Lane 33/11kV	BD2 1BB	Condition	Replacement of 33kV switchgear	0										
Idle 33/11kV	BD10 8SA	Condition	Replacement of 11kV switchgear	0										
Ilkley 33/11kV	LS29 9BE	Condition	Replacement of 11kV switchgear	0										
Menston 1-North Avenue 1 33kV Circuit	LS29 6BP	Condition	Replacement of 2.5km of 33kV overhead line	0										
Upcoming flexibility requirements for future load driven capacity needs														
Substation name	Substation postcode	Postal sectors supplied from substation			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
No upcoming flexibility needs														

Camblesforth

400/66kV Grid Supply Point

Licence area
Yorkshire

Postcode
YO8 8HF

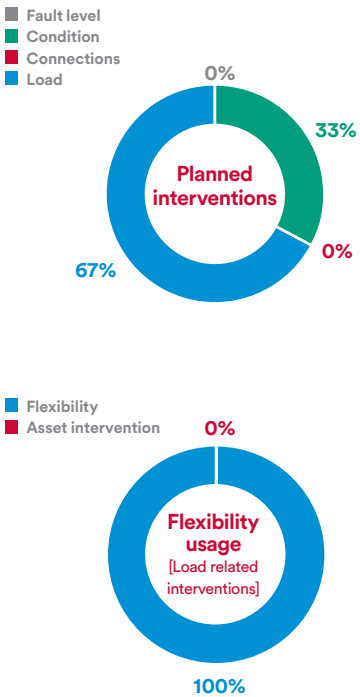


Overview

Camblesforth 400/66kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘North Yorkshire’ operational region of Northern England within our Yorkshire licence area. This GSP serves 19,000 customers through 1 bulk supply point (BSP) and 5 primary substations.

Our network analysis has highlighted the necessity for network intervention works at none of the BSPs and 40% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. Within ‘The Flexibility Services and new infrastructure needs’ table, the use of flexibility is applicable to 1 substation with load driven constraints and we have used flexibility there. As this represents the use of flexibility at 1 out of 1 substations, flexibility usage at this GSP is 100%. Flexibility Services are not suitable for deferring condition based reinforcement.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Crowle 66/11kV	YO8 8HF	Load	Flexibility	0.7										
Crowle 66/11kV	YO8 8HF	Load	Installation of a 11kV interconnector	3										
Goole 66/11kV	DN14 6SX	Condition	Replacement of 11kV switchgear	0										

Upcoming flexibility requirements for future load driven capacity needs

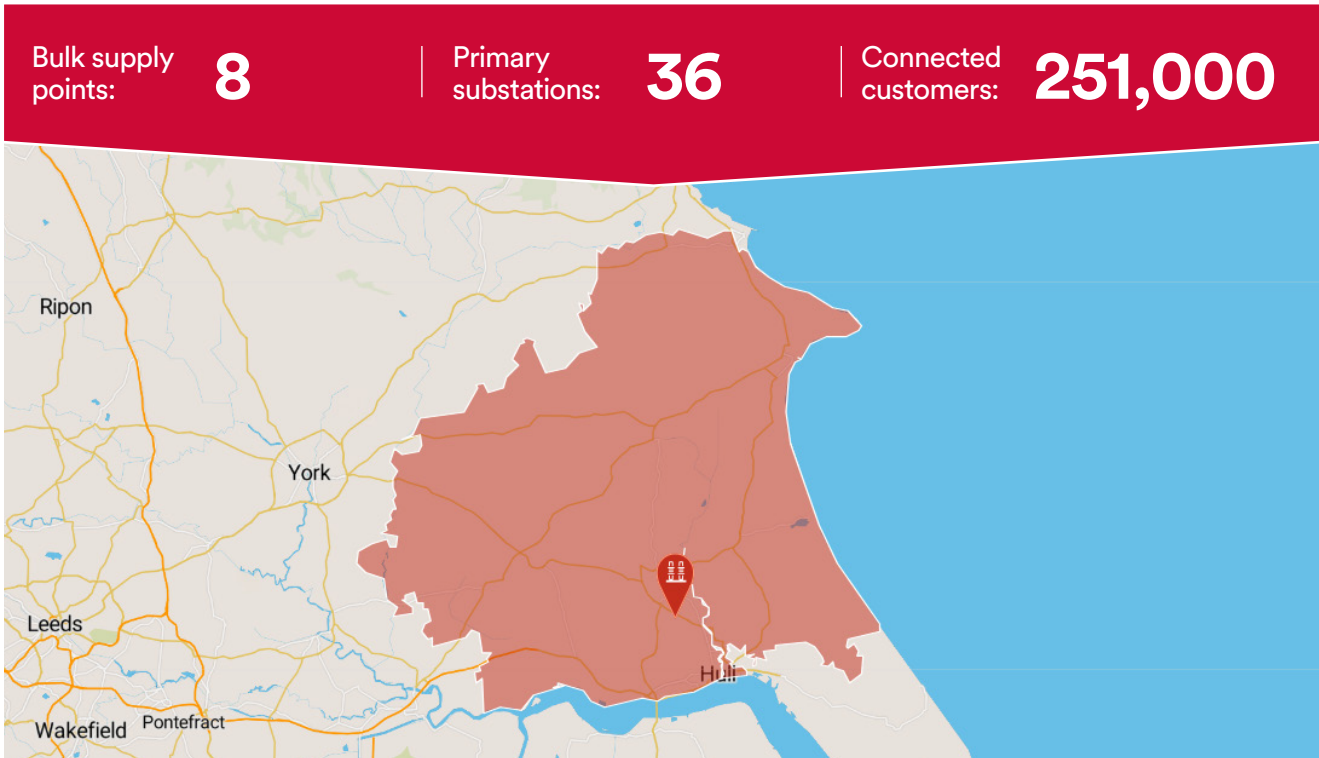
Substation name	Substation postcode	Postal sectors supplied from substation	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
No upcoming flexibility needs												

Creyke Beck

400/132kV Grid Supply Point

Licence area
Yorkshire

Postcode
HU16 5SB



Overview

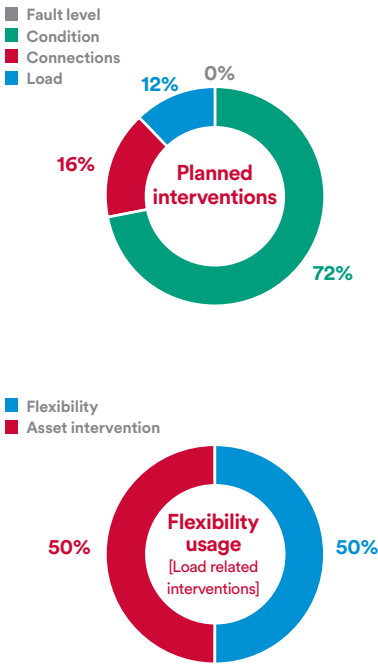
Creyke Beck 400/132 kV Grid Supply Point (GSP) is situated in the Humber estuary on the east coast of Northern England within our Yorkshire licence area. This GSP serves 251,000 customers through 8 bulk supply points (BSPs) and 36 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 88% of the BSPs and 36% of this GSP's primary substations in the next ten years. This is detailed in the 'Flexibility Services and new infrastructure needs' table.

- The distribution of the various types of planned network interventions is illustrated in the 'planned interventions' pie chart.
- The 'flexibility usage' pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our 'flexibility first' approach. Within 'The Flexibility Services and new infrastructure needs' table, the use of flexibility is applicable to 2 substations (Southgate 33/11kV and Holme Upon Spalding Moor 33/11kV) with load driven constraints and we have used flexibility at one of these. As this represents the use of flexibility at 1 out of 2 substations, flexibility usage at this GSP is 50%. Flexibility Services will not be used at Holme Upon Spalding Moor because the proposed reinforcement works are due to the works required at Southgate and Holme Upon Spalding Moor will benefit from additional capacity as a consequence. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 7 substations where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the 'Upcoming flexibility requirements for future load driven capacity needs' table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Beverley 132/33kV	HU17 0RW	Condition	Replacement of Transformer	0										
		Connections	Replacement of 33kV switchboard	0										
Burton Pidsea 66/11kV	HU12 9AE	Condition	Replacement of 66kV feeder Circuit Breakers	0										
Creyke Beck 132kV Circuits	HU16 5SB	Connections	Replacement of 0.9km of 132kV underground cables	0										
Elgar Road 33/11kV	HU4 7JR	Condition	Replacement of 33kV and 11kV switchgear	0										
Gibson Lane 33/11kV	HU14 3BQ	Connections	Replacement of 11kV switchboard	0										
Holme Upon Spalding Moor 33/11kV	YO43 4BX	Load	Addition of a second 33/11kV transformer and 33kV circuit, and 11kV switchboard extension	0										
Hull West 32/33kV	HU13 0JD	Connections	Replacement of 33kV switchboard	0										
Seaton Burn 66/20kV	NE13 6BH	Condition	Replacement of 66 & 20kV switchgear	0										
		Load	Flexibility	0.5										
Southgate 33/11kV	YO43 3BE	Load	Addition of a second 33/11kV transformer and 33kV circuit, and 11kV switchboard extension	7.1										
Beverley 1-Endlike Lane 1 33kV Circuit	HU17 0RW	Condition	Replacement of 2.4km of 33kV overhead line	0										
Beverley 1-Spark Mill Lane 1 33kV Circuit	HU17 0RW	Condition	Replacement of 1.6km of 33kV overhead line	0										
Beverley 2-Spark Mill Lane 2 33kV Circuit	HU17 0RW	Condition	Replacement of 1.7km of 33kV overhead line	0										
Beverley 1-Figham Hull Road Teed 33kV Circuit	HU17 0RN	Condition	Replacement of 1.3km of 33kV underground cable	0										
Beverley 2-Eppleworth Bott Teed 33kV Circuit	HU17 0RW	Condition	Replacement of 10.7km of 33kV overhead line	0										
Bransholme 1-Tiverton Road 1 33kV Circuit	HU7 4ZN	Condition	Replacement of 2.2km of 33kV underground cable	0										
Drifffield 2-Brett Street 2 Teed 66kV Circuit	YO25 5XR	Condition	Replacement of 16.7km of 66kV overhead line	0										
Drifffield 1-Seaton 1 66kV Circuit	YO25 5XR	Condition	Replacement of 11.1km of 66kV overhead line	0										
Drifffield 1-Seaton 1 66kV Circuit	YO25 5XR	Condition	Replacement of 15.2km of 66kV overhead line	0										
Elgar Road 33/11kV	HU4 7NY	Condition	Replacement of 33kV Transformer T2	0										
Gibson Lane 33/11kV	HU14 3HH	Condition	Replacement of 33kV Transformer T1&T2	0										
Hull West 132/33kV	HU13 0FA	Condition	Replacement of 132kV Transformer T1B&T2B	0										
Hunmanby 2 66kV Circuit	YO14 0JY	Condition	Replacement of 21.6km of 66kV overhead line	0										
Spark Mill Lane 33/11kV	HU17 0TT	Condition	Replacement of 11kV switchgear	0										

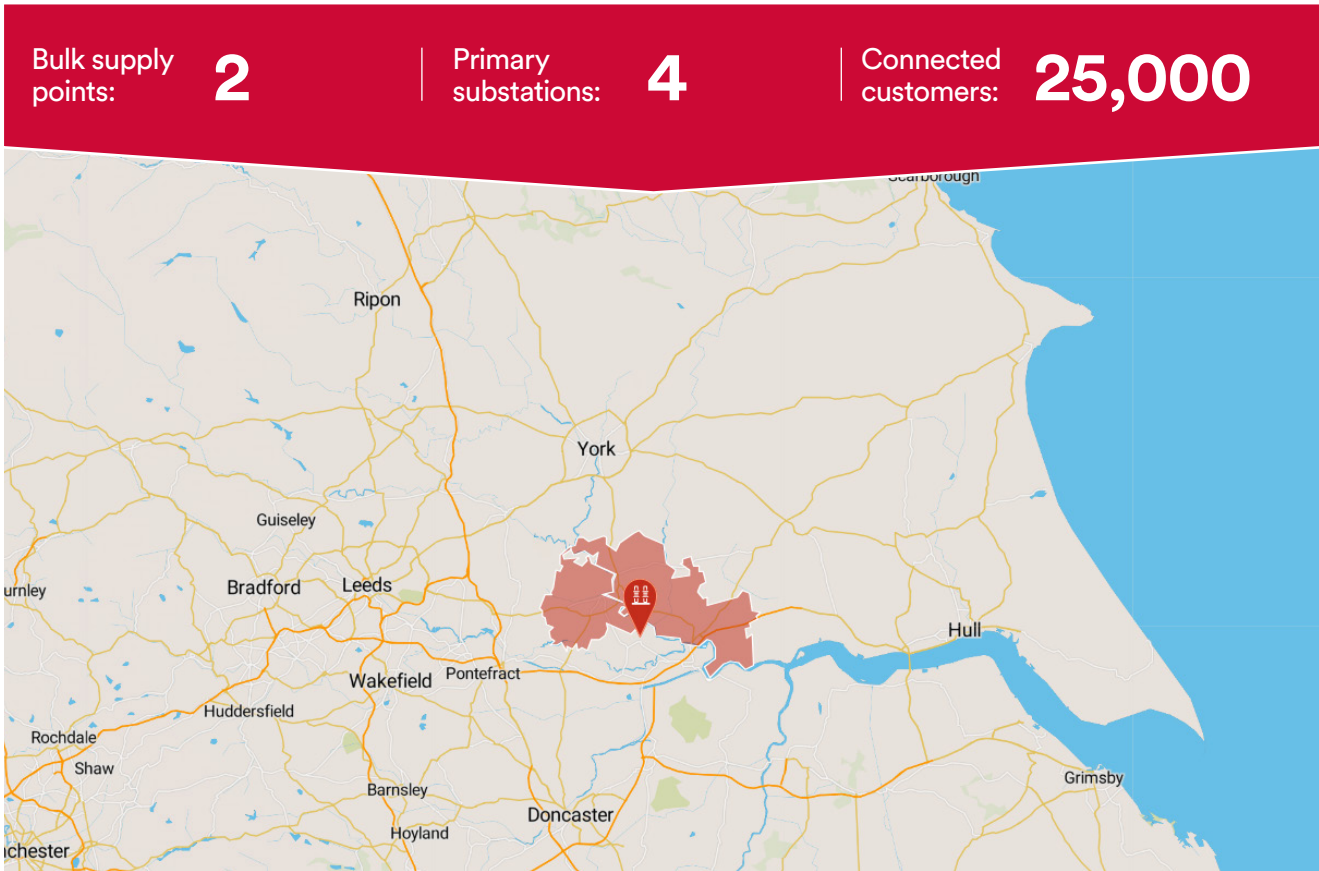
Upcoming flexibility requirements for future load driven capacity needs														
Substation name	Substation postcode	Postal sectors supplied from substation	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
Beverley 132/33kV	HU17 0RW	HU16 4; HU16 5; HU5 2; HU5 4; HU6 7; HU6 8; HU6 9; HU5 2; HU6 7; HU6 8; HU6 9; HU7 0; HU7 6; HU8 0; DN14 7; HU15 2; YO42 1; YO42 4; YO43 3; YO43 4; YO62 5; YO8 6; YO8 7; HU17 0; HU17 5; HU17 7; HU17 8; HU17 9; YO25 3; YO25 9; YO43 4; HU15 2; HU17 7; YO25 9; YO42 4; YO4 3; YO43 3; YO43 4; DN18 5; HU10 6; HU10 7; HU13 0; HU14 3; HU15 1; HU16 4; HU16 5; HU17 8; HU20 3; HU5 5; HU16 4; HU17 0; HU17 7; HU17 8; HU17 9; HU6 0; HU6 7; YO25 9												
Brett Street 66/11kV	YO16 4HW	YO15 2; YO15 3; YO16 4; YO16 6; YO16 7; YO25 0; YO25 4; YO25 5; YO25 8												
Driffield 66/11kV	YO25 5XR	HD8 0; YO25 0; YO25 3; YO25 4; YO25 5; YO25 6; YO25 7; YO25 8; YO25 9												
Gibson Lane 33/11kV	HU14 3HH	HU10 7; HU1 2; HU13 0; HU14 3; HU15 1; HU2 0												
Kirkburn 66/11kV	YO25 9EH	YO17 9; YO25 0; YO25 1; YO25 3; YO25 4; YO25 8; YO25 9; YO42 1												
Martongate 66/11kV	YO16 6RX	YO14 0; YO14 9; YO15 1; YO15 2; YO16 4; YO16 6; YO16 7												
Seaton 66/11kV	HU11 5RQ	HU11 4; HU11 5; HU17 5; HU18 1; HU19 2; HU6 9; HU8 9; YO25 8												

