

FAQs

CHARGES AND FEES

How much will the application fee cost?

This depends on each project but the variables include size and location of your project. Fixed fees start from a minimum of £18,000 and the maximum is £400,000.

What is the difference between fixed price and variable price application fee?

Fixed price means that the application fee quoted initially will not change.

Variable fees will consist of an estimated amount, which is compared with actual costs, within 90 days after the offer has been accepted or lapses. This fee is based on the amount of work carried out to progress the application and so can result in either a refund or top up to the original estimate.

What are cancellation charges or securities?

In the event that a customer cancels their contract or reduces capacity, there is a cancellation charge which needs to be paid and some or all of this value is held by National Grid through various means (such as a Parent Company Guarantee or escrow) as a deposit. This charge will vary depending on the project and the amount of work that may have commenced to connect the developer. This security deposit is required 30 days after signature of the application.

What are the connection costs?

This is a fee which you pay for the installation and maintenance of assets and cannot normally be used by another party. Normally, in England & Wales, generators do not have connection assets as they own the infrastructure up to the point of connecting to our busbars. These will vary between England & Wales and Scotland.

What are the ongoing costs?

All customers who connect to the transmission system will be liable for ongoing costs. The main charges are broadly set out below:

Transmission Network Use of System (TNUoS) charges

This charge relates to the usage of the transmission system and varies depending on location. The latest tariffs can be found on the following link. Please note that some areas of the country are subject to negative tariff rates i.e. you are paid to generate in those areas:

Balancing Services Use of System (BSUoS) charges

This charge is calculated based on the costs incurred by the system operator in balancing the system on a second by second basis.

You are charged BSUoS based on the output of your generator or usage of energy as a supplier. This is calculated on a half hour basis and the price can fluctuate. For example, if you assumed a flat rate charge of £3/MWh, a 50MW generator running for 15 hours a day would be: $50 \times 15 \times £3 = £2,250$ per day.

How can I pay for the connection costs?

This can be either over the lifetime of the asset (40 year standard or as agreed) or staged payment of capital, i.e. you pay as the cost is incurred. **The example below is purely illustrative and does not reflect actual costs for a staged payment:**

To connect a generator, it may incur the following cost:

Transformer £2m, Disconnecter £500,000

Payment could be staged as follows:

2016 - £0 – application offer signed
 2020 - £50,000 – secure order
 2021 - £500,000 - production
 2022 - £1.950m - connection asset installation
 2023 - Connection date

What are one off costs?

If a customer wishes to go above and beyond a minimum economic connection, this may have an upfront cost which is borne by the customer. These one-off costs can include:

- Undergrounding cables
- Up-rated assets
- Accelerated works

The costs for these works will vary depending on what has been requested.

PRE-APPLICATION

Where is the best area to connect my generator?

There are a number of variables which may affect this. For England & Wales, there is a connection tool which provides an illustration of connection times:

<https://www.nationalgridet.com/get-connected/network-capacity-map>

For connections in Scotland, the Distribution Network Owners have heat maps on their website which show the high-level constraints in each area:

Scottish & Southern Electricity Networks

<https://www.ssepd.co.uk/generationavailability/>

Scottish Power Energy Networks

http://www.spenergynetworks.co.uk/pages/connection_opportunities.asp

Generally, we would set up a call with the Transmission Owner to discuss your project if you had a specific site in mind.

How do I get a generation licence?

You need to contact Ofgem who are responsible for granting licences. The application process can be found on their website:

<https://www.ofgem.gov.uk/licences-codes-and-standards/licences/application-process>

What are the different contractual types?

There are three main contracts that you can sign up to with National Grid. These are:

Bilateral Connection Agreement (**BCA**)

Bilateral Embedded Generation Agreement (**BEGA**)

Bilateral Embedded Licence-exempt Large Generator Agreement (**BELLA**) – Scotland only.

BCA

This is a direct connection to the Transmission system and a generator must comply with all the necessary industry codes (CUSC, BSC, Grid Code). The contract is between the generator and National Grid.

