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Renewables Obligation: Guidance for Generators

Guidance

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Overview:

This document is for generators that receive or would like to receive support under the Renewables Obligation (RO) scheme in England, Wales and Scotland. It gives an overview of the banding structure, the types of generating technologies that might be eligible for the scheme and how eligible generators become accredited. It also sets out the information we require from generators to issue Renewables Obligation Certificates (ROCs) and explains how and when we issue ROCs. It is not intended to be a definitive legal guide to the RO. Generator guidance for the Feed-In Tariff scheme, including the ROO-FIT accreditation process, is provided in a separate document, available at www.ofgem.gov.uk.

Context

The Renewables Obligation (RO), the Renewables Obligation (Scotland) (ROS) and the Northern Ireland Renewables Obligation (NIRO) are designed to incentivise large-scale renewable electricity generation in the UK and help the UK meet its requirements for 15 per cent of energy to be sourced from renewable sources by 2020. The Gas and Electricity Markets Authority (the Authority) administers the respective schemes and its day to day functions are performed by Ofgem. The Orders place an obligation on licensed electricity suppliers in England and Wales, Scotland and Northern Ireland to source an increasing proportion of electricity from renewable sources.

In 2009 the RO moved from being a single support mechanism for all eligible technologies to one where support levels, known as bands, vary by technology. At that time the Department of Energy and Climate Change (DECC) also announced that reviews of those banding levels would be reviewed every four years. In October 2011, DECC announced a Banding Review to drive greater value for money in the RO while ensuring ongoing support for the growth of renewables. This included supplementary consultations on: support for solar photovoltaics (PV), biomass affordability and retaining the minimum calorific value requirement for gaseous fuels produced by gasification and pyrolysis. The 2013 (Amendment) Order that takes into account all the 2013 banding review decisions came into force on 1 April 2013 (1 May 2013 under the NIRO).

In 2013, the Department of Energy and Climate Change (DECC) consulted on further amendments to the RO. This included RO transition to Contracts for Difference (CfD) which allows generators a choice of scheme between the RO and CfD. This choice lasts for the duration of the transition period ie between the CfD scheme opening to applications (expected to be October 2014) and the RO closing to new capacity on 31 March 2017. The choice of scheme currently applies to stations in England, Wales and Scotland only. The CfD scheme is expected to be introduced in Northern Ireland in 2016. DECC's 2013 consultation also included amendments to the RO sustainability criteria which mainly affected the sustainability criteria and related reporting requirements for generating stations using solid biomass and biogas.

The 2014 (Amendment) Order that takes into account these amendments came into force on 1 April 2014. This guidance document has been updated as per the 2014 (Amendment) Order. All relevant legislation and decision documents can be accessed via the links in the 'associated documents' section below.

The Northern Ireland Renewables Obligation (Amendment) Order 2014 has not yet come into force. Until this happens generating stations in Northern Ireland should continue to refer to the 2013 version of this guidance document.

Associated documents

Readers should be aware of the following documents which support this publication:

Policy and Legislation

- Government responses transition to CfD amendments: RO (www.decc.gov.uk) and ROS (www.scotland.gov.uk)
- Government responses on biomass sustainability amendments: RO (www.decc.gov.uk), ROS (www.scotland.gov.uk) and NIRO (www.detini.gov.uk)
- Renewables Obligation Order 2009, Renewables Obligation (Scotland) Order 2009 and Renewables Obligation Order (Northern Ireland) 2009, as well as their amendment orders for 2011, 2013 and 2014 can be found at: www.legislation.gov.uk

Guidance

All documents are available at www.ofgem.gov.uk

- Renewables Obligation: Fuel Measurement and Sampling
- Renewables Obligation: Sustainability Criteria
- Renewables Obligation: Sustainability Audit – Guidance for Operators and Auditors
- Renewables Obligation: Biodiesel and Fossil Derived Bioliquids Guidance
- Renewables and CHP Register User Guide

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Executive Summary

This document outlines Ofgem's processes and procedures for the administration of the Renewables Obligations for renewable generators. It is intended to be a working document and may be updated from time to time. It covers the key eligibility requirements of the Renewables Obligation Orders and sets out information on the recent amendments made to them.