Drax

400/132kV Grid Supply Point

Licence area
Yorkshire

Postcode
YO8 8PD



Overview

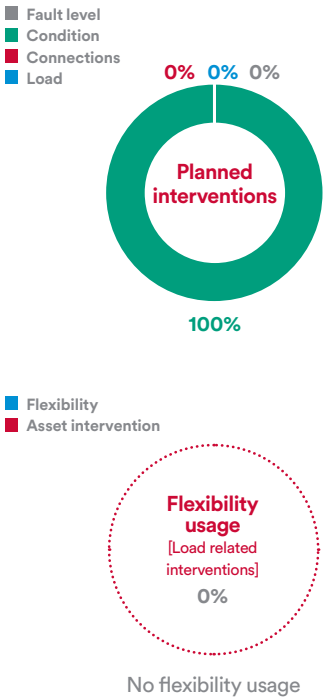
Drax 400/132kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘North Yorkshire’ operational region of Northern England within our Yorkshire licence area. This GSP serves 25,000 customers through 2 bulk supply points (BSPs) and 4 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 50% of the BSPs and 25% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 1 substation where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the ‘Upcoming flexibility requirements for future load driven capacity needs’ table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Riccall-Whitemoor 33kV Circuit	YO19 6QR	Condition	Replacement of 3km of 33kV overhead line	0										

Upcoming flexibility requirements for future load driven capacity needs					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation												
Selby 33/11kV	YO8 8NB	LN8 3; LS24 9; YO19 6; YO8 0; YO8 3; YO8 4; YO8 5; YO8 6; YO8 8; YO8 9												

Elland

275/132kV Grid Supply Point

Licence area
Yorkshire

Postcode
HX5 9DN

Bulk supply points:

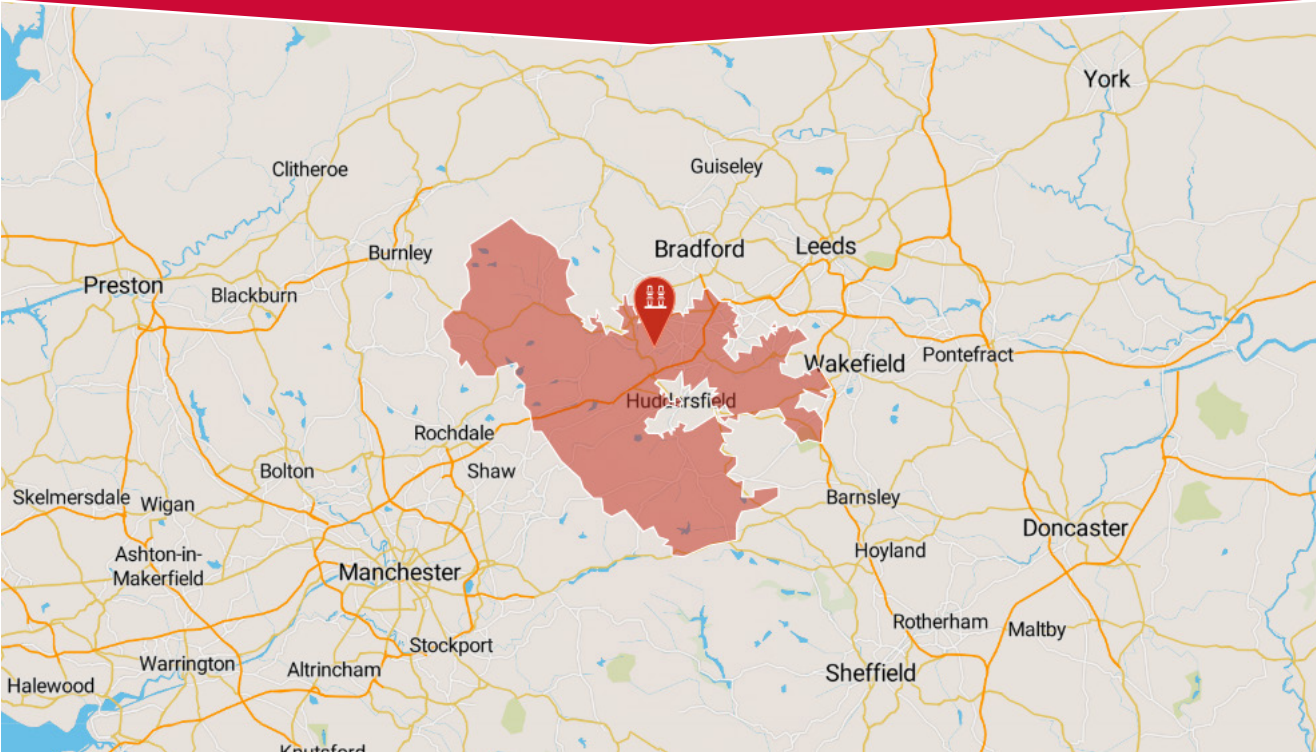
5

Primary substations:

30

Connected customers:

205,000

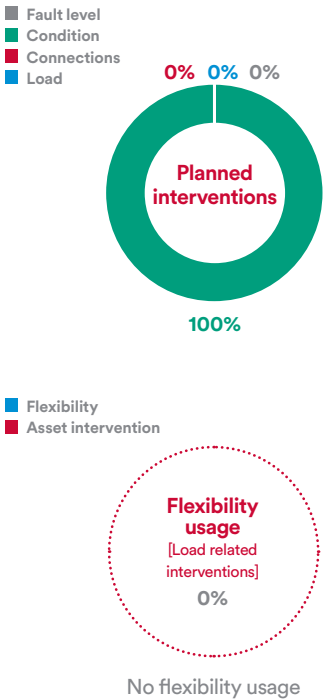


Overview

Elland 275/132kV Grid Supply Point (GSP) is situated in Northern Powergrid's 'West Yorkshire' operational region of Northern England within our Yorkshire licence area. This GSP serves 205,000 customers through 5 bulk supply points (BSPs) and 30 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 60% of the BSPs and 17% of this GSP's primary substations in the next ten years. This is detailed in the 'Flexibility Services and new infrastructure needs' table.

- The distribution of the various types of planned network interventions is illustrated in the 'planned interventions' pie chart.
- The 'flexibility usage' pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our 'flexibility first' approach. The use of flexibility is not applicable to any of the substations within 'The Flexibility Services and new infrastructure needs' table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Hazlehead 33/11kV	HD9 7TT	Condition	Replacement of 11kV switchgear	0										
Brighouse 132/33kV	HD6 1PZ	Condition	Replacement of 132kV Transformer T1&T2	0										
Brighouse 2-Clough LSI 33kV Circuit	HD6 1QE	Condition	Replacement of 1.2km of 33kV overhead line	0										
Dowker Street 33/11kV	HD3 4JB	Condition	Replacement of 33kV Transformer T1	0										
Dowker Street 33/11kV	HD3 4JB	Condition	Replacement of 11kV switchgear	0										
Elland 33/11kV	HX5 9AE	Condition	Replacement of 33kV switchgear	0										
Lindley 2-Harrison Lane 33kV Circuit	HD3 3NY	Condition	Replacement of 8.6km of 33kV overhead line	0										
Millroyd Street 33/11kV	HD6 1JZ	Condition	Replacement of 33kV Transformer T1&T2	0										
Snelsins Lane 33/11kV	BD19 3UH	Condition	Replacement of 33kV Transformer T1&T2	0										
Sowerby Bridge 4-Mytholmroyd 2 33kV Circuit	HX6 1EN	Condition	Replacement of 6.4km of 33kV overhead line	0										
Sowerby Bridge 3-Mytholmroyd 1 33kV Circuit	HX6 1EN	Condition	Replacement of 1.2km of 33kV overhead line	0										
Sowerby Bridge 4-Hebden Bridge 1 33kV Circuit	HX6 1EN	Condition	Replacement of 10km of 33kV overhead line	0										

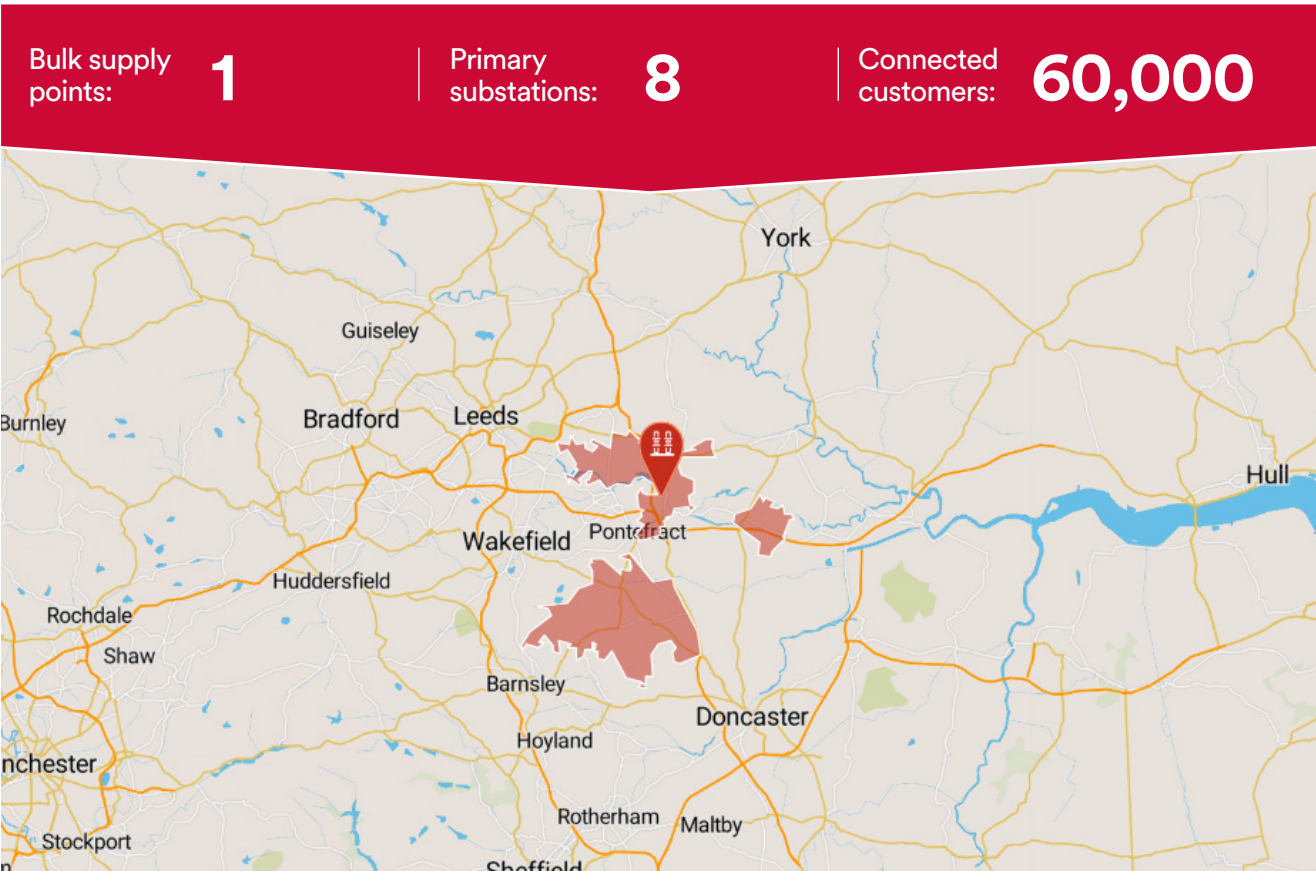
Upcoming flexibility requirements for future load driven capacity needs			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation										
No upcoming flexibility needs												

Ferrybridge A

275/66kV Grid Supply Point

Licence area
Yorkshire

Postcode
WF11 8PR



Overview

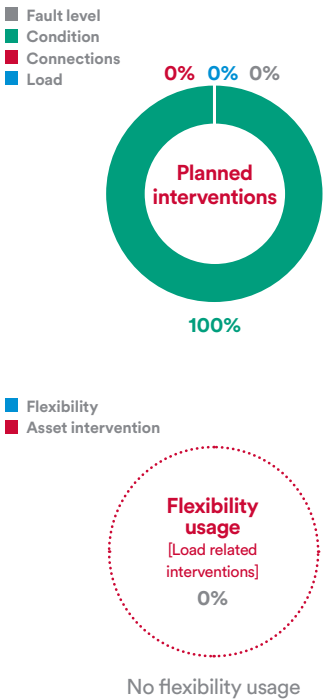
Ferrybridge A 275/66kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘West Yorkshire’ operational region of Northern England within our Yorkshire licence area. This GSP serves 60,000 customers through 1 bulk supply point (BSP) and 8 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 100% of the BSPs and 50% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 3 substations where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the ‘Upcoming flexibility requirements for future load driven capacity needs’ table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Ferrybridge A 2-Eggborough Teed 66kV Circuit	WF11 8PR	Condition	Replacement of 23.3km of 66kV overhead line	0										
Ferrybridge A 1-Barlow Common Rd 66kV Circuit	WF11 8PR	Condition	Replacement of 16.8km of 66kV overhead line	0										
South Kirkby 66/11kV	WF9 3TJ	Condition	Replacement of 66kV Transformer T1&T2	0										

