

An aerial photograph of a residential street. The houses are two-story brick buildings with brown roofs. There are many trees and greenery around the houses. A road with a white zebra crossing is visible in the lower right. A teal diagonal shape is overlaid on the bottom left corner, containing text.

nationalgrid

# Guidance on requesting a new or augmented connection

A guide to application procedures  
for customers wishing to apply for  
new or augmented connections

September 2022

# Guidance for new or augmented connections

A guide to the procedures for customers requiring new connections or an augmentation to an existing connection

This guidance will provide you with all the information you need to complete an application for a new or augmented connection.

This application process is not to be used for predominantly generation connections which should follow the relevant G98 or G99 processes.

## 1 Correspondence details

Applications for a connection to our Distribution System can either be made by the owner or occupier of the premises, or by an approved contractor, supplier or agent, acting with the consent of the owner or occupier. As a minimum we require the customer correspondence and site address details. If you are acting on the customer's behalf, please enter your details in section 3.

The customer detailed in Section A Part 1 will be the person or company responsible for accepting the Connection Offer, entering into a binding contract with National Grid Electricity Distribution, and making any payment due.

For more information on payment options, please see section 16 of this document.

## 2 Type of connection offer

There are a number of different types of estimate or offer we can provide, depending on which stage you are at in the process. This can range from early stage investigations prior to submitting planning applications through to a requirement to enter into a contract to install the connections once the construction of new premises is underway.

### Budget estimate

A budget estimate is a free of charge service to provide an indication of the likely cost of connection. We do not carry out any detailed design work or visit site and the estimate may not identify necessary network reinforcement. The price estimated at this stage, therefore, may vary significantly from the price calculated in any Feasibility Study or Connection Offer. A guidance leaflet on budget estimates is available on our website or on request.

### Feasibility study

A feasibility study may be preferable to a budget estimate for more complex connections and involves a more detailed assessment that may consider a number of connection options. When more than one viable option is available, we will provide estimated costs for each option. You may then decide which option you would like to progress to apply for a Connection Offer. There is a charge associated for this type of study, in accordance with our Connection Charging Methodology Statements.

### Connection offer

If you require a connection offer, we will undertake a more detailed assessment of the network, design the solution including any reinforcement required, and calculate the associated connection charge. The connection offer may include two options for acceptance. The first option will include a price for us to undertake all of the connection works. The second option will include a price for us to undertake the works that only we are allowed to do; the 'non-contestable works'. You can get a competitive quotation for the remaining works; the 'contestable works' and appoint an accredited Independent Connection Provider (ICP) to undertake these works. More information on the options available for using an ICP can be found in the Competition in Connections section of our website.

**The connection offer includes all our terms and conditions for connection which, once accepted, will become a binding contract between us. In some instances, the Assessment & Design fees will need to be paid, irrespective of whether or not you accept the connection offer. For more information, please refer to Section 15 of this document.**

## 3 Type of connections required

It is important that we understand the type of development to which connections are required and whether or not you need a temporary supply.

### Temporary supply

A temporary supply is a connection which will be utilised for less than 5 years, usually by onsite construction teams during the build out of the development, e.g. for power tools and site offices. It is important to note that the cost for subsequent disconnection is not usually included within the connection offer. We will require a formal disconnection request when the temporary connection is no longer needed.

### New connections

A new connection is a permanent connection to our network. Please indicate whether the development is made up of domestic or commercial premises, or a combination of both. This question also applies where your request is for an augmentation, such as an increase in capacity, e.g. to increase capacity at a factory select Business Premises.

## 4 Domestic connections

Please enter the number of connections required to domestic premises and the power required, in kVA, taking account of diversity. If you require a three phase connection to domestic premises, please provide details in Section L - Additional Information.

### Landlords supplies

A landlords supply may be required for electrical equipment which is not related to a single premises. This may include, for example, lighting within a communal entrance to a block of flats, electronic access gates or sewerage pumping stations.

## 5 Business premises

Please enter the number of connections required to business premises and the power required, in kVA. This will include all commercial and industrial units from small shops and offices to schools and through to large scale factories.

### Earthing arrangements

In some instances we will be unable to provide an earthing solution, for example where the building is steel framed and subdivided into units. We will identify within our Connection Offer any requirement for you to provide your own earthing solution via your electrical contractor. For more information on earthing arrangements, please see our website [connections.nationalgrid.co.uk/information-for-electrical-installers](https://connections.nationalgrid.co.uk/information-for-electrical-installers)

## 6 Disturbing loads

Potentially disturbing equipment is electrical equipment of a type that may cause electrical disturbances (or 'interference') that could be unacceptable to other customers. We need to be notified if you are planning to connect any motors, welders or other potentially disturbing equipment.

