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| Stage 1 G83 microgeneration |
| Information and Commissioning pack for Single Installations  Version 1.1 October 2017 |

**Introduction to Microgeneration**

Small scale renewable technologies such as solar panels, hydro or wind turbines can be used to generate your own electricity and export some of that electricity to the grid - commonly referred to as Small Scale Embedded Generators (SSEG). These microgenerators typically connect to the Northern Ireland Electricity Networks’ (NIE Networks’) electricity grid under the principles of Engineering Recommendation G83/1.

Typical schemes are:

* Single phase solar, hydro or wind technologies which generate up to a maximum of 3.68 [[1]](#footnote-1)kilowatts of electricity. These will typically be connected to domestic premises. An existing single phase connection must already be available.
* Three phase solar, hydro or wind technologies which generate up to a maximum of 11.04[[2]](#footnote-2) kilowatts of electricity. These will typically be connected to a farm or small commercial premises. An existing three phase connection must already be available.

**Connection Process**

At NIE Networks, we are responsible for registering your installation and fitting an import/export meter to facilitate the measurement of electricity units exported to the grid.

Remember: you will not be able to benefit from exporting electricity back to the grid until the following process is complete:

1. You must inform NIE Networks when your generator is connected to the system- see Note 1
2. Your microgeneration has been registered by NIE Networks
3. Your electricity meter has been changed by NIE Networks to a meter capable of recording export
4. Your purchase contract is in place with your chosen electricity supplier

**Note 1:** In compliance with G83/1 you are required to notify NIE Networks that a connection has been made to the network. Please ensure you submit the online form at the address below, at or before making your connection. You then have 30 days to complete and return the required information.

www.nienetworks.co.uk/Connections/Generation-connections/Microgeneration

**Note 2:** All G83 connections are subject to:

* the installation not causing any operational difficulties for NIE Networks
* the installation not adversely affecting the quality of supply to either the connected party or any other customers

Your installer can advise further in relation to the issues above which are covered under Annex A of G83/1.

­­­­**How to commission your microgeneration**

**1. Commissioning of your microgeneration:**

The installer must commission the system and fully complete and return the following forms and information to NIE Networks.

This information verifies that your microgenerator installation complies with Engineering Recommendation G83/1 and is suitable to be connected to the electricity grid:

* Small scale embedded generator installation (G83 commissioning form) commissioning confirmation
* A schematic diagram (single line drawing) of the microgeneration scheme installed from the inverter to the meter
* G83/1 Certification for the inverters used each time

All of this information should be returned in **hard copy** to:

Market Operations - SRU  
NIE Networks  
Pennybridge Industrial Estate,  
Larne Road,   
Ballymena, BT42 3HN

**2. Changing your electricity meter:**

Once we have received and checked all of the information above, we will arrange the installation of an import/export electricity meter (if required). An import/export meter records the electricity units being exported to the grid. This process can take up to four weeks.

**3. Agreeing your purchase contract:**

You need to agree a purchase contract with an electricity supplier to sell your exported electricity units. [NB. You may have two electricity suppliers – you may buy electricity from one supplier and sell or export electricity to another supplier].

NIE Networks has no involvement in the purchase contract agreement – your chosen export electricity supplier will provide this information. It is your responsibility to provide export meter readings to your export supplier.

For more information on electricity suppliers operating in Northern Ireland, you may wish to consult the Utility Regulator ([www.uregni.gov.uk](http://www.uregni.gov.uk)) or the Consumer Council for Northern Ireland ([www.consumercouncil.org.uk](http://www.consumercouncil.org.uk)).

# G83 Stage 1 Commissioning Confirmation Form

Small Scale Embedded Generator (SSEG) Installation

(Up to 3.68 kW single phase and up to 11.04kW three phase)

Confirmation of commissioning of a Small Scale Embedded Generator (SSEG) connected in parallel with NIE Networks’ Distribution Network in accordance with Engineering Recommendation G83/1.

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| **Site details** | | | |
| Property address  (including post code) |  | | |
| Telephone number |  | | |
| MPRN number  MPRN is a unique 11 digit number which identifies the electricity connection. You will find it on the card left by your meter reader or on your electricity bill. |  | | |
| Meter Serial Number  Unique Meter Serial Number can be located on the front of the meter that requires changed to an import/export meter. |  | | |
| Distribution Network Operator (DNO) | **NIE Networks** | | |
| **Contact details** | | | |
| SSEG owner |  | | |
| Contact person |  | | |
| Contact telephone number |  | | |
| **SSEG details** | | | |
| Manufacturer and model type |  | | |
| Serial number of SSEG |  | | |
| Serial number/version numbers of  software (where appropriate) |  | | |
| SSEG rating (A) and power factor  (under normal running conditions) |  | Capacity KWp |  |
| Maximum peak short circuit current (A) |  | | |
| Type of prime mover and fuel source |  | | |
| Location of SSEG within the  installation |  | | |
| Location of multi pole isolator |  | | |

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| **Information to be Enclosed** | |
| Final copy of circuit diagram |  |
| SSEG Type Test Certificate (if not already provided e.g. under a Stage 2 Connection) |  |
| Computer print out (where possible) or other schedule of protection settings |  |
| Electricity meter(s) make and model: | |

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| **Installer details**  To be completed by installer | |
| Installer |  |
| Accreditation/Qualification: |  |
| Address  (including post code) |  |
| Contact person |  |
| Telephone number |  |
| Fax number |  |
| Email address |  |

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| **Installer declaration**  Must be completed by the installer | | |
| The SSEG installation complies with the relevant sections of Engineering Recommendation G83/1. | |  |
| Protection settings have been set to comply with Engineering Recommendation G83/1. | |  |
| The protection settings are protected from alteration except by prior written agreement between NIE Networks and the Customer or his agent. | |  |
| Safety labels have been fitted in accordance with section 6.2 of Engineering Recommendation G83/1. | |  |
| The SSEG installation complies with the relevant sections of BS7671 and an installation test certificate is attached. | |  |
| Comments (continue on separate sheet if necessary) | |  |
| **Name:** | **Signature:** | **Date:** |

Please send completed forms to:

Market Operations - SRU  
NIE Networks  
Pennybridge Industrial Estate,  
Larne Road,   
Ballymena, BT42 3HN

1. Please note NIE Networks will accept a maximum installed capacity of 4kW provided the inverter is rated at no more than 3.68kW. [↑](#footnote-ref-1)
2. Please note NIE Networks will accept a maximum installed capacity of 12kW provided the inverter is rated at no more than 11.04kW. [↑](#footnote-ref-2)