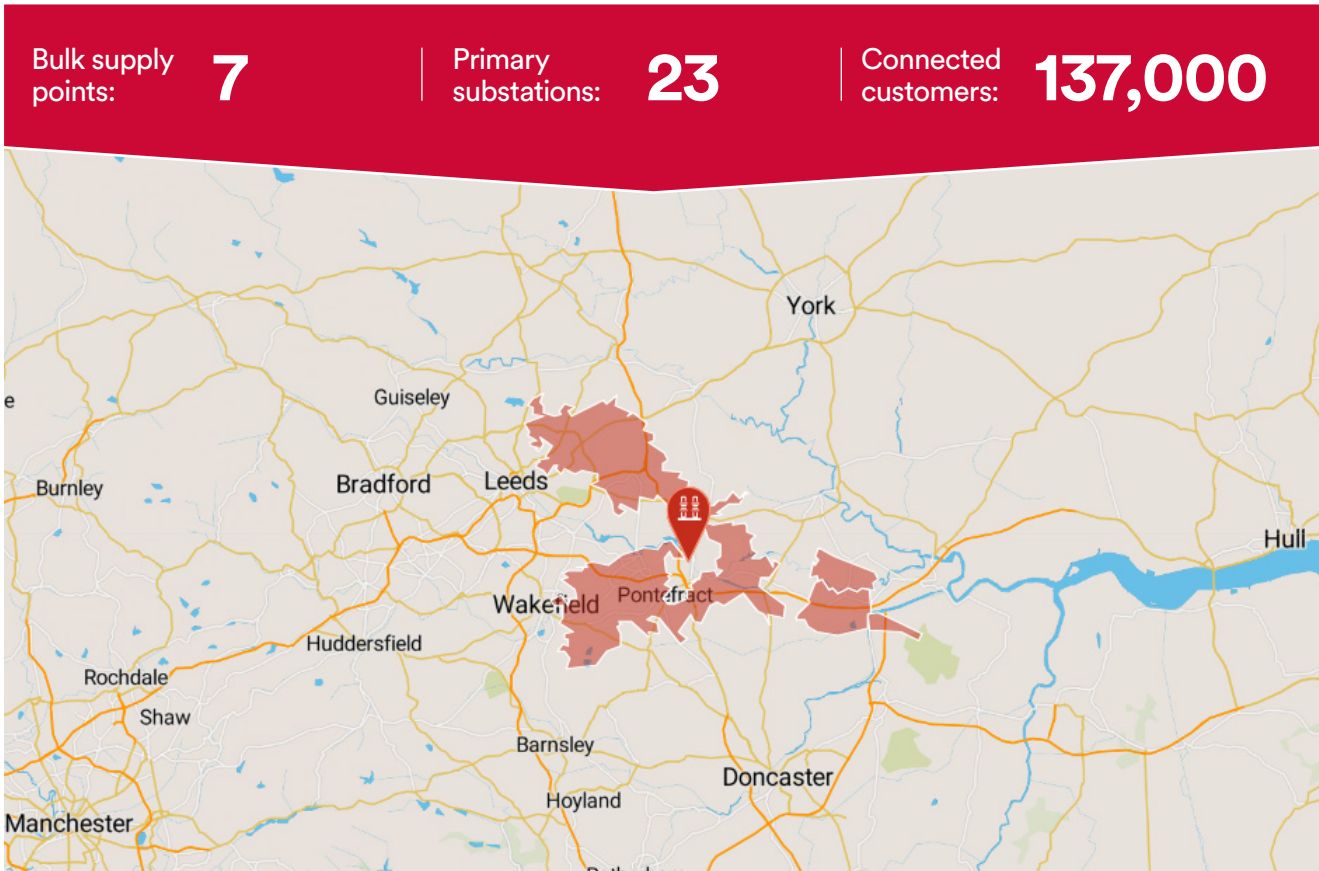
Upcoming flexibility requirements for future load driven capacity needs				2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation											
Eggborough 66/11kV	DN14 0QA	DN14 0; LN12 1; WF11 8; YO8 8											
Ferrybridge A 66/11kV	WF11 8RR	LS25 5; WF10 2; WF10 3; WF11 0; WF11 8; WF11 9; WF8 1; WF8 2; YO8 9											
Hemsworth 66/11kV	WF9 5BZ	WF4 1; WF4 2; WF7 7; WF8 3; WF9 1; WF9 4; WF9 5											

Ferrybridge B

275/132kV Grid Supply Point

Licence area
Yorkshire

Postcode
WF11 8PR



Overview

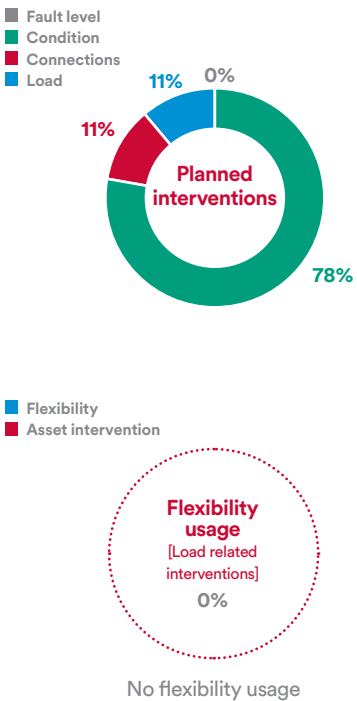
Ferrybridge B 275/132kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘West Yorkshire’ operational region of Northern England within our Yorkshire licence area. This GSP serves 137,000 customers through 7 bulk supply points (BSPs) and 23 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 57% of the BSPs and 39% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 6 substations where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the ‘Upcoming flexibility requirements for future load driven capacity needs’ table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Featherstone 132/33kV	WF7 6HE	Connections	Replacement of 33kV switchboard	0										
Prince of Wales 33/11kV	WF8 4PR	Condition	Replacement of 33kV switchgear	0										
Warren Lane 33/11kV	LS24 9NT	Condition	Replacement of 11kV Switchgear	0										
Wetherby 33/11kV	TBC	Load	Construction of new 33/11kV primary substation	30										
Bramham 2-Fenton Lane 2 Teed 33kV Circuit	LS24 9NT	Condition	Replacement of 4km of 33kV overhead line	0										
Kirkhaw Lane 132/33kV	WF11 8RD	Condition	Replacement of 33kV switchgear	0										
Kirkhaw Lane 1-Carr Lane 1 33kV Circuit	WF11 8SB	Condition	Replacement of 1.9km of 33kV overhead line	0										
Whinmoor 2-Barwick 2 33kV Circuit	LS14 2DG	Condition	Replacement of 6.3km of 33kV overhead line	0										
Whinmoor 2-Barwick 2 33kV Circuit	LS14 2DG	Condition	Replacement of 1.7km of 33kV overhead line	0										

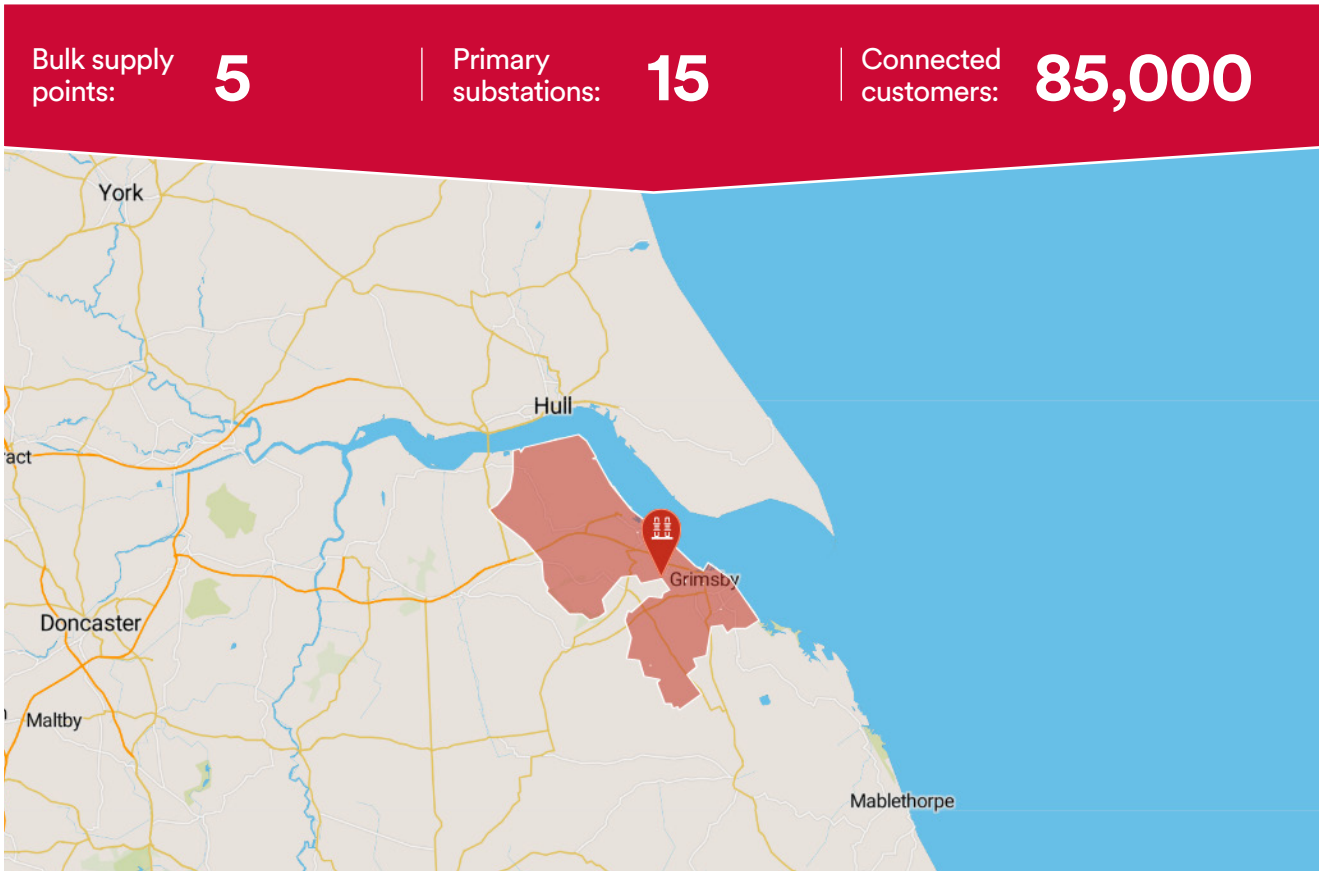
Upcoming flexibility requirements for future load driven capacity needs					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation												
Audby Lane 33/11kV	LS22 7SU	HG3 1; HG5 8; LS22 4; LS22 5; LS22 6; LS22 7; LS23 6; LS23 7; LS24 8; YO26 7; YO26 8; YO5 8												
Commonside Lane 33/11kV	WF7 5DF	WF2 7; WF4 1; WF6 1; WF6 4; WF7 5; WF7 6; WF7 7; WF8 4												
Dunkeswick 33/11kV	LS17 9LP	HG3 1; HG5 8; LS16 8; LS16 9; LS17 0; LS17 7; LS17 9; LS21 1; LS22 4; LS22 6; YO41 5												
Leeds Road 33/11kV	LS22 5AA	LS14 1; LS14 3; LS17 9; LS22 4; LS22 5; LS23 6												
Sherburn 33/11kV	LS25 6PL	LS24 9; LS25 5; LS25 6; YO8 3												
Wellington Street 33/11kV	WF10 1NW	LS26 9; WF10 1; WF10 4; WF10 5; WF6 1; WF6 2; WF7 5; WF7 6												

Grimsby West

400/132kV Grid Supply Point

Licence area
Yorkshire

Postcode
DN37 9PE



Overview

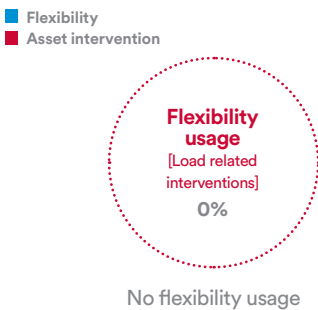
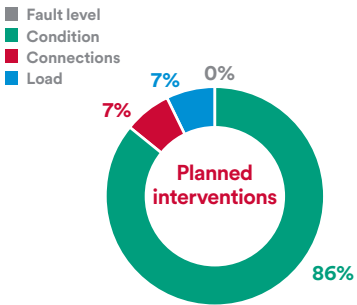
Grimsby West 400/132kV Grid Supply Point (GSP) is situated in the Humber estuary on the east coast of Northern England within our Yorkshire licence area. This GSP serves 85,000 customers through 5 bulk supply points (BSPs) and 15 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 60% of the BSPs and 80% of this GSP's primary substations in the next ten years. This is detailed in the 'Flexibility Services and new infrastructure needs' table.

- The distribution of the various types of planned network interventions is illustrated in the 'planned interventions' pie chart.
- The 'flexibility usage' pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our 'flexibility first' approach. The use of flexibility is not applicable to any of the substations within 'The Flexibility Services and new infrastructure needs' table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 3 substations where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the 'Upcoming flexibility requirements for future load driven capacity needs' table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Conyard Road 33/11kV	DN35 8AJ	Condition	Replacement of transformer T1 and T2	1										
Doughty Road 33/11kV	DN32 0LR	Load	33 kV incomer replacements and 11 kV transformer tail replacements	2										
Grimsby Docks 33/6kV	DN31 3TN	Condition	Replacement of Grimsby Docks PSS with a dedicated 11kV customer metering substation and replace the 33/11kV T1 at Marsden Road.	-23										
Netherlands Way 132/33kV	DN41 8DF	Connections	Construction of new 132/33kV supply point	120										
Barrow 33/11kV	DN19 7EG	Condition	Replacement of 11kV switchgear	0										
BTP 33/11kV	DN31 2RL	Condition	Replacement of 33kV Transformer T2	0										
Convamore Road 33/11kV	DN32 9PG	Condition	Replacement of 33kV Transformer T1&T2	0										
Great Coates 33/11kV	DN37 9PN	Condition	Replacement of 33kV Transformer T1&T2	0										
Grimsby Docks 33/6.6kV	DN40 2LZ	Condition	Replacement of 33kV Transformer T1&T2	0										
Humber Road 33/11kV	DN40 3LZ	Condition	Replacement of 33kV Transformer T1&T2	0										
Humberston 132/33kV	DN36 4AW	Condition	Replacement of 132kV Transformer T1	0										
Humberston 1-Convamore Road 133kV Circuit	DN36 4AW	Condition	Replacement of 1.8km of 33kV overhead line	0										
Immingham 1-Millennium Inorgan 1 33kV Circuit	DN40 1QT	Condition	Replacement of 2.4km of 33kV underground cable	0										
Scartho 33/11kV	DN33 3JL	Condition	Replacement of 33kV Transformer T1	0										

