



# Budget Estimates

Your Budget Estimate Explained

September 2023

**Electricity  
Distribution**

**nationalgrid**

# A guide to help you understand your Budget Estimate and to outline your options for obtaining an offer to connect to NGED's Distribution System

Thank you for requesting a Budget Estimate for a connection to our distribution system. This guide is designed to help you understand the basis upon which the Budget Estimate is prepared and to highlight the options available to you should you wish to proceed to a formal offer for connection (the 'Connection Offer').

## Budget Estimate

Provision of a Budget Estimate is a free of charge service, the purpose of which is to give you an indication of the likely cost of your connection(s). We do not carry out any detailed design work and the assessment is carried out as a desktop exercise that does not take account of any site specific considerations. You should note that the estimate that we provide at this stage may vary significantly from the price subsequently calculated in any Feasibility Study or Connection Offer. This is because it does not include the costs for any necessary network reinforcement, changed circumstances, or other influencing factors that come to light when the detailed investigation is undertaken. A Budget Estimate is not a formal offer for connection and cannot be accepted by you.

## Exclusions from the Budget Estimate

Costs associated with the following activities are **NOT** included in the Budget Estimate:

- The diversion of our existing assets (if any) or any third party apparatus that is required
- Any associated reinforcement works
- Any on-site excavation and reinstatement
- The inclusion of any payment required in accordance with the Electricity (Connection Charges) Regulations 2017
- Any associated civil works, for example the provision of a substation plinth
- Detailed earthing studies are your responsibility
- Permits required under the Traffic Management Act 2004
- Out-of-hours working
- Legal requirements or consents
- Disturbing loads, for example motors, welders, electric vehicle chargers, heat pumps, etc.
- Any associated disconnections
- Any associated temporary supply

- Final competitive tenders and increases in labour, contract, or material costs
- Any required surveys, including any site survey
- Testing and commissioning (where applicable) that is undertaken in accordance with Engineering Recommendation G99 that must be witnessed by us
- Any impact on the transmission system and/or NGESO requirements arising

## Application of the Electricity (Connection Charges) Regulations 2017 (ECCRs)

If your new electricity connection will connect to and utilise assets installed and paid for in respect to a previous connection the ECCRs may come in to effect. The ECCRs empower us to recover from you a proportion of those costs and refund the initial connection customer. Any calculated ECCR payments will be included in your Connection Offer.

## Ways to proceed

If you want to take your enquiry further there are a number of ways you can proceed. You can request:

- A Feasibility Study; or
- A formal Connection Offer; or
- A Study & Offer quotation (Distributed Energy Resources (DER) only – limitations apply)

## Feasibility Study

A Feasibility Study is generally used 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. Once you have decided which option you would like to progress you can apply for a Connection Offer. There is a charge associated for this work; therefore we recommend you speak to your NGED contact first to find out more.

## Formal Connection Offer

If you request 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 will include two options for acceptance. The first option will include a price for us to undertake all the connection works.

The second option will include a price for us to undertake just 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 may appoint an accredited Independent Connection Provider (ICP) to undertake these works. For further information please see our section on Competitions in Connections.

The Connection Offer is open for acceptance for 90 days and includes all our terms and conditions for connection. Once accepted it will become a binding contract between us.

The Connection Offer will include charges for the costs we incur in preparing it. For those Connection Offers that include an element of works at extra high voltage (22kV and above) we will charge you for the costs incurred regardless of whether or not you accept the Connection Offer (see 'Assessment & Design Fees' below).

### Study & Offer Process

If you are unsure of the capacity you wish to connect, a Study & Offer quotation allows you to assess the capacity options available without submitting multiple formal applications. Please note that this option is only available for generation connections with export capacity of 5MVA and above.

Each application allows up to three different capacity options you may require. We conduct a Feasibility Study for the approximate cost and works required to connect the generation to our network. This includes an indication of any reinforcement or diversionary works that may be required.