This document provides guidance on renewable source technologies that may be eligible to receive support under the Renewables Obligation Order 2009 (as amended) (RO Order) the Renewables Obligation (Scotland) Order 2009 (as amended) (ROS Order) and the Renewables Obligation Order (Northern Ireland) 2009 (as amended) (NIRO Order). In this guidance, the RO Order, ROS Order, and NIRO Order are collectively referred to as the Orders but individually referenced where necessary. It also provides guidance on the level that this support will be at, how generators should apply under the scheme, what information we require to verify that renewable electricity has been generated and how we issue ROCs.

This document has been specifically created for the Renewables Obligation scheme. It is for guidance only and is not intended to be a legal guide. We will assess applications for accreditation once they are submitted to us. Generators might find it helpful to seek their own legal and technical advice before applying.

The document does not anticipate every scenario which may arise. Where a scenario arises which is not addressed in these procedures, we will adopt an approach consistent with the relevant legislation. Any guidance in addition to this document will be published on our website.

Where parties other than registered holders are involved in the RO, for example data collectors providing monthly information, the operator of the generating station is responsible for ensuring this guidance is distributed accordingly.

1. Introduction

1.1. The RO and ROS Orders detail the Authority's functions in respect of the RO in England and Wales and in Scotland, respectively. A number of these functions are carried out via our IT system - the Renewables and CHP Register (the Register), and include:

- accrediting generating stations as being capable of generating electricity from eligible renewable energy sources
- issuing Renewable Obligation Certificates (ROCs) and Scottish Renewable Obligation Certificates (SROCs)
- establishing and maintaining a register of ROCs and SROCs
- revoking ROCs and SROCs where necessary
- monitoring compliance with the requirements of the Orders
- calculating annually the buy-out price resulting from the adjustments made to reflect changes in the retail price index
- receiving buy-out payments and redistributing the buy-out fund
- receiving late payments and redistributing the late payment fund
- recovering the administration costs of the RO from the buy-out fund
- publishing an annual report on the operation of and compliance with the requirements of the Orders.

1.2. We administer the Northern Ireland Renewables Obligation (NIRO) in accordance with the NIRO Order on behalf of the Utility Regulator Northern Ireland (UREGNI) under an Agency Services Agreement. Under this agreement, the Authority is required to carry out the functions listed above in respect of the NIRO. However, the UREGNI continues to retain responsibility under the legislation for administering the NIRO.

1.3. We carry out the functions outlined in section 1.1 as efficiently and effectively as possible, according to the provisions of the Orders. We cannot act beyond the scope of the powers laid down in the Orders. For example, we have no remit over the operation or regulation of the ROC market itself. Amendments to the relevant legislation in respect of the RO are a matter for the Secretary of State, Scottish Ministers and the Secretary of State for Northern Ireland.

How the scheme works

1.4. Accredited generators are issued ROCs based on the net renewable electricity that is generated each month by an accredited renewable generating station. ROCs can then be sold directly or indirectly to suppliers who will redeem them against their Renewables Obligation.

1.5. The number of ROCs issued per megawatt hour (MWh) is determined by the technology/fuel used by the station, its size, its location and how long it has been accredited under the RO. In order to be accredited under the Orders, generating stations must meet certain statutory criteria, including the fact that they have been

commissioned. Once accredited, further criteria must be met on a monthly basis if ROCs are to be issued.

1.6. If accreditation has been granted and ROCs have subsequently been issued, the onus is then on the generator to transfer the certificates to a suitable party. We have no responsibility in terms of the transfer of ROCs once they have been issued. We can, however revoke ROCs if we are of the view that they should not have been issued in the first instance.

