

REINFORCEMENT WORKS – CONNECTION OFFER GUIDANCE

REF-NET-COM-022	Reinforcement Works – Connection Offer Guidance		Applies to
			Distribution ✓
Revision: 1.00	Classification: Public	Issue Date: July 2026	Review Date: July 2034

	Name	Title
Author	Maryline Guinard	Connections Policy Analyst
Checked by	Michael Allison	Connections Policy Engineer
Approved by	Rob Gladstone	Connections Policy Senior Manager

CONTENTS

1	Introduction	3
2	References	3
3	Background	3
4	Why Reinforcement Works May Be Required	3
5	Cost of Reinforcement Works	4
6	Reinforcement Types	4
7	Other Dependencies	5
8	National Electricity Transmission System (NETS) Reinforcement Works	5
9	Revision History	5

REF-NET-COM-022	Reinforcement Works – Connection Offer Guidance		Applies to
			Distribution ✓
Revision: 1.00	Classification: Public	Issue Date: July 2026	Review Date: July 2034

1 Introduction

This Guidance Note provides supporting information on ‘Reinforcement Works’ for the Distribution System Connection Offer provided to the Customer by the Company. This Guidance Note applies to large and major ‘Demand’ and/or ‘Generation’ Connection Offers.

Reference to this Guidance Note when reviewing and interpreting Connection Offers is essential to ensure consistent interpretation and approach.

2 References

The documents detailed in Table 2.1 – Scottish and Southern Electricity Networks Documents should be used in conjunction with this document.

Table 2.1 – Scottish and Southern Electricity Networks Documents

Reference	Title
REF-NET-COM-004	SSEN Standard Terms and Conditions for Large and Major Demand Connections
REF-NET-COM-019	SSEN Standard Terms and Conditions for Large and Major Generation Connections
REF-NET-COM-020	Connection Offer – Glossary of Defined Terms
REF-NET-COM-021	Alternative Providers – Connection Offer Guidance
REF-NET-COM-023	Transmission Works – Connection Offer Guidance
REF-NET-COM-024	Site Requirements – Connection Offer Guidance
REF-NET-COM-025	Land Rights – Connection Offer Guidance
REF-NET-COM-026	Metering – Connection Offer Guidance
REF-NET-COM-027	Flexible & Curtailable Connections – Offer Guidance
REF-NET-COM-028	Change & Variations – Connection Offer Guidance
REF-NET-COM-029	Project Programming – Connection Offer Guidance

3 Background

The Company is a regulated Distribution Network Operator (DNO) owning and operating electricity distribution networks through its companies Southern Electric Power Distribution plc in southern England and Scottish Hydro Electric Power Distribution plc in the north of Scotland.

This Guidance Note clarifies, supports and should be read with the Connection Offer made by the Company to the Customer. This Guidance Note gives details of the reinforcement works to the electricity Distribution System that may be required to enable the Customer’s Connection. The Customer should contact the Company if it has any queries about the information contained in this Guidance Note.

4 Why Reinforcement Works May Be Required

The Company is a regulated Distribution Network Operator (DNO) owning and operating electricity distribution networks through its companies Southern Electric Power Distribution plc in southern England and Scottish Hydro Electric Power Distribution plc in the north of Scotland.

In order for the Customer’s Premises or site to be connected to the Company’s electricity Distribution System, some changes may require to be carried out to that Distribution System to reinforce it and ensure that it can accommodate the requested Connection. This may be because of the Customer’s Connection’s effect on the thermal capacity, volts or fault levels or a combination of these.

REF-NET-COM-022	Reinforcement Works – Connection Offer Guidance		Applies to
			Distribution ✓
Revision: 1.00	Classification: Public	Issue Date: July 2026	Review Date: July 2034

This requirement for Distribution System reinforcement associated with/triggered by the Connection will be assessed by the Company following the connection application and will be further reviewed during detailed design and as part of ongoing reviews of the Distribution System.