### Electricity safety, quality and continuity regulations 2002

Regulation 26 of the Electricity Safety, Quality and Continuity Regulations 2002 specifies the procedure to use if we consider that an installation is causing, or would cause, disturbance and also the procedure to challenge our refusal to give or continue a supply. If a load is causing or would cause disturbance we can issue a notice in writing requiring remedial works within a reasonable period: if this remedial work is not carried out we may disconnect or refuse to connect.

## Examples of potentially disturbing equipment

Motors	Welders	Electric vehicle charge points	Heat pumps
Sprinkler systems	Induction furnaces	Arc furnaces	Kilns
Train traction	Generators	Switched capacitors	Motor drives (VSDs)
Electric boilers and other equipment compliant with British Standard BS EN 61000-3-11, BS EN 61000-3-12		Industrial/commercial AC regulators (agricultural lighting control or industrial heating control)	Multiple personal computer installations (e.g. large offices, data centres etc)

## What information should be provided?

Please provide as much information about the equipment you are proposing to install as possible and enclose the manufacturer's specification. We will assess the information you provide but if we are unable to carry out a detailed assessment of the potential impact on the network as a result, we may request further information from you. This will usually be via a Standard Data Collection Form and your electrical contractor or equipment manufacturer may be able to assist you in completing the form. Copies of the Data Collection forms are available to download at [energynetworks.org](https://energynetworks.org)

## Electric vehicles and heat pumps

The Energy Networks Association (ENA) have developed an industry agreed notification/application form. Completion of this form ensures that we have all relevant details to avoid any delays in carrying out an accurate assessment for your connection requirements. A copy of the form is available on our website at [connections.nationalgrid.co.uk/guidance-on-connecting-a-new-ev-charging-point-or-heat-pump](https://connections.nationalgrid.co.uk/guidance-on-connecting-a-new-ev-charging-point-or-heat-pump) and available via the ENA website [energynetworks.org](https://energynetworks.org)

More information on electric vehicles and heat pumps is available on our website at [connections.nationalgrid.co.uk/guidance-on-connecting-a-new-ev-charging-point-or-heat-pump](https://connections.nationalgrid.co.uk/guidance-on-connecting-a-new-ev-charging-point-or-heat-pump)

## 7 Details of electrical load

It is important that we understand the electrical loads to be connected to your supply, particularly heating and water systems. This will ensure that we provide an accurate connection installation which will be fit for purpose once the premises are occupied.

### Ground and air source heat pumps

Low carbon technologies are expected to play an important role in achieving the UK's targets for improving air quality and reducing carbon emissions. The Energy Networks Association (ENA) website has a database of Heat Pump technologies available. They have created a combined application form which can be used for both electric vehicle charging points and heat pumps. Please ensure to enclose a copy of this form should you wish to install a Ground or Air Source Heat Pump. The form is available to download on our website at [connections.nationalgrid.co.uk/guidance-on-connecting-a-new-ev-charging-point-or-heat-pump](https://connections.nationalgrid.co.uk/guidance-on-connecting-a-new-ev-charging-point-or-heat-pump)

## 8 Meter box

We can provide, on request, single phase flush fit or surface mounted meter boxes and three phase flush fit meter boxes.

### Flush fit

This is best built into new brickwork but can be fitted afterwards.

### Surface mounted

This fits directly onto the outside wall. A surface mounted box protrudes by 230mm so you need to ensure this will not cause an obstruction or be likely to be damaged.

### Please note:

Once we have completed our works the meter box and cable guard becomes your property and it is your responsibility to ensure it is maintained in good condition. However, please contact us before any repair or maintenance work is carried out.

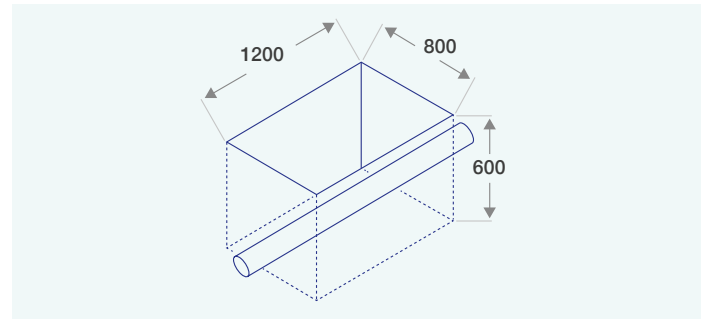
## 9 Excavation

We will undertake excavation within the public highway in accordance with the New Roads & Streetworks Act 1991 (NRSWA) and in land which is owned by a third party with their consent (see section 17). We can provide onsite excavation upon request.