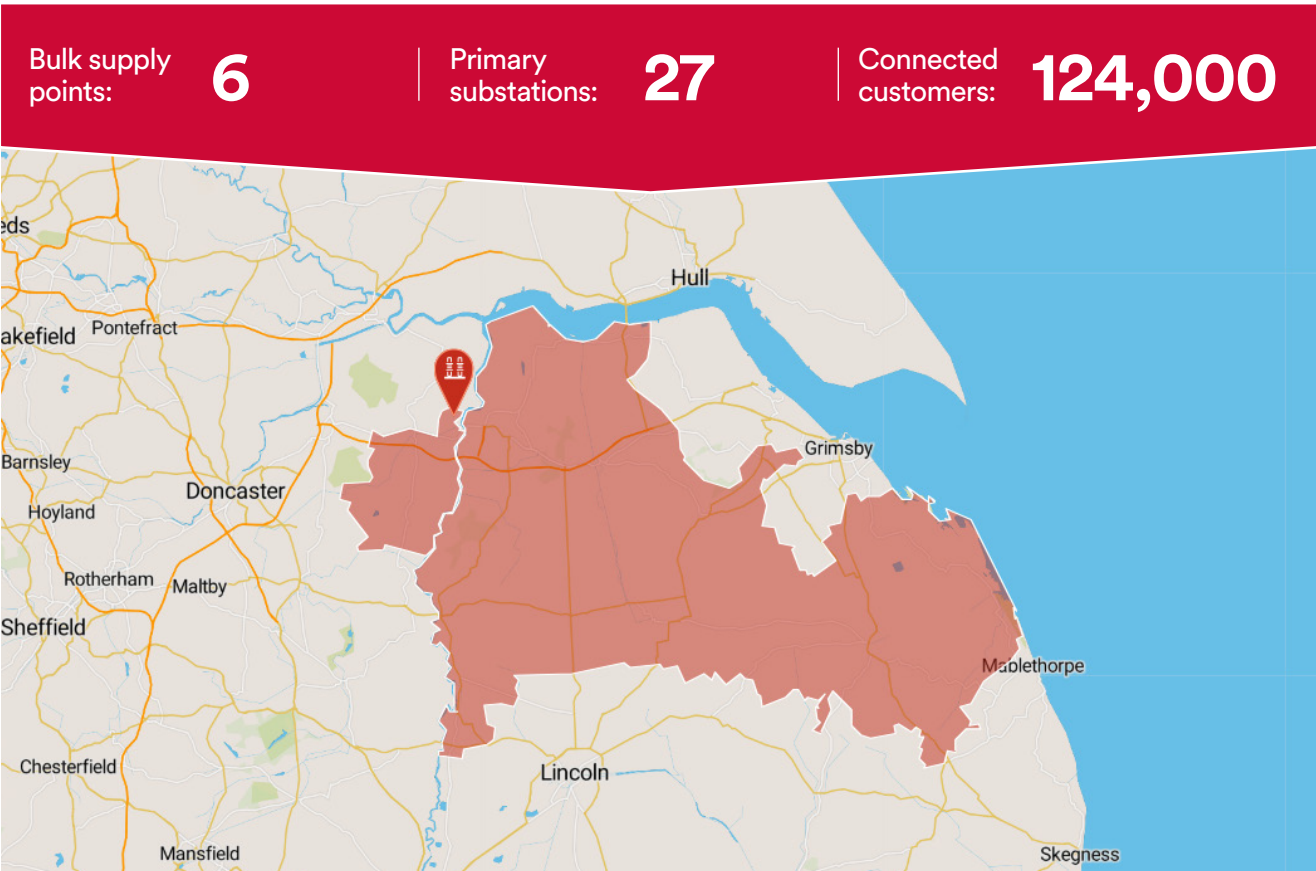
Upcoming flexibility requirements for future load driven capacity needs				2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation											
Clough Lane 33/11kV	DN40 3EH	DN19 7; DN39 6; DN40 3											
Eastfield Road 33/11kV	DN40 3LW	DN37 8; DN39 6; DN40 1; DN40 2; DN40 3; DN41 8											
Scartho 33/11kV	DN33 3JL	DN32 0; DN32 9; DN33 1; DN33 2; DN33 3; DN34 5; DN36 4; DN36 5; DN37 0; DN37 7; DN37 9; LN 7 6											

Keadby

400/132kV Grid Supply Point

Licence area
Yorkshire

Postcode
DN17 3EL



Overview

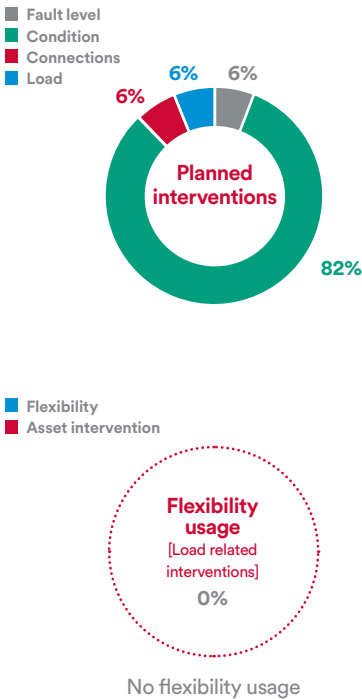
Keadby 400/132kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘South Yorkshire and North Lincolnshire’ operational region of Northern England within our Yorkshire licence area. This GSP serves 124,000 customers through 6 bulk supply points (BSPs) and 27 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 50% of the BSPs and 52% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 6 substations where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the ‘Upcoming flexibility requirements for future load driven capacity needs’ table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Corringham Road 33/11kV	DN21 1FF	Condition	Replacement of 11kV switchgear in a new switchroom.	0										
Epworth 33/11kV	DN9 1JU	Load	Green recovery reinforcement	14										
Foxhills 33/11kV	DN15 8QN	Fault level	Switchgear replacement	0										
Grainthorpe 33/11kV	LN11 7JU	Condition	Replacement of 33kV Transformers	0.5										
Hibaldstow 33/11kV	DN21 4NJ	Condition	Replacement of 11kV Switchgear	0										
Keadby 400/132kV	DN17 3EL	Connections	Total overhaul of GSP	GSP*										
Blyton 132/33kV	DN21 3NS	Condition	Replacement of 132kV Transformer T1&T2	0										
Blyton 2-Haxey 33kV Circuit	DN21 3NS	Condition	Replacement of 5.1km of 33kV overhead line	0										
Blyton 2-Haxey 33kV Circuit	DN21 3NS	Condition	Replacement of 5km of 33kV overhead line	0										
Bottesford 33/11kV	DN16 3UJ	Condition	Replacement of 33kV Transformer T1&T2	0										
Bridges Road 33/11kV	DN17 1HA	Condition	Replacement of 33kV Transformer T1&T2	0										
Corringham Road 33/11kV	DN21 1FT	Condition	Replacement of 33kV Transformer T1&T2	0										
Hibaldstow 33/11kV	DN21 4NH	Condition	Replacement of 33kV Transformer T1&T2	0										
Keadby - Santon Tee 1 & 2 132kV Circuit	DN17 3EW	Condition	Replacement of 12km of 132kV overhead line	0										
Keadby-Scawby Brook 132kV Circuit	DN17 3EW	Condition	Replacement of 1.8km of 132kV underground cable	0										
Normanby 33/11kV	LN8 2HQ	Condition	Replacement of 11kV switchgear	0										
Scunthorpe South 132/33kV	DN16 1BD	Condition	Replacement of 132kV Transformer T2	0										

Upcoming flexibility requirements for future load driven capacity needs					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Bridges Road 33/11kV	DN17 1HA	DN15 7; DN15 8; DN16 2; DN16 3; DN17 1; DN17 2; DN17 3												
Harpwell 33/11kV	DN21 5UT	DN20 9; DN21 3; DN21 4; DN21 5; LN1 2; LN1 3; LN8 2; LN8 3												
Kedington Road 33/11kV	LN11 0DE	LN11 0; LN11 7; LN11 8; LN11 9; LN12 1												
Station Road 33/11kV	DN15 6BT	DN15 0; DN15 6; DN15 7; DN15 8; DN16 1; DN16 2; DN16 3; DN17 1												
Stow 33/11kV	LN1 2AJ	DN21 4; DN21 5; LN1 2; LN2 2												
Walesby 33/11kV	LN8 3UL	LN1 2; LN3 5; LN7 6; LN8 3; LN8 5; LN8 6												

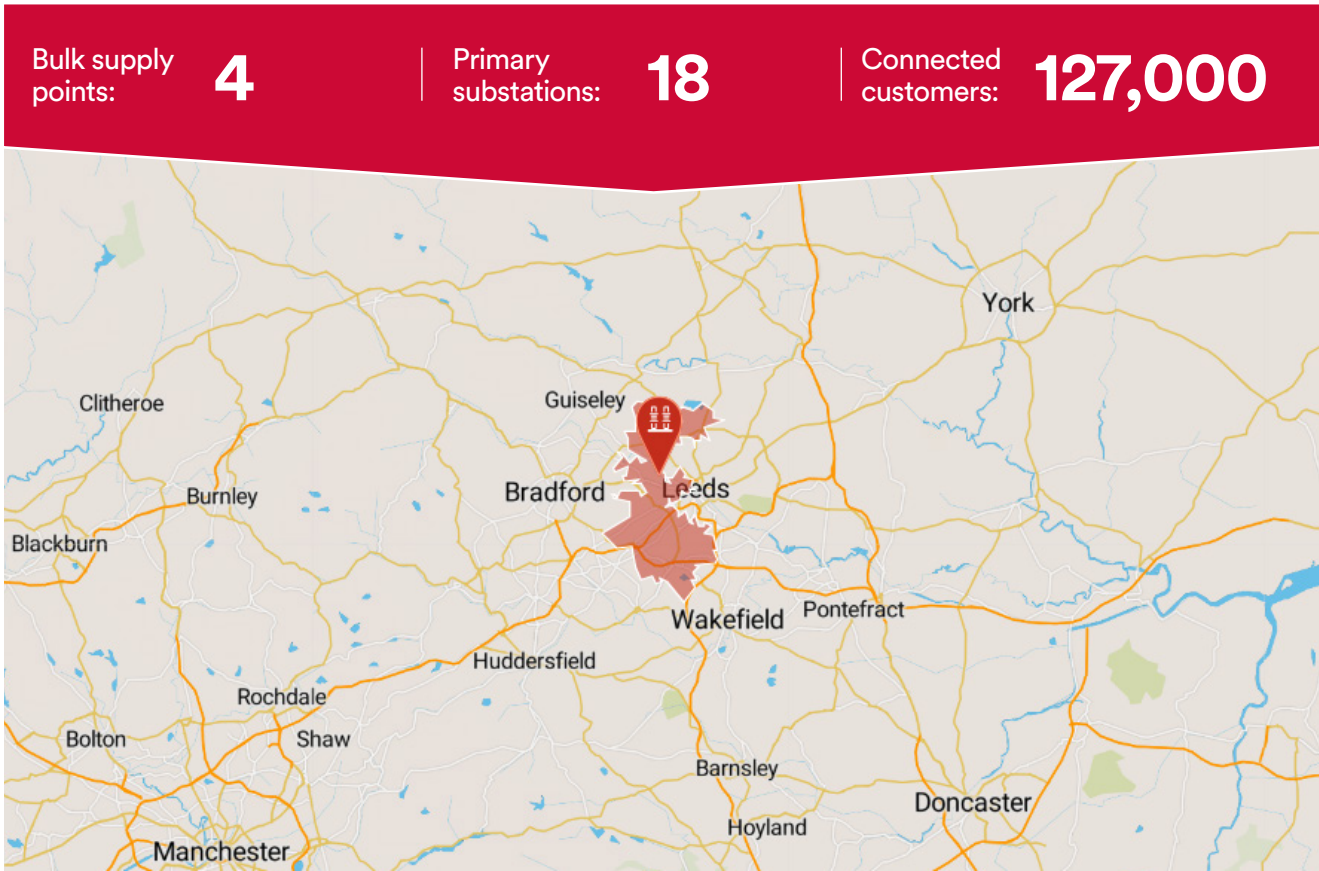
* We are not reporting changes to National Grid capacity

Kirkstall B

275/132kV Grid Supply Point

Licence area
Yorkshire

Postcode
LS12 2QX



Overview

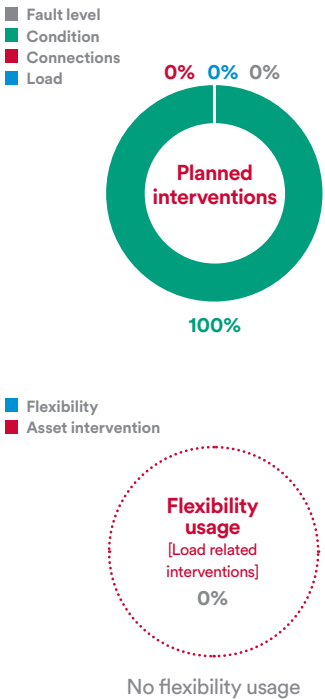
Kirkstall B 275/132kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘West Yorkshire’ operational region of Northern England within our Yorkshire licence area. This GSP serves 127,000 customers through 4 bulk supply points (BSPs) and 18 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 25% of the BSPs and 28% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 1 substation where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the ‘Upcoming flexibility requirements for future load driven capacity needs’ table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Whitehall Road 33/11kV	LS1 4EE	Condition	Replacement of 11kV switchgear	0										
Iveson House 33/11kV	LS16 6RF	Condition	Replacement of 33kV Transformer T1&T2	0										
Morley 33/11kV	LS27 9HS	Condition	Replacement of 11kV switchgear	0										
Whingate 33/11kV	LS12 3QT	Condition	Replacement of 33kV switchgear	0										
Whingate 2-Farnley Crescent 2 33kV Circuit	LS12 3QT	Condition	Replacement of 1.9km of 33kV underground cable	0										