1.7. Once a ROC has been issued and transferred to a supplier, that supplier can redeem that ROC against their Renewables Obligation. The ROC can only be redeemed by a supplier against the obligation period in which it was issued or against the following obligation period. For example, a ROC issued in respect of generation in June 2011 can be redeemed by a supplier in respect of the 2011/12 or 2012/13 obligation periods only. After that, the ROC would effectively expire and cannot be presented to us against a supplier's obligation.

1.8. In terms of seeking accreditation and being issued with ROCs, operators of renewable generating stations will need to comply with the following steps. The onus is on the generator to ensure that they are familiar with our Register and generator guidance documents in advance of setting up a generator account and using the functionality of that account to:

- Create a generator account via the Register[1]
- Complete an application for accreditation via their generator account
- Make the relevant declarations in advance of submitting an application
- Once the declarations have been made, submit the application to us and respond to any queries we may have on the application (email notifications will be sent to alert generators when we raise queries on applications and output data)
- Submit monthly generation data and information to us within the two month statutory deadline, regardless of whether accreditation has been granted or not
- Provide information in relation to their application for accreditation or monthly data submission, as needs be
- Make new declarations at the start of each obligation year (i.e. every April).

Provision of information

1.9. The Orders[2] provide that Ofgem may require:

(a) a designated electricity supplier to provide it with information which in its opinion is relevant to the question whether the supplier is discharging, or has discharged, its renewables obligation

(b) a person to provide it with information which in its opinion is relevant to the question whether a ROC is, or was or will in future be, required to be issued to the person.

1 http://www.ofgem.gov.uk/Sustainability/Environment/RCHPreg/Pages/RCHPreg.aspx
2 Article 53 ROO, article 53 ROS and article 45 NIRO.

1.10. The Orders[3] provide that we may also require any person who:

- is the operator of a station generating electricity in respect of which a ROC has been or may be issued
- supplies, distributes or transmits such electricity
- buys or sells (as a trader) such electricity or ROCs

to provide us with information we believe we require in order to carry out any of our functions under the RO. Information requested under article 53 for the RO and ROS and article 45 for the NIRO must be given to us by the date specified and in a specified format.

Future of the RO

1.11. The government set out in its White Paper of 12 July 2011 that the RO is scheduled to close to new capacity on 31 March 2017. Support for capacity accredited under the RO at that date will be grandfathered at existing support levels and will receive its full lifetime of support, with grace periods offered to those who miss the closure date in certain circumstances.

1.12. From 1 April 2017 the obligation will be set annually until 31 March 2027. Then a fixed price certificate scheme will be introduced with the price of certificates fixed at the 2027 buyout price, plus 10 per cent.

1.13. The government also confirmed its intention to introduce a new Contracts for Difference (CfD) scheme in 2014 which would replace the RO. Between the CfD scheme's introduction and the scheduled closure of the RO to new capacity in 2017 (the transition period), generators will be able to choose between the schemes. Ofgem will continue to administer the RO and National Grid[4] (and a new counterparty body) will administer the CfD scheme. The choice of scheme applies to stations in England, Wales and Scotland only. The CfD scheme is expected to be introduced in Northern Ireland in 2016.

1.14. The arrangements for the transition period were consulted on in 2013 and the government response published in March 2014. The majority of the arrangements will not take effect until the CfD scheme opens and we will publish guidance in summer 2014 to explain the changes to our administration of the RO. The amendments that take effect from 1 April 2014 have been included in this document.

1.15. In 2013 the government also consulted on its grace period proposals, which will apply once the RO closes to new capacity in 2017. We will provide additional guidance on how operators can apply for these grace periods once the associated legislation has been laid.

[3] Article 53 ROO, article 53 ROS and article 45 NIRO.
[4] National Grid will undertake this in its function as CfD Delivery Body.

This document

1.16. This document has been updated since it was last published in May 2013 to take into account amendments made to the legislation that came into effect in April 2014.

1.17. Unless apparent from the context, where "RO" is used, it denotes the Renewables Obligation (RO) Order, the Renewables Obligation (Scotland) (ROS) Order and the Northern Ireland Renewables Obligation (NIRO) Order and where "ROC" is used it denotes certificates issued under all three Orders ie ROCs, SROCs and NIROCs.