It is usually simpler, however, for you to arrange the onsite excavation yourself.

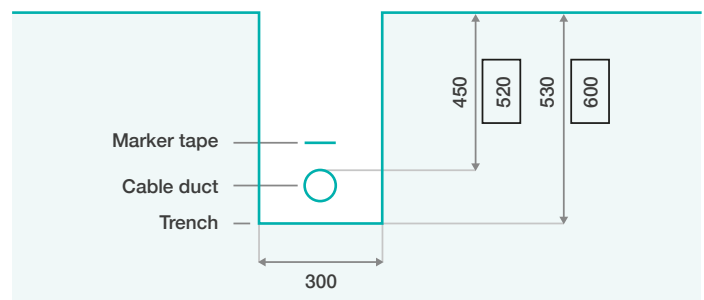
## Joint hole

If we are bringing mains cables into site for multiple plot connections, we will require joint holes for each service connection point. The diagram below shows the minimum dimensions required.



## Trench work

Cables are normally laid in black electrical ducting and all cables should have an electrical warning marker tape laid for the entire length 75mm above the cable depth. You may collect ducting and marker tape from your local National Grid Electricity Distribution office.



## 10 Generation

We recognise the role that renewable energy generation can have in helping individuals and organisations to combat climate change and prepare for a low carbon future. It is important, however, that we are aware of any proposed generation installations, to be connected to your new or augmented connection, to enable us to assess any potential impact on our network.

If your proposed installation complies with the Energy Networks Association document ER G98 "Requirements for the connection of Fully Type Tested Micro-generators (up to and including 16A per phase) in parallel with public Low Voltage Distribution Networks", please provide details of the size and type of installation on your application for a new/augmented connection.

For larger installations, in accordance with ER G99 "Requirements for the connection of generation equipment in parallel with public distribution networks", please enclose a completed G99 form with your application for a new or augmented connection.

More information, including guidance documents, can be found at [energynetworks.org](https://energynetworks.org)

## 11 Build out programme

It is useful to understand how a development may be built out over a period time to assist with providing a design solution for the required connections, proposals for staged payments and consideration of the construction of new and reinforced network assets in line with the required ramp up of capacity.

At this stage we require only an indication of the anticipated programme of works. We appreciate that programmes can and do change, and updates to this programme can be discussed with your allocated contact post acceptance of a connection offer.

## 12 Site plans

### Site location plan

We require a Location Plan to identify the proposed site for the new connection. The plan should include identifiable markers, such as existing buildings and identify the boundary of the development site. Location plans can be obtained by using A-Z street maps or via the internet. Sites which offer instant location plans include: [multimap.com](https://www.multimap.com) and [ordnancesurvey.co.uk](https://www.ordnancesurvey.co.uk)

### Site layout plan

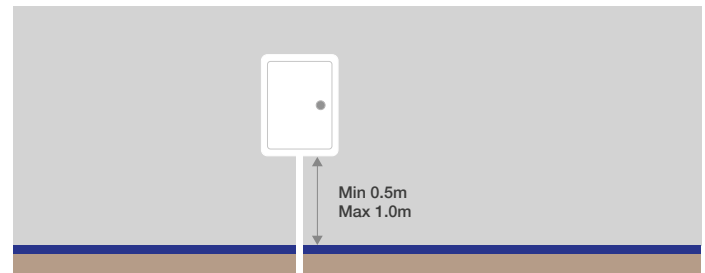
In the absence of an architect's drawing, all applications need to have a Site Layout Plan enclosed. This should include proposed road layouts and buildings. It should also identify temporary and permanent accesses to the site. Any existing buildings to be demolished should be marked on the plan. To ensure an accurate design and cost, measurements should be taken from permanent features such as existing buildings, boundaries, footpaths and kerb lines. Measurements should be legible and easy to read. Meter positions should be marked on the plan (see information below on acceptable meter positions)

The absence of this information may not prevent a connection offer from being issued but may affect the accuracy of the connection charge. Variations to the connection offer may be required at a later date to adjust the price, taking account of actual locations and measurements once identified.