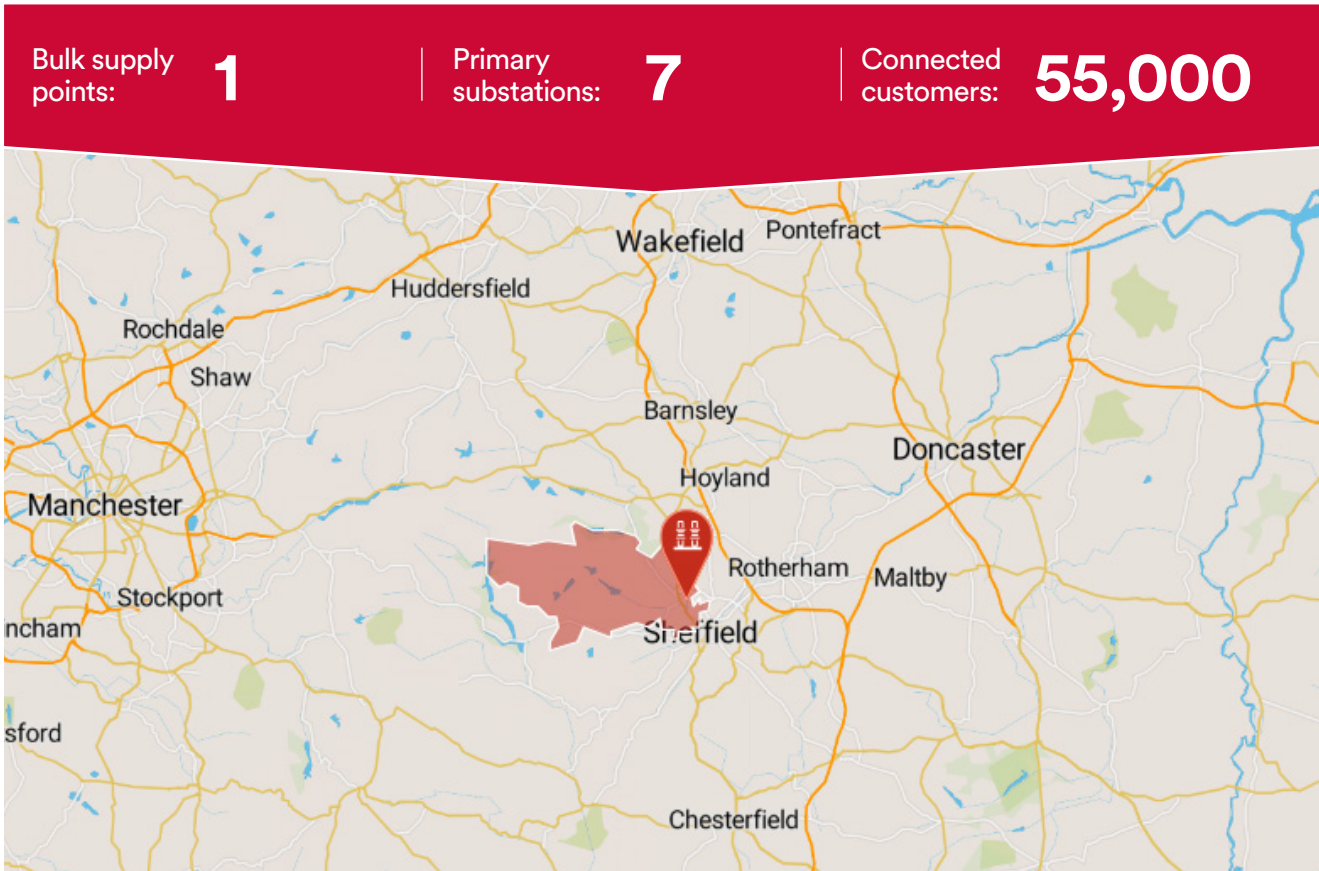
Upcoming flexibility requirements for future load driven capacity needs				2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation											
Bramley 33/11kV	LS13 3ST	LS12 2; LS12 3; LS13 1; LS13 2; LS13 3; LS13 4											

Neepsend

275/33kV Grid Supply Point

Licence area
Yorkshire

Postcode
S6 2FH



Overview

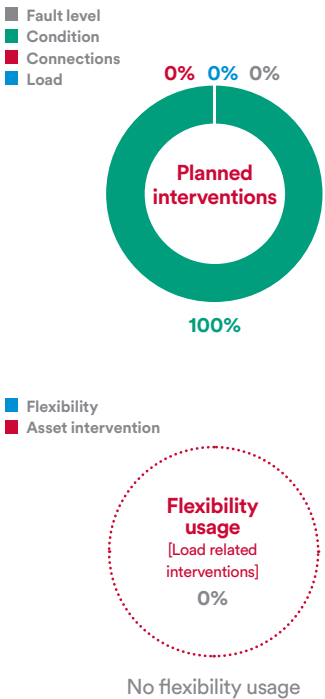
Neepsend 275/33kV Grid Supply Point (GSP) is situated in Northern Powergrid's 'South Yorkshire and North Lincolnshire' operational region of Northern England within our Yorkshire licence area. This GSP serves 55,000 customers through 1 bulk supply point (BSP) and 7 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 100% of the BSPs and 43% of this GSP's primary substations in the next ten years. This is detailed in the 'Flexibility Services and new infrastructure needs' table.

- The distribution of the various types of planned network interventions is illustrated in the 'planned interventions' pie chart.
- The 'flexibility usage' pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our 'flexibility first' approach. The use of flexibility is not applicable to any of the substations within 'The Flexibility Services and new infrastructure needs' table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 1 substation where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the 'Upcoming flexibility requirements for future load driven capacity needs' table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Livesey Embankment 33kV Circuits (5 Feeders Diversion)	S6 2FH	Condition	Replacement of 6.3km of 33kV underground cable	0										
Beeley Wood-Loxley Road 33kV Circuit	S6 1ND	Condition	Replacement of 3.5km of 33kV overhead line	0										
Blue Boy Street 33/11kV	S3 7BA	Condition	Replacement of 11kV switchgear	0										
Claywheels Lane 33/11kV	S6 1LY	Condition	Replacement of 11kV switchgear	0										

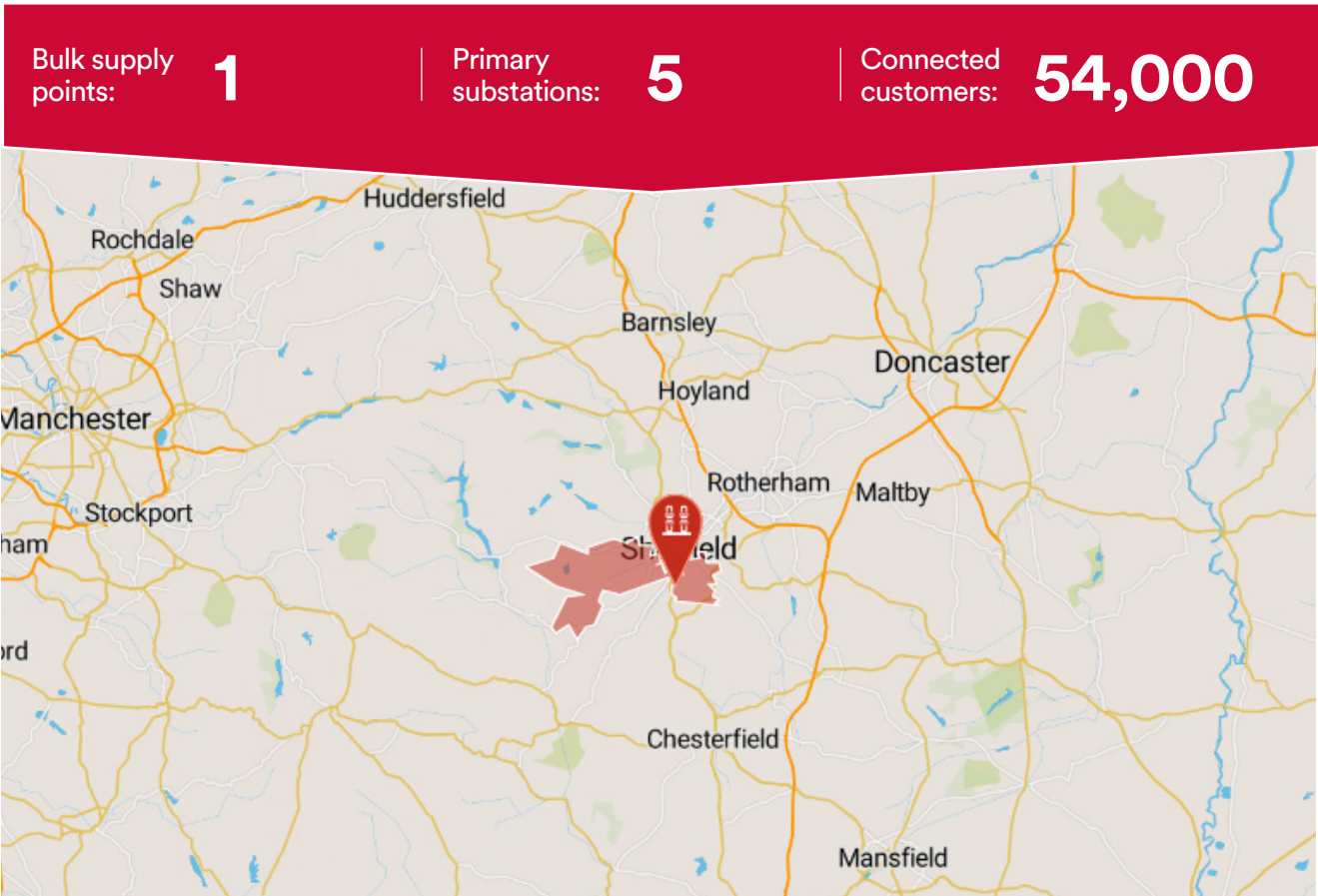
Upcoming flexibility requirements for future load driven capacity needs					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation												
Claywheels Lane 33/11kV	S6 1LY	S30 3; S35 0; S35 8; S5 8; S5 9; S6 1; S6 2; S6 4; S6 6												

Norton Lees

275/33kV Grid Supply Point

Licence area
Yorkshire

Postcode
S8 9BH

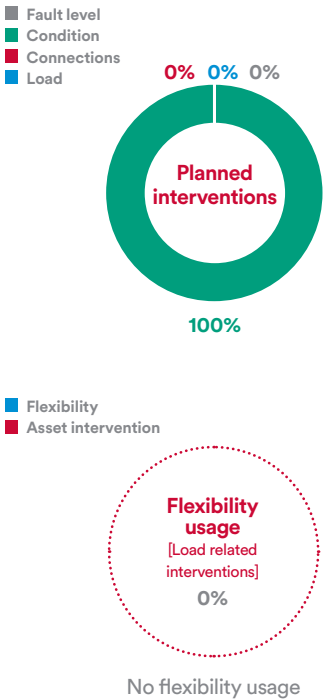


Overview

Norton Lees 275/33kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘South Yorkshire and North Lincolnshire’ operational region of Northern England within our Yorkshire licence area. This GSP serves 54,000 customers through 1 bulk supply point (BSP) and 5 primary substations.

Our network analysis has highlighted the necessity for network intervention works at none of the BSPs and 40% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

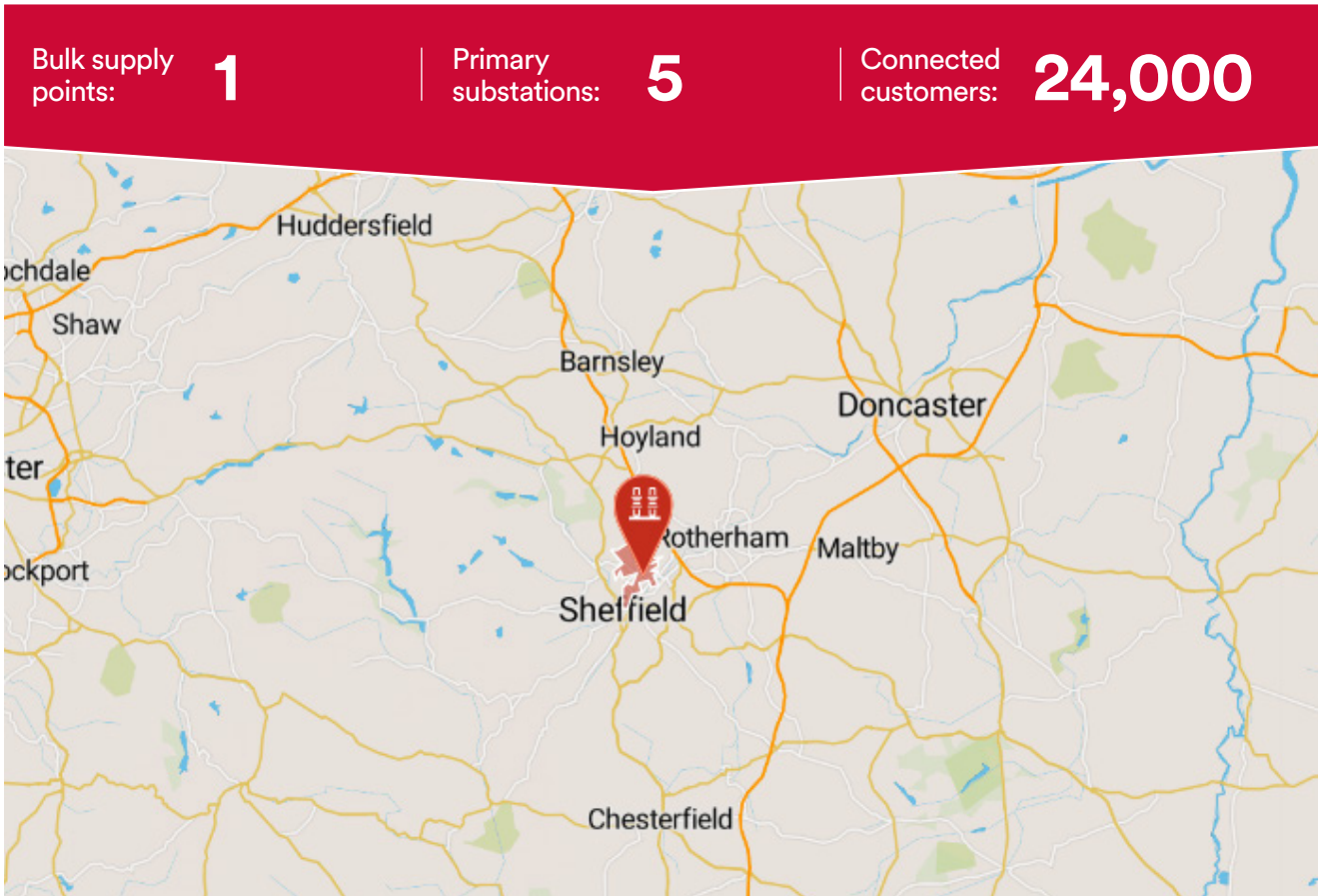
Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Marmion Road 33/11kV	S11 8TS	Condition	Asset replacement	6										
Marmion Road 33/11kV	S11 8TS	Condition	Replacement of 33kV Transformer T1&T2	0										
Marmion Road 33/11kV	S11 8TS	Condition	Replacement of 33kV switchgear	0										
Marmion Road 33/11kV	S11 8TS	Condition	Replacement of 11kV switchgear	0										
Saxon Road 33/11kV	S8 0XQ	Condition	Replacement of 33kV switchgear	0										
Saxon Road 33/11kV	S8 0XQ	Condition	Replacement of 11kV switchgear	0										
Upcoming flexibility requirements for future load driven capacity needs					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation												
No upcoming flexibility needs														

Pitsmoor 3/4

275/33kV Grid Supply Point

Licence area
Yorkshire

Postcode
S4 8LU

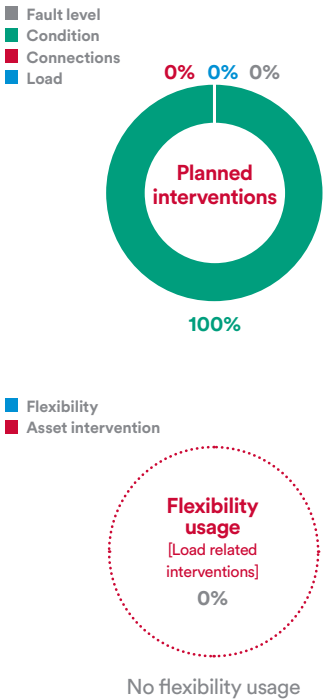


Overview

Pitsmoor 3/4 275/33kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘South Yorkshire and North Lincolnshire’ operational region of Northern England within our Yorkshire licence area. This GSP serves 24,000 customers through 1 bulk supply point (BSP) and 5 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 100% of the BSPs and 20% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Pitsmoor 275/33kV	S4 8LU	Condition	Replacement of 33kV switchgear	0										
Newhall Road 33/11kV	S9 2RS	Condition	Replacement of 11kV switchgear	0										

