

Information Summary: On Farm Renewables: G98 Notifications and G99 Applications to your DNO

What is an application to the DNO?

DNO stands for a Distribution Network Operator. Distribution Network Operators (DNOs) are licensed companies responsible for distributing electricity from the National Grid and all embedded generators to your home or business. Cumbria is served by [Electricity North West](#).

When you are looking to install any form of renewable energy, battery or vehicle charge point that will be connected to the Distribution Network you must inform your local DNO. Whether it is for your home or business.

Electricity North West is notified in order to accurately calculate and monitor the amount of electricity needed.

This is generally done by your chosen installer who will fill out a G99 application and send it to Electricity North West. [Generation connections \(enwl.co.uk\)](http://enwl.co.uk)

The size of your system will determine the type of DNO application you will need to complete and if you will have to apply before or after installation. As you are making a direct connection to the grid, the installation needs to be compliant with the Energy Networks Association (ENA) Engineering Recommendation G98 or G99 Which are UK standards and apply to all DNO areas.

As we work towards a Net Zero UK and as fuel and energy prices soar, electric powered devices or “energy assets” such as electric vehicles and heat pumps are increasing in popularity. You must either apply or notify your local DNO so that the extra load and strain on the National Grid can be managed effectively. This will help to reduce local black outs, protect vulnerable customers and ensure that supply in your area is efficient.

If you install equipment without notifying or applying to the DNO and subsequently allow them to upgrade the network if needs, be, you may have power quality issues like under or over voltage issues which could damage your equipment.

Installing with a DNO certificate will also enable you to receive Smart Export Guarantees (SEG's) from the National Grid, this is part of the incentive of being grid connected.

The main two types of DNO applications are “**connect and notify**” or “**apply to connect**”.

If you are installing a larger scale solar system, **greater than 16A per phase**, you will need to apply for DNO approval prior to installation, the grid will need to determine whether your local distributor can handle the extra load.

All generation applications fall under the G98 / G99 notification / application process whether it's for Solar PV, wind turbine, hydro power, heat pump or anaerobic digester.

Due to the recent increase in demand to install renewables, waiting periods for DNO applications have also increased.

Low Voltage (LV) generation has a timescale of 45 working days and High Voltage (HV) generation has a timescale of 65 working days. Please note: the timescales are related to the work required on the network, therefore if an LV generator requires HV reinforcement work, the 65 working days will be the category.

After your DNO application has been assessed, you will usually be sent a connect offer. This includes the maximum specification of the connection and if there are any connection charges. Electricity North West can advise of the maximum generation installation on the existing supply, e.g., if you have an existing single-phase service, the maximum generation installation is 'X'kW, with a maximum export capacity of 'Y'kW.

There are usually three outcomes of a DNO application.

1. Your application is accepted, and Electricity North West is happy with the size of the system you have requested to install. This means you can proceed with your installation, with no extra charges or amendments.
2. The system size is capped at a given kWp AC rating, and an export limitation is required. Sometimes a small fee is charged for a witness test, where your provider ensures a limitation has been put in place.
3. Your supply size needs to be upgraded from a single phase to a three-phase system in order to go ahead with your solar panel installation. This additional charge can be expensive depending on the site.

There have been some changes to the costs of reinforcement since Ofgem made their 'access significant code review' due to come into force from April 2023. Some of these changes may benefit you but there are still charges.

Reducing the cost of connections

Ofgem 'access significant code review' new arrangements from 1 April 2023

Different charging arrangements for demand and generation	Demand – no reinforcement charges	Generation – reduced reinforcement charges	Storage treated as generation
---	-----------------------------------	--	-------------------------------

	Extension assets	Reinforcement assets at connection voltage	Reinforcement assets at connection voltage +1
Current arrangements	Connecting customer pays 100%	Connecting customer pays a proportion of the reinforcement costs	Connecting customer pays a proportion of the reinforcement costs
New arrangements (Demand)	Connecting customer pays 100%	Fully funded by the DNO via DUoS	Fully funded by the DNO via DUoS
New arrangements (Generation)	Connecting customer pays 100%	Connecting customer pays a proportion of the reinforcement costs	Fully funded by the DNO via DUoS

Some exceptions...



Be aware that reinforcement across multiple landowners can be difficult. Electricity Northwest don't have statutory rights and it can take a very long time to get the wayleaves they need to do the work.

How much will I pay for a DNO application?

Fees are applicable to certain size applications, [Quote costs \(Connection Offer Expenses\) \(enwl.co.uk\)](#) however administrative fees from your solar panel installers are usually charged in order to process the application. Application can cost anywhere between £300 – £750 each.

Funded by