The standard application form should be completed as well as an additional covering form for the Study & Offer process. For more information [National Grid - Electricity Connection Offer Expenses Regulations](#)

### Assessment & Design Fees (A&D Fees)

If your proposed electricity connection requires work at 22kV and above we will charge you for the time we spend preparing the connection offer in accordance with the Electricity (Connection Offer Expenses) Regulations 2018, (the 'A&D Fee'). We will require payment even if you do not accept the Connection Offer. The charge covers costs we reasonably incur when assessing the impacts of the proposed connection on the distribution/transmission system, designing the connection (including any

reinforcement works) and preparing the Connection Offer. Further information may be found on our website: [National Grid - Electricity Connection Charges Regulation](#)

### How to apply

You can apply in writing via the following addresses:

#### National Grid Electricity Distribution (East & West Midlands)

Records Team  
6th Floor  
Toll End Road  
Tipton  
DY4 0HH

[NGED.newsuppliesmids@nationalgrid.co.uk](mailto:NGED.newsuppliesmids@nationalgrid.co.uk)

#### National Grid Electricity Distribution (South Wales)

Records Team  
Phoenix Way  
Swansea Enterprise Park  
Llansamlet  
Swansea  
SA7 9HW

[NGED.newsupplieswales@nationalgrid.co.uk](mailto:NGED.newsupplieswales@nationalgrid.co.uk)

#### National Grid Electricity Distribution (South West)

Records Team  
Lostwithiel Road  
Bodmin  
Cornwall  
PL31 1DE

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

You can also apply **online**: [National Grid - Get connected](#)

If you are unsure as to how to proceed you can also contact us to discuss your connection proposals further. Please see the 'Connection Appointments' section in this Guide.

### Competition in Connections (CiC)

We offer a complete and comprehensive connection service but, if you wish, there are other companies you may ask to undertake some of the work known as the 'contestable' work. ('Non-contestable' works are the elements of the connections work which must be completed by NGED). An Independent Connection Provider (ICP) can build electricity networks for adoption by us or by an Independent Distribution Network Operator (IDNO).

An IDNO is a company that can construct electricity networks, arranges connections to NGED's network or adopt networks built by ICPs then retains ownership of and be responsible for the operation, repair and maintenance of that new network.

The ICP must be registered with Lloyds Register EMEA under the National Electricity Registration Scheme (NERS) and they are required to work in accordance with the national framework and NGED documents that provide specifications for design, material procurement and installation and recording of assets.

The new connection (up to the start of your electrical installation) will be adopted by us (where no IDNO is involved) and become part of our electricity network on satisfactory final inspection, testing and connection. We will own the new connection from that time, and will take responsibility for future operation, repair, maintenance and replacement (subject to any guarantee requirements of the Adoption Agreement).

More information regarding Competition in Connections can be found on our website at [National Grid - Information for Customers](#)

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## Safety

If you are already on site, or about to move on to site, please remember to take adequate precautions to protect yourself from potential electrical hazards.

## Overhead Lines

Particular care must be taken in the handling of mechanical plant, cranes, scaffolding or ladders in the vicinity of our overhead lines. You should always seek guidance before any work takes place on site from your appointed Site Manager, who will ensure that all works are carried out safely and in accordance with Health and Safety Guidance Instruction GS6 – Avoidance of Danger from Overhead Electric Power Lines. ([hse.gov.uk/pubns/gs6.htm](https://www.hse.gov.uk/pubns/gs6.htm))

## Safe Excavation

Obtain the latest copies of our cable records for the site from [linerecordsearch.co.uk](https://www.linerecordsearch.co.uk). You must excavate by hand digging trial holes to establish the actual positions of all cables before any mechanical excavation works commence. Please contact your Site Manager who will help you ensure that all your works are carried out safely and in accordance with Health and Safety Guidance Instruction HSG47 – Avoiding Danger from Underground Services. ([hse.gov.uk/pubns/gs47.htm](https://www.hse.gov.uk/pubns/gs47.htm))

## Legal Permissions and Consents

We have a legal obligation to provide new electricity connections, as well as to maintain and upgrade the existing distribution system in our area. For a new connection we need land rights to install and thereafter use, maintain and renew our equipment on privately owned land. When this is necessary we secure our equipment by legal agreement (Wayleaves and/or Deeds) with landowners. This helps to ensure that the equipment stays where it has been placed and can be maintained when necessary.