Upcoming flexibility requirements for future load driven capacity needs

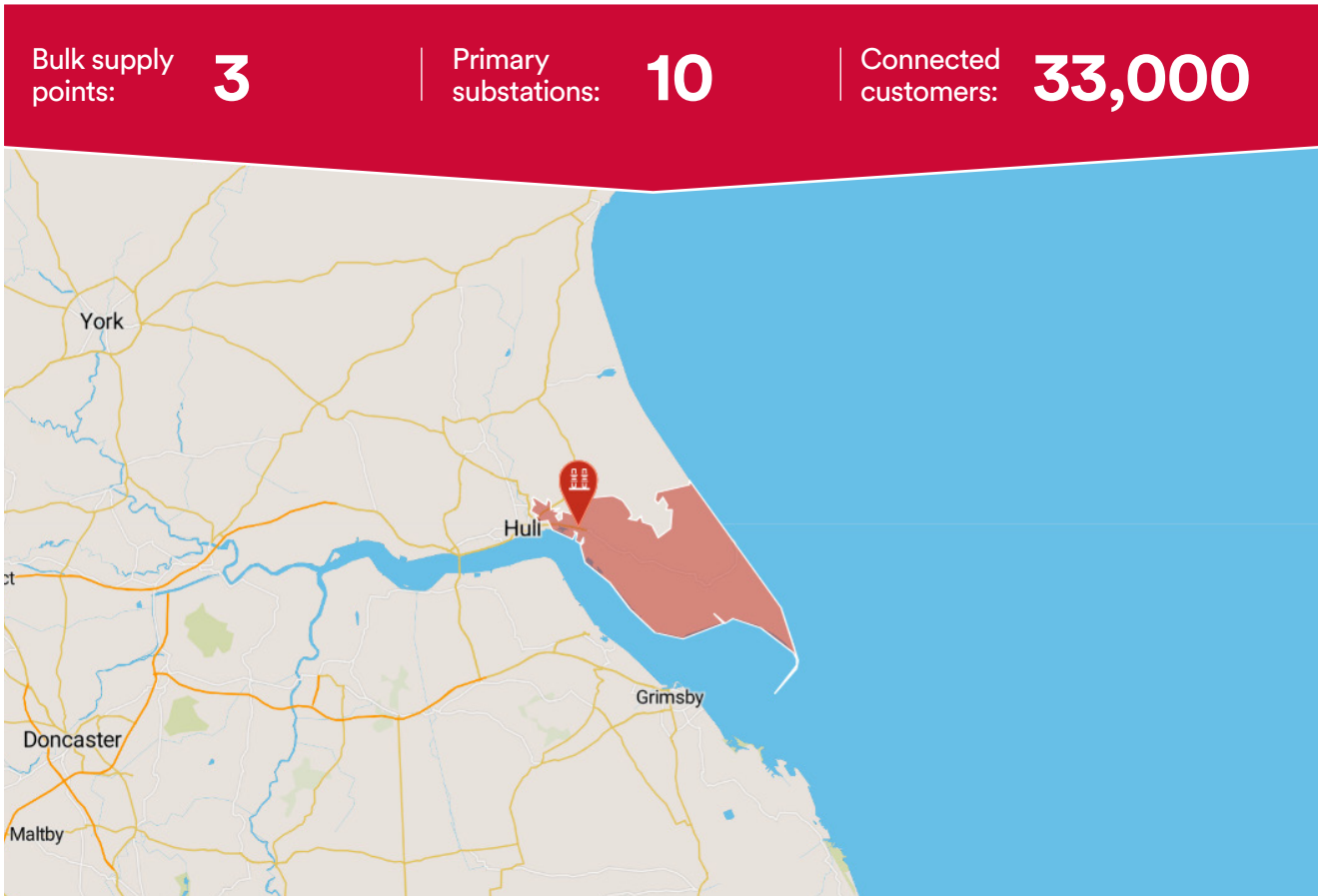
Substation name	Substation postcode	Postal sectors supplied from substation	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
No upcoming flexibility needs												

Saltend North

275/132kV Grid Supply Point

Licence area
Yorkshire

Postcode
HU12 8EY

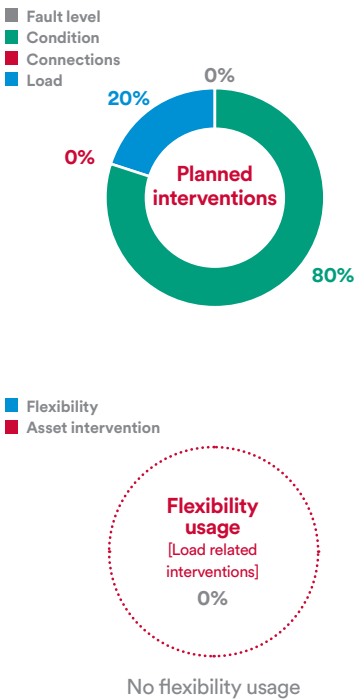


Overview

Saltend North 275/132kV Grid Supply Point (GSP) is situated in the Humber estuary on the east coast of Northern England within our Yorkshire licence area. This GSP serves 33,000 customers through 3 bulk supply points (BSPs) and 10 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 67% of the BSPs and 10% of this GSP's primary substations in the next ten years. This is detailed in the 'Flexibility Services and new infrastructure needs' table.

- The distribution of the various types of planned network interventions is illustrated in the 'planned interventions' pie chart.
- The 'flexibility usage' pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our 'flexibility first' approach. The use of flexibility is not applicable to any of the substations within 'The Flexibility Services and new infrastructure needs' table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

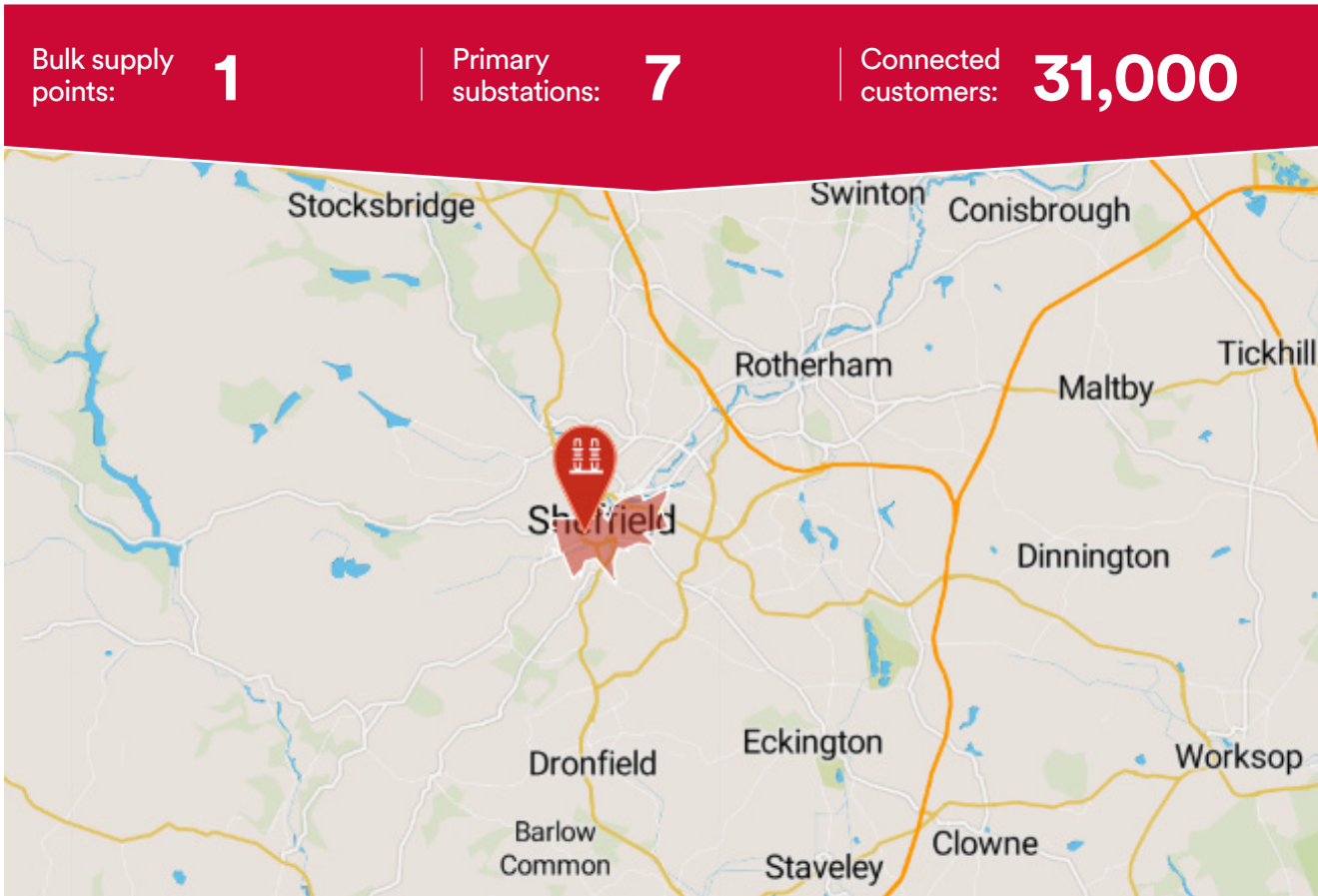
Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Hull East 132/33kV	HU9 5NP	Condition	Asset replacement	39										
Hull East 33/11kV	HU9 5NP	Condition	Replacement of 11kV switchgear in a new switchroom.	0										
Saltend 132/33kV	HU12 8EY	Connections	Replacement of 33kV switchboard and Tx1	66.2										
Withernsea 33/11kV	HU19 2LD	Condition	Replacement of 11kV switchgear	0										
Hedon Road 33/11kV	HU12 8ED	Condition	Replacement of 33kV Transformer T1&T2	0										
Upcoming flexibility requirements for future load driven capacity needs														
Substation name	Substation postcode	Postal sectors supplied from substation			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
No upcoming flexibility needs														

Sheffield City

275/33kV Grid Supply Point

Licence area
Yorkshire

Postcode
S3 7WR

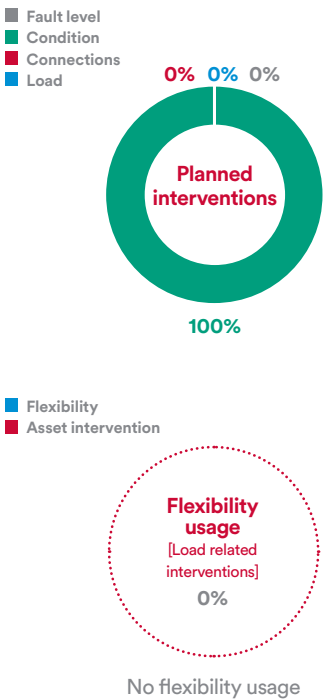


Overview

Sheffield City 275/33kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘South Yorkshire and North Lincolnshire’ operational region of Northern England within our Yorkshire licence area. This GSP serves 31,000 customers through 1 bulk supply point (BSP) and 7 primary substations.

Our network analysis has highlighted the necessity for network intervention works at none of the BSPs and 14% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Arundel Street 33/11kV	S1 4PJ	Condition	Replacement of 11kV switchgear	0										
Victoria Street 33/11kV	S3 7QB	Condition	Replacement of 11kV switchgear	0										
Ellin Street 33/11kV	S1 4QZ	Condition	Replacement of 11kV switchgear	0										

Upcoming flexibility requirements for future load driven capacity needs

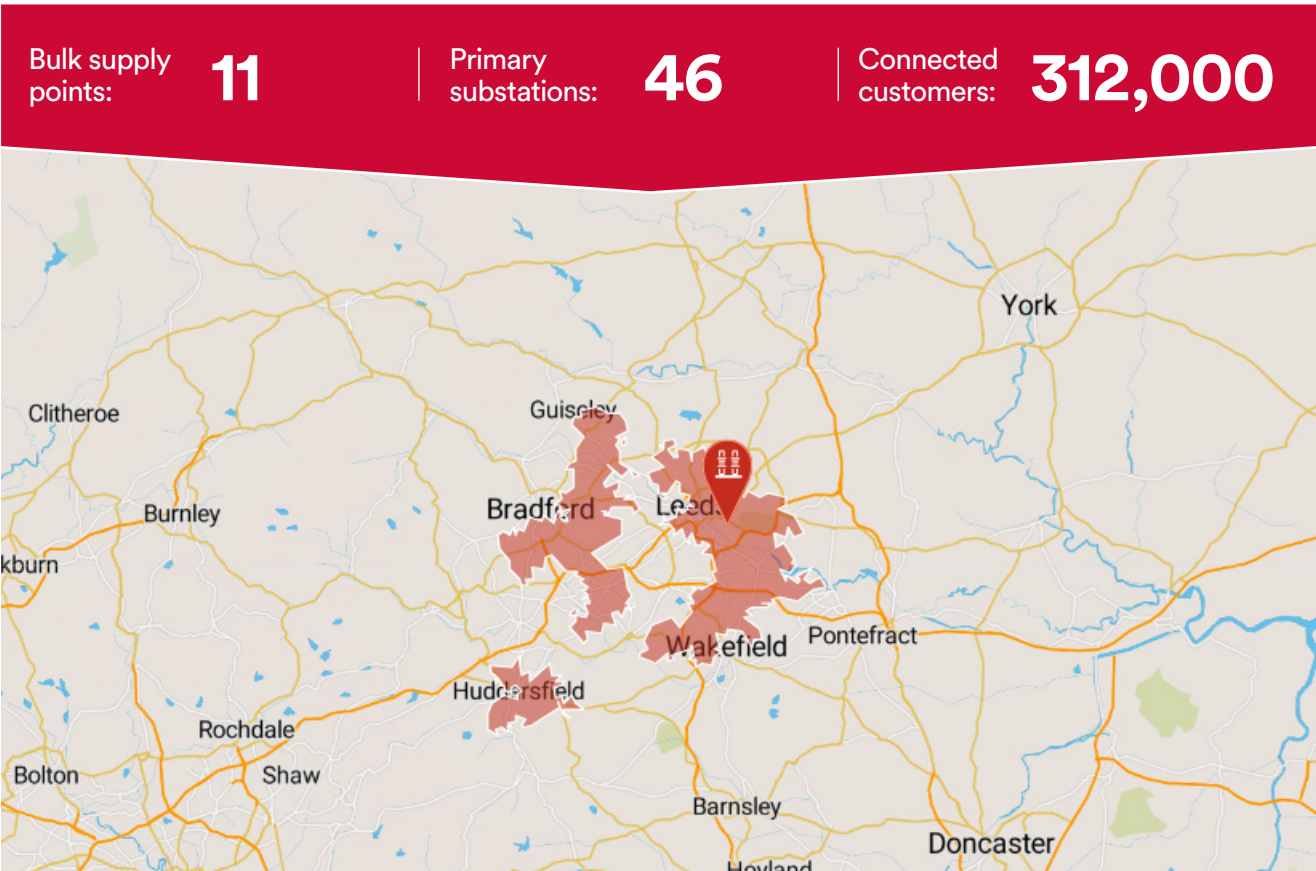
Substation name	Substation postcode	Postal sectors supplied from substation	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
No upcoming flexibility needs												