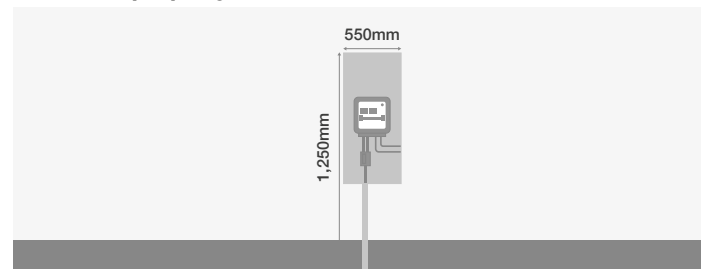
### Meter positions

An external meter box offers the benefit of providing easy access meter reading and maintenance works being carried out with little or no inconvenience to you. An external meter box must be placed on the external side of a wall where it is accessible from the front of the property. It is advisable that a meter box does not open out onto a footpath or right of way.

### In a meter box located externally on an outside wall



### Inside the property on an external wall



### Permissible meter locations

- In an external meter box (recommended).
- Inside the property on an **external** wall.
- In a suitable weather proof meter cubicle.

### Meters should not be located

- Inside a dustbin, coal or refuse store.
- Above doorways.
- In a bathroom, toilet or shower room.
- In a basement or cellar.
- Under stairs where the headroom is less than 2m.
- On partition walls made of plasterboard, drywall or similar.
- Close to a source of water that could damage the equipment or cause an electrocution risk.
- In any location which is in breach of the current edition of BS7671 "Requirements for Electrical Installations".

## 13 Additional information

Please provide details of any further information you feel may be useful towards your application for connection. This may include a schedule of property types and sizes, site conditions that you need to make us aware of (for example, potential hazards such as asbestos and ground contamination). This will help us to provide a more accurate assessment of the works required to facilitate your required connections and the associated costs.

## 14 How do I progress my application?

**Please send your completed application form with supporting documentation to:**

**National Grid Electricity Distribution  
Records Team**

6th Floor  
Toll End Road  
Tipton  
DY4 0HH

**T: 0121 623 9007**

(Lines are open Mon to Fri 08:00-17:00)

**[nged.newsupplies@nationalgrid.co.uk](mailto:nged.newsupplies@nationalgrid.co.uk)**

## 15 Connection offers

We are required to issue budget estimates and connection offers within restricted timescales in accordance with the Connection Guaranteed Standards of Performance, although our offers are usually sent much earlier than the target date. With the exception of budget estimates which cannot be accepted, our connection offers are valid for a period of 90 days. To proceed with an offer within the 90 day window, the customer will need to sign the acceptance and return it along with any payment which is due.

### Electricity (connection charges regulations)

When you make an application for connection, we may charge you for the time spent preparing the offer for connection in accordance with the Electricity (Connection Charges) Regulations 2018. We will require payment even if you do not accept the offer. The charge covers costs we reasonably incur when assessing the impact of the proposed connection on the distribution/transmission system, designing the connection (including any reinforcement works) and preparing the offer.

At the time of publication of this document, we have limited the recovery of connection offer expenses to larger schemes that require elements of works at 22kV and above.

To find out more on the Regulations applied to the connection offer processes, including Connection Guaranteed Standards of Performance and the Electricity (Connection Charges) Regulations, please visit our website at [connections.nationalgrid.co.uk/legal-permissions-and-consents](https://connections.nationalgrid.co.uk/legal-permissions-and-consents)

## 16 Payment options

The ways in which you can make payment to move your electricity supply are set out below. Cheques may be enclosed with your completed application form but if you wish to use one of the alternative payment methods you will need to obtain your reference number from us beforehand.

### Cheque

Cheques should be made payable to: 'National Grid Electricity Distribution' and posted to: National Grid Electricity Distribution, AR Payments Team, PO Box 231, Elliott Road, Plymouth, PL4 0YU.

### Telephone

We accept most major credit & debit cards (charges may apply). Please note, for security reasons, the person making the call must be the registered card holder. Please call 01752 502187 during office hours and quote your National Grid Electricity Distribution reference number.

### Internet banking/bank transfer (bacs)

You can also make a payment from your bank account using the following details:

Account Name: National Grid Electricity Distribution  
Bank Account Number: 22410923  
Sort Code: 40-14-13

**Please quote your National Grid Electricity Distribution reference number. If applicable please send remittances to National Grid Electricity Distribution, AR Payments Team, PO Box 231, Elliott Road, Plymouth, PL4 0YU or email: [nged.remit@nationalgrid.co.uk](mailto:nged.remit@nationalgrid.co.uk)**

## 17 Legal permissions and consents

To provide a new connection we sometimes need to position our equipment, such as overhead lines, underground cables and substations, on private land. When this is necessary we have to secure our equipment by legal agreement (Wayleaves or Deeds/Easements) with landowners or occupiers. The type of land rights agreement we require will depend on the location and voltage of the equipment being installed.