All land rights/legal and consents must be in place before we install and energise a new connection to our network. It is important that customers/developers are aware that the statutory process for acquiring compulsory land rights can be time consuming, it is not guaranteed to be successful and could be extremely costly. For this reason you should be prepared and if a third party is involved in the scheme, to start the negotiations before instructing us to pursue the compulsory land rights process.

**Please note that we cannot energise our equipment until land rights are legally secured.**

Please see the Legal Process on our website – [National Grid - Legal permissions and consents](#)

## National Grid Electricity System Operator (NGESO) – The Electricity Transmission System

Larger installations, (typically generation requiring 1MW of export capacity and above and demand requiring 10MW of import capacity and above) may have an impact on the National Grid Electricity System Operator (NGESO) transmission system. Although we may flag any existing limiting network conditions in your Budget Estimate, it does not take account of any impact of the proposed connection(s) on the transmission system, including the outcome of any modification application that we may be required to submit to NGESO.

We may be required to request a 'Statement of Works' from NGESO in accordance with section 6.5.5, or a Modification in accordance with section 6.9 of the Connection and Use of System Code (the "CUSC") in order to ascertain the effect of the proposed connection on the transmission system. On receipt of this request, NGESO will consider, in accordance with the CUSC, whether or not a formal modification application is required.

For further information concerning the Statement of Works process please see our website – [National Grid - Statement of Works](#)

### Further Network Information

We have a large range of network asset data available for access by third party users through a variety of services.

### Constraint Maps

The constraint map provides an overview of our EHV networks (33kV and above), highlighting those circuits which are operating at or near their limits for the connection of any further Distributed Generation (DG)

Please see the constraint maps for all four NGED areas on our website – [National Grid - Distributed generation EHV constraint maps](#)

### Network Capacity Maps

The network capacity map provides an indication of the networks capability to connect large-scale developments to major substations. The network capacity map is a guide to show the network where a connection is more likely to be achieved without significant reinforcement.

The map does not replace a full Formal Application in determining network capacity.

Please see the capacity map on our website for a login – [www.nationalgrid.co.uk/our-network/network-capacity-map](http://www.nationalgrid.co.uk/our-network/network-capacity-map)

### Alternative Connections

NGED offers alternative connections, which enable customers willing to have their capacity temporarily reduced to connect ahead of the required reinforcement without contribution. The level of curtailment experienced by the

connection can be fixed or dynamic, depending on the type of alternative connection offered.

Please see alternative connections webpage – [National Grid - Connection offers and agreements](#)

### Flexible Power - Flexibility

DNO's are committed to openly comparing reinforcement and market flexibility, it has become one of the new fast moving areas when it comes to managing electricity distribution networks.

Any significant reinforcement scheme once at feasibility study or formal offer stage will require a flexibility assessment.

For more information, please visit

[www.nationalgrid.co.uk/network-flexibility-map](http://www.nationalgrid.co.uk/network-flexibility-map)

### Connection Appointments

Make an appointment with an engineer to discuss your requirements and the connection process ahead of making an actual application for a connection to the network.

To find out more or make an appointment

Call;

South Wales & South West: **0800 028 6229**

East & West Midlands: **0800 121 4909**

Email:

**[NGED.connectappoint@nationalgrid.co.uk](mailto:NGED.connectappoint@nationalgrid.co.uk)**

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