Skelton Grange

275/132kV Grid Supply Point

Licence area
Yorkshire

Postcode
LS10 1RS



Overview

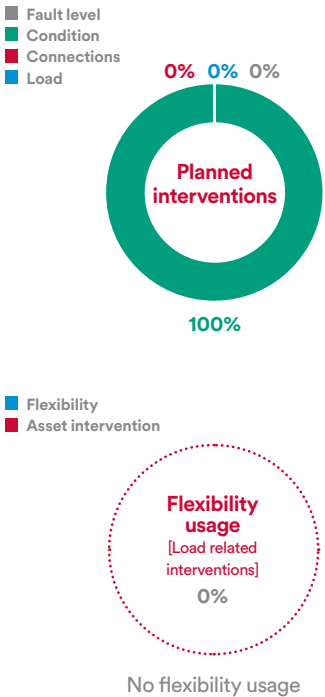
Skelton Grange 275/132kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘West Yorkshire’ operational region of Northern England within our Yorkshire licence area. This GSP serves 312,000 customers through 11 bulk supply points (BSPs) and 46 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 55% of the BSPs and 20% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

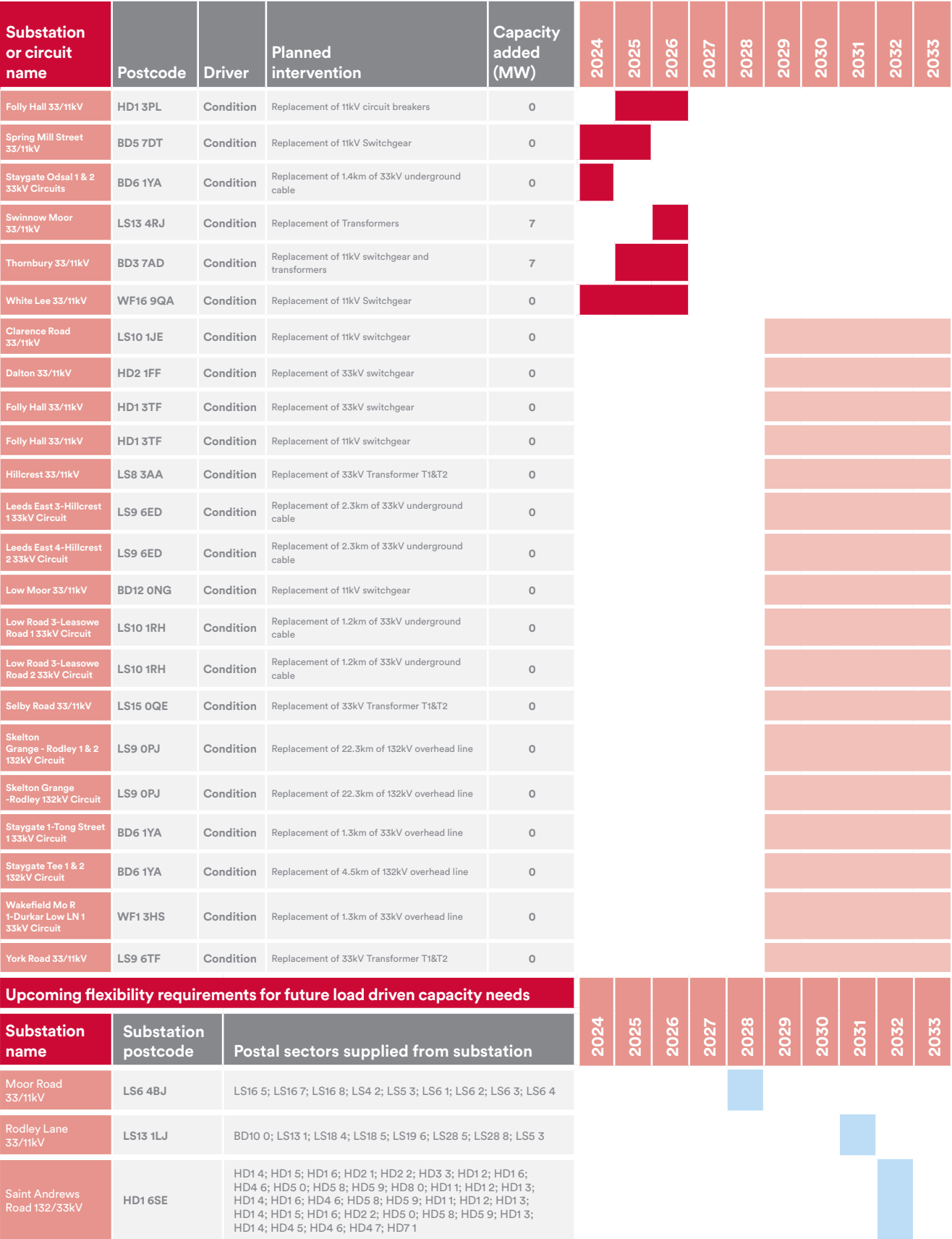
- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 3 substations where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the ‘Upcoming flexibility requirements for future load driven capacity needs’ table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

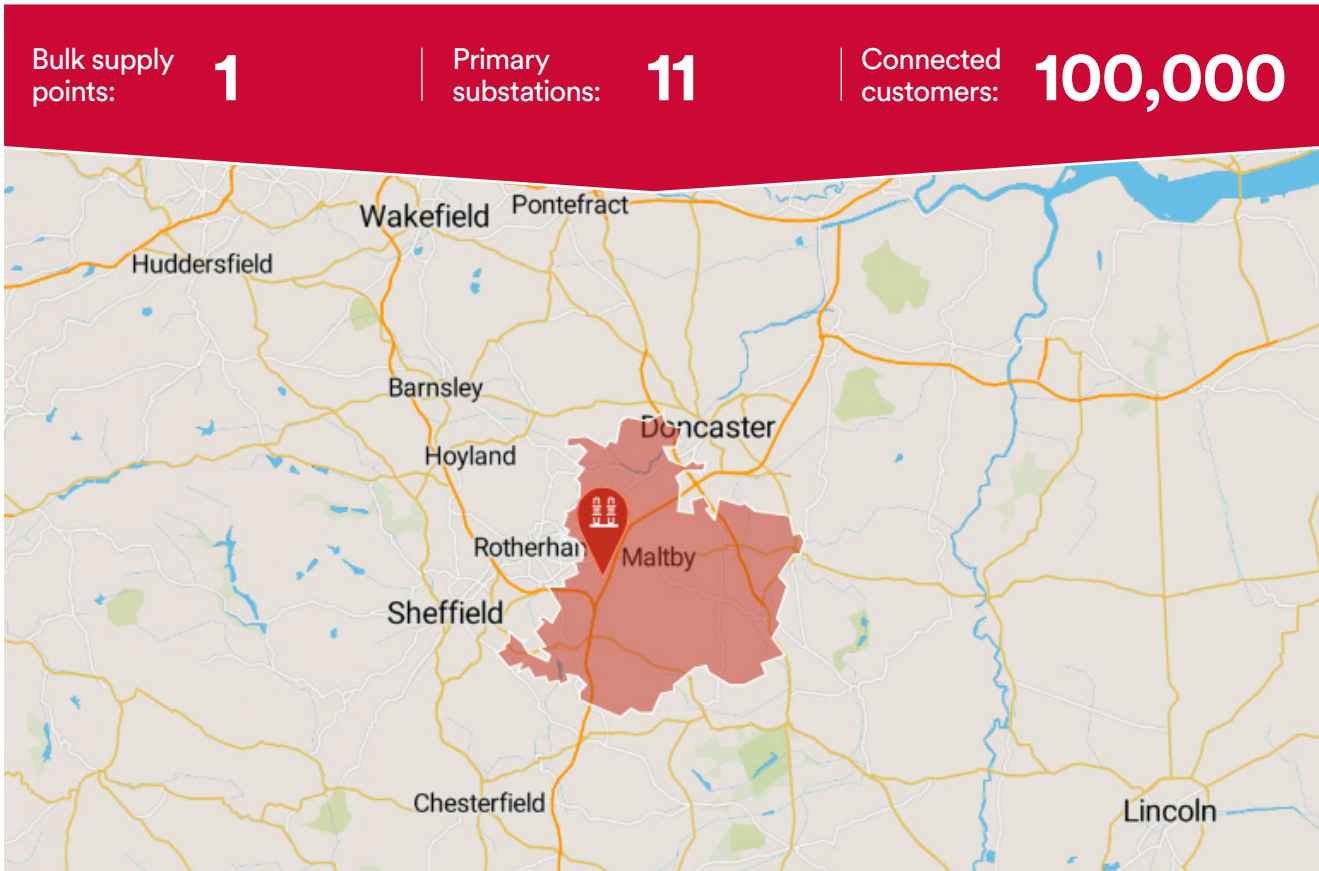


Thurcroft

275/66kV Grid Supply Point

Licence area
Yorkshire

Postcode
S66 9JD



Overview

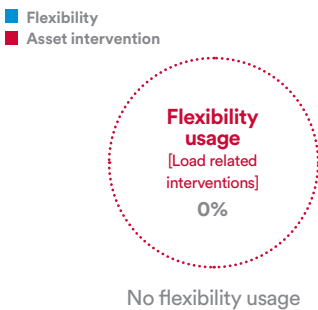
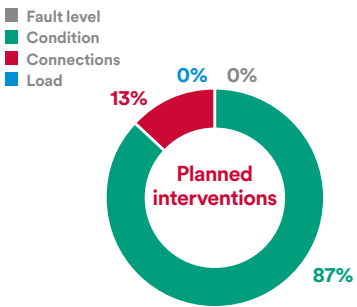
Thurcroft 275/66kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘South Yorkshire and North Lincolnshire’ operational region of Northern England within our Yorkshire licence area. This GSP serves 100,000 customers through 1 bulk supply point (BSP) and 11 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 100% of the BSPs and 36% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. The use of flexibility is not applicable to any of the substations within ‘The Flexibility Services and new infrastructure needs’ table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 2 substations where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the ‘Upcoming flexibility requirements for future load driven capacity needs’ table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Hackenthorpe 66/11kV	S12 4ET	Condition	Replacement of 66kV switchgear and 11kV switchgear	0										
New Orchard Lane 66/11kV	S66 9EP	Connections	Replacement of Transformer 1	0										
Beighton 1-Hackenthorpe 2 66kV Circuit	S26 4TL	Condition	Replacement of 4.1km of 66kV overhead line	0										
Edlington 66/11kV	DN12 1SU	Condition	Replacement of 66kV switchgear	0										
Edlington 66/11kV	DN12 1SU	Condition	Replacement of 11kV switchgear	0										
Edlington-Balby 2 66kV Circuit	DN12 1SU	Condition	Replacement of 2km of 66kV overhead line	0										
Kiveton Park 66/11kV	S26 6RP	Condition	Replacement of 66kV Transformer T1&T2	0										
Tickhill Road 2-Dinnington 1 66kV Circuit	S66 7QN	Condition	Replacement of 7.1km of 66kV overhead line	0										

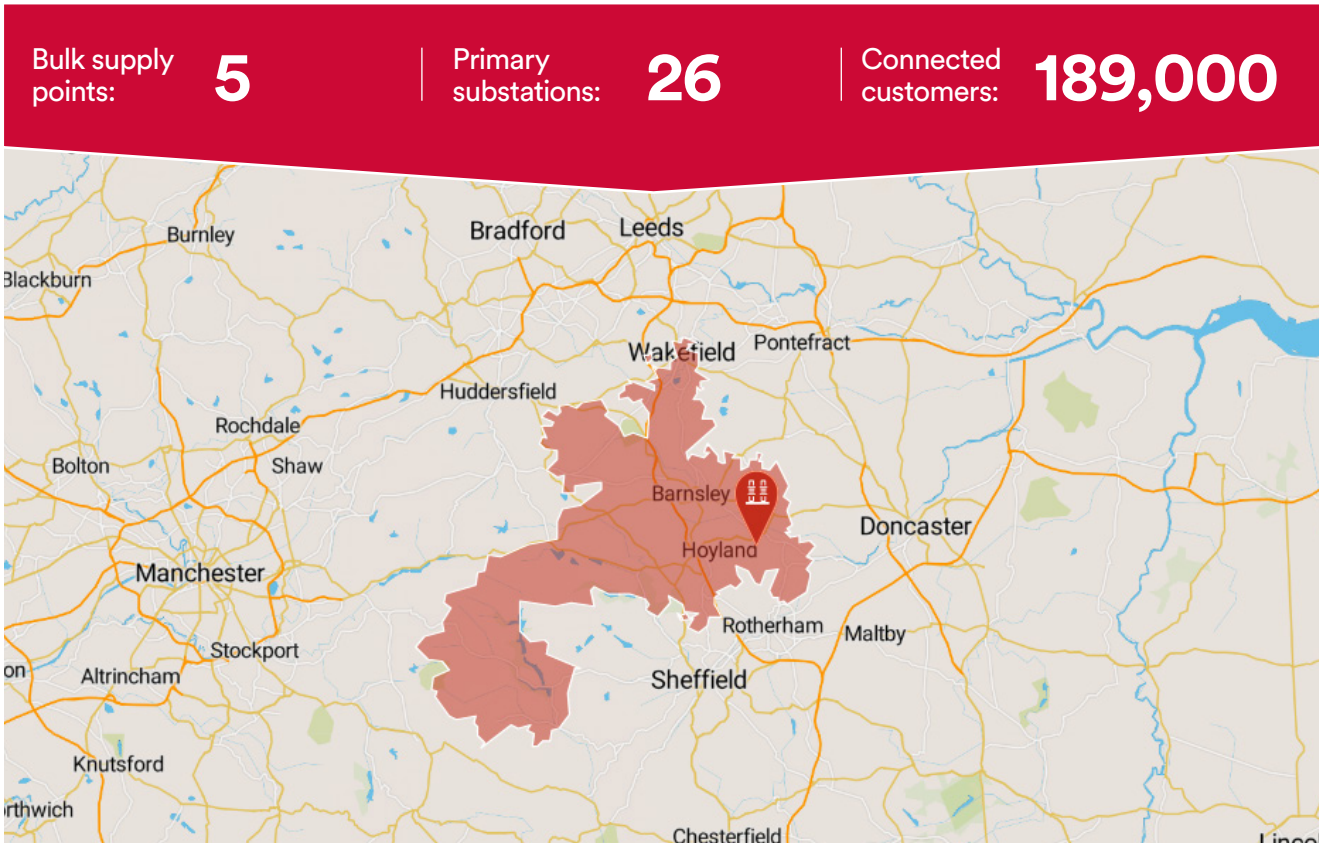
Upcoming flexibility requirements for future load driven capacity needs			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation										
Costhorpe 66/11kV	S81 9QR	DN10 6; DN11 8; DN22 8; S80 2; S81 0; S81 8; S81 9										
New Orchard Lane 66/11kV	S66 9HY	S25 1; S25 7; S26 3; S60 4; S66 1; S66 8; S66 9										

West Melton Section 3

275/132kV Grid Supply Point

Licence area
Yorkshire

Postcode
S63 6LS



Overview

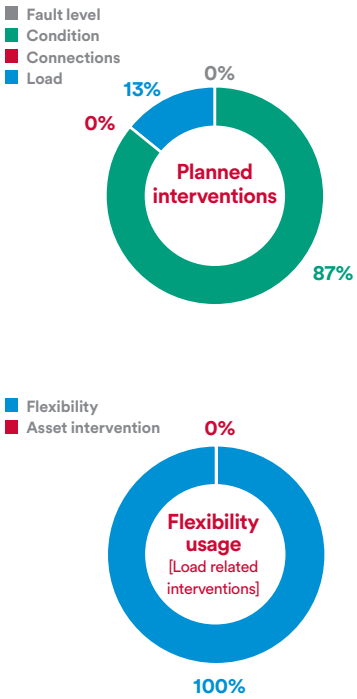
West Melton Section 3 Marsh 275/132kV Grid Supply Point (GSP) is situated in Northern Powergrid’s ‘South Yorkshire and North Lincolnshire’ operational region of Northern England within our Yorkshire licence area. This GSP serves 189,000 customers through 5 bulk supply points (BSPs) and 26 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 100% of the BSPs and 38% of this GSP’s primary substations in the next ten years. This is detailed in the ‘Flexibility Services and new infrastructure needs’ table.