More detailed guidance, including information for landowners and customers, is available on our website at [connections.nationalgrid.co.uk/legal-permissions-and-consents](https://connections.nationalgrid.co.uk/legal-permissions-and-consents)

## 18 Scheduling the works

We will contact you following receipt of your acceptance and any payment due to discuss the scheduling of the works. Where we are able to, we will agree a date to carry out the works. Where we require pre-requisite works to be completed beforehand, such as obtaining legal consents, we will discuss the process with you.

We require 4 weeks minimum notice to schedule the works. In some cases, this may be longer, e.g. if we need to request a road closure. If you have asked us to carry out the excavation works, we may do this in advance and our reinstatement team may not visit until a few days after completion to finish off reinstatement works.

## 19 Project management

Once you have accepted, we will provide you with details of the team member who will be looking after your project.

This may include a technician responsible for scheduling the works and a wayleave officer responsible for managing the progress of the legal and consents processes.

Our teams will keep in contact with you throughout your project but you may also contact them at any time should you wish to discuss any aspect of the delivery of your connection.

## 20 MPANs and metering

We are not an energy supplier and therefore you cannot set up your billing accounts with us. We will provide you with a Meter Point Administration Number (MPAN) for each connection. As it is unique to each premises, it is important that we register these against a postal address therefore please provide details of the final postal addresses once known.

### When will the MPAN be issued?

For small scale developments, we will raise the MPANs when we schedule the works and issue them to you by post. For larger scale developments with multiple premises, we will raise MPANs as connections are requested. This will mean you receive multiple releases of MPANs rather than one long list. It is important that they are generated closer to the time of the connection being completed as unregistered MPANs become obsolete after a period of time.

### Registering with a supplier

National Grid Electricity Distribution are not a supplier and therefore you cannot pay your electricity bills to us. You will need to choose a supplier and register your MPANs with them to set up billing accounts for each premises. The supplier will provide you with another reference unique to them but the MPAN will remain linked to that property for the lifetime of the connection.

Your supplier will be responsible for arranging the installation of the meters and issuing bills for the charges associated with taking electricity from the distribution network.

## 21 Completion

We aim to complete the works in the timescales set out in your connection offer. The timescales will vary depending on the size of the development but can range from 90 days for a single domestic premises to several years for large scale housing and commercial developments.

Once the connection works are completed and your supply is live, the Distribution Network Operator will be responsible for the ongoing operation, repairs and maintenance of the assets they own which supply your connection.



## Important

To prevent your application from being delayed, please ensure you have enclosed all the required information.

- **Completed application form**
- **Location plan**
- **Site layout plan**
- **Manufacturer's specification sheet** (if you are installing electric boilers, heat pumps, generation, or similar electrical equipment)

## What happens next?

### National Grid Electricity Distribution:

**1**

Assess the information you have provided, contact you to provide details of the local team responsible for the connection and, if required, request any additional information.



**2**

Send you a Connection Offer which is valid for 90 days.



**3**

On receipt of acceptance and payment, contact you to agree the dates for the works or discuss any pre-requisite matters, such as obtaining legal consents.



**4**

If required, enter into a legal process to obtain permissions for access to install and maintain our equipment.



**5**

Send you a Meter Point Administration Number (MPAN).



**6**

Complete all works to make the connection as stated in the Connection Offer.



### Customer:

Provide additional information where requested.

To accept the Connection Offer, sign and return the Letter of Acceptance together with any payment due.

Prepare your site for our arrival in accordance with the requirements set out in your Connection Offer. This may include meter box installation and onsite excavation.

To ensure the legal process runs smoothly, provide any information possible about the land on which the site is based. More information and a guidance document is available on our website: [connections.nationalgrid.co.uk/legal-permissions-and-consents](https://connections.nationalgrid.co.uk/legal-permissions-and-consents)

Register your MPAN with a supplier and enter into a supply contract.

Appoint a suitably qualified electrician to carry out any internal wiring and connect this to your supply.

Arrange with your supplier or meter operator a date to install your new meter. Please note, the meter can only be installed after we have completed the connection works.