BEGA

This is an embedded connection to the Distribution system and a generator must comply with the industry codes as per BCA connections. The contract is between the generator and National Grid but the generator will also have a contract with the Distribution Network Owner (DNO).

BELLA

This is an embedded connection to the Distribution system in Scotland, but the generator must be over a certain size in order to be eligible (10MW Northern Scotland or 30MW Southern Scotland). They have to comply with most elements of the codes (CUSC, Grid Code). The contract is between the generator and National Grid but the generator will also have a contract with the Distribution Network Owner (DNO).

What is the minimum connection capacity?

There is no minimum although there is a concept of small and large power stations. It is recommended that small power stations contact their local Distribution Network Owner (DNO) to connect into their network, as they may find that the costs of connecting to the Transmission System may be prohibitive if they are small. The classifications of power stations are as follows:

	England & Wales	South Scotland	North Scotland
Small	<50MW	<30MW	<10MW
Medium	≥50<100MW	N/A	N/A
Large	≥100MW	≥30	≥10

What is the CUSC?

The CUSC stands for the Connection and Use of System Code. It is a rulebook which sets out the rights and obligations on generators that connect to the transmission system.

Do I need to have acquired land rights before submitting my application?

No, this is not required before application and we would recommend that you chat to our team ahead of this taking place.

What is the balancing mechanism and do I need to be involved in it?

The balancing mechanism (BM) is a tool which we use to balance electricity supply and demand. This allows generators to set prices for which they will increase or decrease their output if requested by us. All large generators must participate in the BM, whereas it is optional for smaller generators. The process for participating will form part of the connections process after you have signed your offer. This will specify all the necessary communications equipment that you need to install to allow participation in the BM.

What information do you require for a pre-app discussion?

The minimum information that you should provide can be found in the table below:

	Description
Project name	Insert the name of your proposed project
Connecting substation/Grid Supply Point	What is the name of the nearest substation or Grid Supply point that you would like to connect into?
DNO Offer	Have you already received a DNO offer?
Indicative programme	What is your desired connection date?
Generation Type	Insert the technology or fuel type
Connection Type	Specify whether it is a direct connection to the grid or an embedded connection with the DNO
Capacity	Insert the number of MW
Planning received?	Has the project received planning permission on the proposed site?

POST APPLICATION

What is clock start?

This is the date on which you have paid for your application fee and the application has been deemed as competent by National Grid. Once the clock has started, National Grid has a maximum of three months to send an offer to you.

What is a design variation?

If you wish to accelerate your connection date, you may choose to opt for a “non-firm” access product which means that there will be certain restrictions on your generation. An example of this is the installation of an Intertrip (see below).

What is an Intertrip?

An Intertrip is a piece of equipment that will automatically disconnect a generator from the transmission system, if it detects a specific event such as a system fault. This is to relieve localised circuit overloads. There are two types of Intertrips:

Operational Intertrip: those that are a condition of connection to the transmission system

Commercial Intertrip: these may be specified at the time of connection or agreed on an ad hoc basis.

Within your connection offer, you may be required to install an Intertrip due to the location where you are connecting.

What are the restrictions on availability?

During the course of your plant generation, there may be times where you are requested to disconnect from the system for a short period. This can be either planned or unplanned by National Grid due to system conditions. Depending on your contract, it may be a condition of connection which means that compensation is not payable i.e. it is an Allowed Interruption.

How long will it take to receive my offer?

Once your application has been paid for and accepted by us, it can take up to a maximum of three months to receive your offer.

How long do I have to accept my offer?

You will have up to three months to sign and accept your offer.

What is a modification application?

This is a request to make changes to your original application, which will incur a fee to process as it will involve drawing up another legal contract.

How often will I be able to generate?

For a fully compliant connection, in an unconstrained area of the network, there should be minimal limitations on the output of your generation. This is always subject to system conditions. However, if you connect into a less robust area of the system, which requires further reinforcement, you may have your output reduced at certain times, if required by the system operator.

What additional services can I provide?

Any generator greater than 50MW must provide mandatory services. These services are reactive power and frequency response. Projects below 50MW can still provide these services, through their own choice.