5 Cost of Reinforcement Works

The Company will fund some of the Distribution System reinforcement works in accordance with regulatory rules where the benefit of the reinforcements for the electricity Distribution System is wider than simply enabling the Customer's project, but the Customer may require to pay for an element of charges associated with this reinforcement. The Company will charge the Customer for investment into Distribution System reinforcement in accordance with the Electricity (Connection Charges) Regulations (as amended from time to time) and the Company's Statement of Methodology and Charges for Connection.

The cost will be apportioned between the Company and the Customer based on the type of connection and the capacity of the electricity connection the Customer applied for and the new Distribution System capacity after the reinforcement has taken place. Some worked examples of different reinforcement and this sharing of costs are provided in the Company's Statement of Methodology and Charges for Connection which may be found [here](#).

Where the Customer is a second comer – i.e., makes use of reinforcement works carried out for a prior customer's project – the Customer may require to make payment for its share of the benefit of those reinforcements in accordance with the Electricity (Connection Charges) Regulations (as amended from time to time). Equally the Customer may be refunded where a subsequent second comer makes use of reinforcement works it has paid for.

More detail can be found at: [Access SCR - SSEN](#).

Where investment is required for assets for a connection project, but this is not as a result of reinforcement then cost apportionment will not apply. Sole use assets must be paid for by the Customer.

6 Reinforcement Types

There are a number of different types of electricity Distribution System reinforcements that may be triggered by a Connection, including but not limited to the following:

- **Thermal driven reinforcement:** Reinforcement due to thermal capacity (potential overload) is required when the requested demand and/or generation exceeds the current rating of the existing equipment on the distribution system. Reinforcement to resolve this may be required on transformers, underground cables, overhead lines or a combination of these
- **Voltage driven reinforcement:** Reinforcement due to voltage rise or fall (potential volts too high or too low) is required when the requested demand and/or generation would cause the volts on the network to be out-with the statutory limits for voltage. Reinforcement to resolve this may be required on transformers, underground cables, overhead lines or a combination of these
- **Fault Level driven reinforcement:** The fault level is defined as the amount of current which would flow into a fault, from all sources, at any given location on the electricity Distribution System. Network equipment such as circuit breakers, lines and cables are designed to safely handle a stated fault level, if this is exceeded it may damage the equipment and lead to unsafe conditions. Therefore, reinforcement due to fault level requires equipment to be replaced with that of a higher rating

REF-NET-COM-022	Reinforcement Works – Connection Offer Guidance		Applies to
			Distribution ✓
Revision: 1.00	Classification: Public	Issue Date: July 2026	Review Date: July 2034

7 Other Dependencies

Where reinforcements or other works required for a project that is before the Customer in the queue of connections are also required to enable the Customer's project, then the Customer's project will be 'dependent' on that earlier project. Those prior works will need to be completed before the Customer's project can be connected. Where the timing of those prior works changes this may impact the Customer's estimated connection date, or if the other project does not progress for any reason, the Customer's Connection Offer may need to be varied.

Additional or amended Protection may be required on the Distribution System following changes.

8 National Electricity Transmission System (NETS) Reinforcement Works

The electricity Distribution System forms part of the whole electricity system for Great Britain. Reinforcement works may also be required to the NETS to enable the Customer's Connection to the Company's electricity Distribution System. For many connections, the Company will require to apply to the National Energy System Operator (NESO) for an assessment as to whether NETS reinforcements will be required.

Where NETS reinforcements are required, the Customer may require to make additional payments and provide security against project cancellation, and the time for the Connection may be delayed. Where the Customer's Connection Offer identifies that reinforcements to the NETS will or may be required the Customer should refer to the separate Guidance Note on Transmission Works.

9 Revision History

No	Overview of Amendments	Previous Document	Revision	Authorisation
01	New Guidance Document	Not Applicable	1.00	Rob Gladstone
02				