1.18. ”Ofgem”, “us”, “our” and “we” are used interchangeably when referring to the exercise of the Authority's powers and functions under the Orders.

1.19. "The Act" refers to the Electricity Act 1989 (as amended). This is the primary legislation from which the RO and ROS Orders were borne. Changes made to the Act via the Energy Act 2008 have given the government the enabling powers to introduce the differential rewards that have fundamentally changed the ROC support structure.

1.20. The terms “generators” and “operators” are used interchangeably throughout the document.

Queries

1.21. Please email any queries about our functions under the Orders or a station that is accredited or pending accreditation under the scheme to our dedicated support team on renewable@ofgem.gov.uk. Please state what your query is about in the subject line of the email.

1.22. Written queries should be sent to the address on the front of this document clearly marked for the attention of the Renewable Electricity Administration.

1.23. For telephone enquiries, the administration team can be contacted on 020 7901 7310 during office hours.

1.24. Please note that we can only provide guidance on the legislation currently in place. Any queries regarding future changes to the Orders or wider energy policy should be directed to the Department of Energy and Climate Change (DECC), the Scottish Government or DETI as appropriate. Contact details can be found at www.decc.gov.uk, www.scotland.gov.uk and www.detini.gov.uk respectively.

2. Eligibility

Chapter summary

Sets out the technology types that may be eligible for support under the Renewables Obligation (RO) and the circumstances in which generating stations may not be eligible for accreditation or Renewables Obligation Certificates (ROCs).

Our obligation in assessing eligibility

2.1. Under the RO we are obliged to assess and, where appropriate, accredit applications made to us in respect of renewable generating stations. We assess such applications on a case-by-case basis, taking into account any supporting information and evidence submitted to us by the generator.

2.2. The Orders set out the criteria for issuing ROCs and granting accreditation. We must not, for example, grant accreditation where it is apparent to us that the station is unlikely to generate electricity in respect of which ROCs may be issued.

2.3. We are obliged to grant accreditation if we are satisfied that the generating station meets the requirements of the RO Orders. However, we cannot provide any legal/technical advice or formal comfort before an application for accreditation or preliminary accreditation is submitted to us in accordance with the requirements of the scheme.

2.4. For the Authority to grant accreditation, generating stations must meet the eligibility criteria set out in this chapter and underpinned by article 58 of the RO Order[5]. The Authority must also be satisfied that the generating station satisfies the metering requirements; these are explained further in chapter 3 of this document.

Definition of a generating station

2.5. The Orders provide a definition of a "hydro generating station" however there is no definition of a generating station. In the absence of a definition in the Orders, the term “generating station” will generally have its natural or ordinary meaning unless it is used in a technical context, in which case it will have its technical meaning.

2.6. In view of this, we have set out in appendix 1 detailed information about the equipment and factors we would typically consider when determining what comprises a generating station for the purposes of the RO.

[5] Article 58 ROS and article 50 NIRO.

Changes related to the transition period from the RO to Contracts for Difference (CfD)

2.7. The transition period from the RO to CfD begins once the CfD scheme opens to applications (expected to be in October 2014) and ends when the RO closes to new capacity, scheduled for 31 March 2017. In this period stations will have a one-off choice of scheme between the RO and CfD. The transition period currently only applies to stations in England, Wales and Scotland. Stations in Northern Ireland will not be affected until the CfD scheme is introduced in Northern Ireland, expected to be in 2016.

2.8. A station that applies for CfD has exercised its 'choice of scheme' and will not be eligible to apply for accreditation under the RO. If however, an applicant is rejected from the CfD scheme it will regain its choice of scheme and can apply to the RO. Similarly, stations that have entered into an investment contract[6] will not be eligible for the RO, unless the investment contract has been terminated.

2.9. Stations applying to the RO are required to declare that they have not applied for a CfD (or that any applications for a CfD have been rejected) or entered into an investment contract (or that the investment contract has been terminated) as part of the information declaration[7]. These declarations also apply to stations registering additional capacity[8]. See section 3.4 for an explanation of the information declaration and section 3.75 for information on registering additional capacity.