- The distribution of the various types of planned network interventions is illustrated in the ‘planned interventions’ pie chart.
- The ‘flexibility usage’ pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our ‘flexibility first’ approach. Within ‘The Flexibility Services and new infrastructure needs’ table, the use of flexibility is applicable to 1 substation with load driven constraints and we have used flexibility there. As this represents the use of flexibility at 1 out of 1 substations, flexibility usage at this GSP is 100%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 3 substations where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the ‘Upcoming flexibility requirements for future load driven capacity needs’ table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name	Postcode	Driver	Planned intervention	Capacity added (MW)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Durkar Low Lane 33/11kV	WF2 7GP	Condition	Replacement of 11kV switchgear in a new switchroom.	0										
Ecclesfield 66/11kV	S35 9TG	Condition	Replacement of 66kV Circuit Breakers and 11kV switchgear	0										
Elsecar 66/11kV	S74 8HW	Condition	Replacement of 66/11kV transformer T1, 66kV circuit breaker and 11kV switchgear	1										
Scissett 66/11kV	HD8 9LS	Condition	Replacement of the 66kV circuit breaker	0										
Wheatacre Road 66/11kV	S36 8WQ	Load	Flexibility	1.3										
		Load	Addition of a second 66/11kV transformer and 11kV switchboard extension	4.8										
Worsborough Park 66/11kV	S70 5LY	Condition	Replacement of 66kV Circuit Breakers and 11kV switchgear	0										
Houghton Main - Dearne Road 66kV Circuit	S72 0GX	Condition	Replacement of 4.8km of 66kV overhead line	0										
Hunningley Tee 1 & 2 132kV Circuit	S70 3ET	Condition	Replacement of 3.5km of 132kV overhead line	0										
Tankersley Park 66/11kV	S35 2PT	Condition	Replacement of 66kV switchgear	0										
Tankersley Park 66kV Circuit	S35 2PT	Condition	Replacement of 4.2km of 66kV overhead line	0										
West melton 2-ecclesfield 2 66kV Circuit	S63 6EZ	Condition	Replacement of 10km of 66kV overhead line	0										
West Melton - Hunshef 1 & 2 132kV Circuit	S63 6EZ	Condition	Replacement of 17.5km of 132kV overhead line	0										
Woolley 66/11kV	S75 5JE	Condition	Replacement of 66kV switchgear	0										
Woolley 66/11kV	S75 5JE	Condition	Replacement of 11kV switchgear	0										

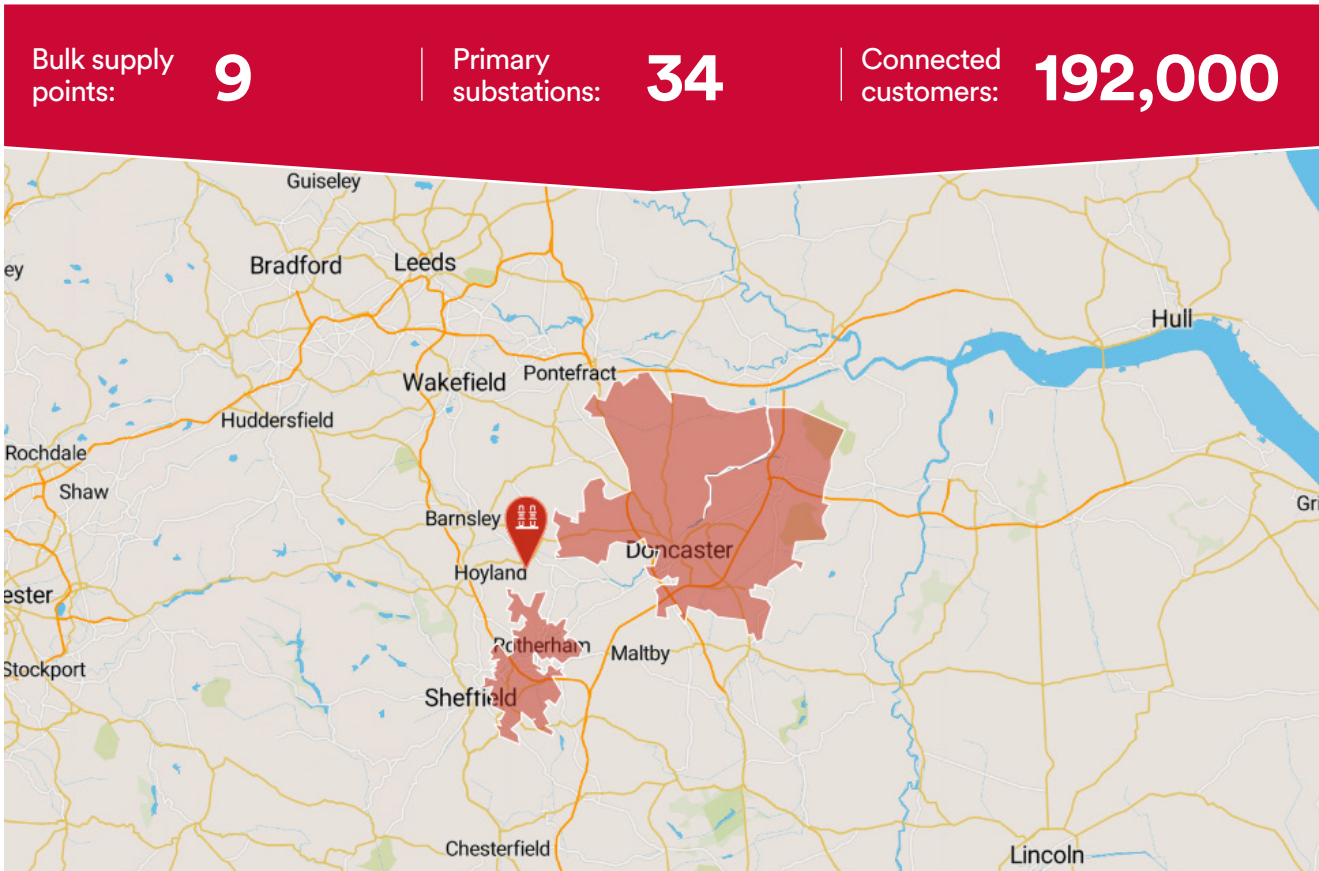
Upcoming flexibility requirements for future load driven capacity needs			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation										
Tankersley Park 66/11kV	S35 2PT	S30 4; S30 7; S35 1; S35 2; S35 3; S35 4; S35 7; S60 4; S61 2; S62 7; S70 5; S74 0; S75 3										
West Melton 132/66kV	S63 6EZ	S63 6; S70 3; S71 5; S73 0; S73 8; S73 9; S74 0; S74 9; S63 5; S63 6; S63 7; S71 1; S73 0; S30 3; S30 4; S30 9; S35 1; S35 8; S35 9; S38; S59; S61 2; S60 4; S62 7; S63 6; S73 0; S74 0; S74 8; S74 9; S63 0; S70 1; S71 5; S72 0; S72 7; S73 0; S73 9; S62 5; S62 6; S62 7; S64 5; S64 8; S30 4; S30 7; S35 1; S35 2; S35 3; S35 4; S35 7; S60 4; S61 2; S62 7; S70 5; S74 0; S75 3; S63 5; S63 6; S63 7; S63 8; S63 9; S64 0; S64 9; S72 0; S63 5; S70 4; S70 5; S70 6; S74 0; S74 8; S74 9; S75 3										
Wheatacre Road 66/11kV	S36 2GQ	S30 5; S35 0; S35 7; S36 1; S36 2; S36 3; S36 4; S36 9; S66										

West Melton/Thorpe Marsh

275/132kV Grid Supply Point

Licence area
Yorkshire

Postcode
S63 6LS



Overview

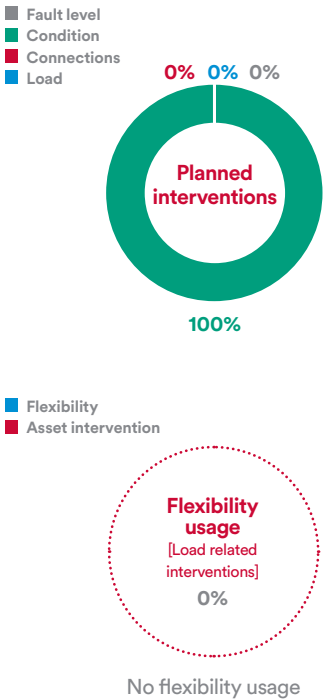
West Melton / Thorpe Marsh 275/132kV Grid Supply Point (GSP) is situated in Northern Powergrid's 'South Yorkshire and North Lincolnshire' operational region of Northern England within our Yorkshire licence area. This GSP serves 192,000 customers through 9 bulk supply points (BSPs) and 34 primary substations.

Our network analysis has highlighted the necessity for network intervention works at 67% of the BSPs and 35% of this GSP's primary substations in the next ten years. This is detailed in the 'Flexibility Services and new infrastructure needs' table.

- The distribution of the various types of planned network interventions is illustrated in the 'planned interventions' pie chart.
- The 'flexibility usage' pie chart outlines our utilisation of Flexibility Services for addressing load driven constraints, in alignment with our 'flexibility first' approach. The use of flexibility is not applicable to any of the substations within 'The Flexibility Services and new infrastructure needs' table so flexibility usage at this GSP is 0%. Flexibility Services are not suitable for deferring condition based reinforcement.

We have identified 2 substations where future network load is projected to surpass capacity within the next decade. We have detailed the sites considered suitable for Flexibility Services in the 'Upcoming flexibility requirements for future load driven capacity needs' table.

- We welcome all interested customers in the region who may be able to provide Flexibility Services in these potential future flexibility needs areas to contact us at flexibility@northernpowergrid.com.



Flexibility Services and

new infrastructure needs

Flexibility

Asset intervention delivery time

2029 - 2033 Asset intervention - Indicative (signposting)

Flexibility needs start year

Substation or circuit name					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Postcode	Driver	Planned intervention	Capacity added (MW)											
Attercliffe 132/33kV	S9 3FA	Condition	Replacement of Transformers	48										
Kirk Sandall 66/11kV	DN3 1HR	Condition	Replacement of 66kV Circuit Breakers	0										
Stainforth 66/11kV	DN7 5HD	Condition	Relocation of substation to a new suitable site and install new plant.	1										
Wheatley Park 66/11kV	DN2 4HG	Condition	Replacement of both 66/11kV Transformers, 66kV circuit breakers and the 11kV switchgear	0										
Armthorpe-Markham Gates 66kV Circuit	DN3 3DY	Condition	Replacement of 3.6km of 66kV overhead line	0										
Askern Primary 66/11kV	DN6 0BY	Condition	Replacement of 66kV Transformer T1&T2	0										
Balby 66/11kV	DN4 8DG	Condition	Replacement of 66kV Transformer T1	0										
Barnburgh 66/11kV	S63 9NT	Condition	Replacement of 11kV switchgear	0										
Blackburn Meadows 33/11kV	S9 1HF	Condition	Replacement of 11kV switchgear	0										
Brodsworth 66/11kV	DN5 7XB	Condition	Replacement of 66kV Transformer T1&T2	0										
Brodsworth 66/11kV	DN5 7XB	Condition	Replacement of 11kV switchgear	0										
Doncaster B 1-Rockware 1 66kV Circuit	DN5 8UX	Condition	Replacement of 5km of 66kV overhead line	0										
Hickleton 66/11kV	S63 0DE	Condition	Replacement of 66kV switchgear	0										
Hickleton 66/11kV	S63 0DE	Condition	Replacement of 11kV switchgear	0										
Hickleton 1-Brodsworth 2 66kV Circuit	S63 0DE	Condition	Replacement of 7.1km of 66kV overhead line	0										
Thorpe Marsh 5-Stainforth 1 Teed 66kV Circuit	DN5 8UX	Condition	Replacement of 12.1km of 66kV overhead line	0										
Upcoming flexibility requirements for future load driven capacity needs					2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Substation name	Substation postcode	Postal sectors supplied from substation												
Armthorpe 66/11kV	DN3 3DY	DN3 2; DN3 3; DN7 4; DN7 6; DN8 5;												
Doncaster B/ Thorpe Marsh 132/66kV	DN5 8UX	DN3 2; DN3 3; DN7 4; DN7 6; DN8 5; DN14 0; DN5 0; DN6 0; DN6 8; DN6 9; WF8 2; WF8 3; DN10 6; DN11 0; DN11 8; DN11 9; DN4 5; DN4 6; DN4 7; DN4 8; DN5 7; S63 0; S63 8; S63 9; S73 9; DN12 3; DN4 5; DN5 7; DN5 8; DN6 0; DN6 7; DN6 8; S63 7; DN5 7; S63 0; S63 9; DN1 2; DN2 4; DN2 5; DN5 9; DN2 4; DN2 5; DN3 1; DN3 2; DN3 3; DN7 4; DN2 5; DN2 6; DN3 2; DN3 3; DN4 5; DN4 6; DN4 7; DN20 8; DN2 4; DN2 5; DN3 1; DN3 2; DN3 1; DN6 0; DN7 4; DN7 5; DN7 6; DN8 5; DN10 6; DN14 0; DN14 4; DN14 8; DN14 9; DN17 4; DN6 0; DN7 5; DN7 6; DN8 4; DN8 5; DN85 4; DN11 0; DN11 9; DN3 3; DN4 6; DN4 7; DN4 8; DN9 3; DN3 3; DN9 3; DN1 1; DN1 2; DN2 4; DN2 5; DN2 6												

Contact us

We invite feedback from stakeholders to improve our decision-making and communication processes as we work towards a flexible, future-ready distribution network.

Please contact our System Forecasting team via email at opendata@northernpowergrid.com if you have any feedback or questions.