2.10. An application for preliminary accreditation under the RO is not considered a 'choice of scheme'. Therefore generating stations that have applied for or been granted preliminary accreditation under the RO will be able to apply for a CfD.

2.11. In the following specific circumstances, a station may become a dual scheme facility ie a station that has some capacity under the RO and some under the CfD:

- a station accredited under the RO which adds additional capacity >5MW under CfD

- an RO-accredited biomass co-firing station that transfers one or more generating units to CfD as biomass conversions. (This can also be done on a station-wide basis which would mean an entire station transfers to CfD and will therefore no longer be eligible to receive ROCs)

2.12. An offshore wind generating station that is accredited under the RO can also apply for a CfD for any unregistered turbines and therefore become the equivalent of a dual scheme facility. However, these stations would be subject to CfD phasing rules which differ to CfD dual scheme facility rules. These rules are expected to be set out by the government in 2014 and in advance of the CfD scheme opening to applications.

[6] Investment contracts are an early form of CfD launched under the government's Final Investment Decision (FID) Enabling programme to enable developers to take final investment decisions ahead of the CfD scheme being in place. See www.decc.gov.uk for further details.
[7] Article 58ZZA(8) of the ROO and ROS.
[8] Article 58(4) of the ROO and ROS.

2.13. Before the transition period begins, we will provide further guidance on how we will administer the RO during this time. In the meantime queries relating to the choice of scheme and CfD should be directed to DECC (www.decc.gov.uk).

Changes related to the introduction of the Feed-in tariff[9]

Wind, photovoltaic (PV), anaerobic digestion (AD) and hydro generating stations <5MW in England, Wales and Scotland

2.14. In April 2010 the Feed-in Tariffs (FITs) scheme was introduced as the main means of providing support to micro (<50kW DNC) and small (50kW-5MW) wind, PV, AD and hydro generating stations. To prevent double counting changes were made to the RO to ensure that support is not claimed under both schemes.

Microgenerators (stations with ≤50kW DNC)

2.15. Wind, PV, AD and hydro microgenerators located in England, Wales and Scotland are not eligible to receive support under the RO.

Stations seeking accreditation on or after 1 April 2010

2.16. Stations that were not accredited before 1 April 2010 that wish to claim support for the electricity they generate may be eligible for support via the FITs scheme subject to meeting the scheme's eligibility requirements. Please refer to our 'Feed-in Tariffs: Guidance for renewable installations' document for further information regarding FITs.

Exceptions

2.17. The above does not apply to generating stations located in Northern Ireland where a FITs scheme is not in place. Additional support to such stations is provided under the RO.

Small generating stations (50kW DNC < 5MW)

Stations accredited on or after 1 April 2010[9]

2.18. Small wind, PV, AD and hydro generating stations in Great Britain accredited after 1 April 2010 have the one-off option to choose to receive support under either the RO or FITs schemes. This choice must be declared on application for accreditation (through the ROO-FIT accreditation process). Once the generating station has been accredited under the chosen scheme, it is not possible to switch to the other scheme.

2.19. This means that once a station is accredited under FITs it becomes ineligible under the RO. The exception to this is where an accredited FITs installation is extended above 5MW. In this situation, the station would no longer be eligible for FITs and an

[9] Articles 17B to E ROO.

application could be made to the RO. Please refer our 'Feed-in Tariffs: Guidance for renewable installations' for further information regarding FITs.

Circumstances where generating stations may not be eligible for accreditation or ROCs

AD, wind, hydro and PV stations <5MW

2.20. Due to the introduction of the FITs scheme in England, Wales and Scotland some AD, wind, hydro and PV stations <5MW became excluded from the RO. See previous section on 'Changes related to the introduction of the Feed-in Tariff'.

Stations using peat

2.21. In any month where a generating station uses peat (including alongside other fuels) it will not be able to claim ROCs.

Stations that first commissioned prior to 1 January 1990[10]

2.22. Generating stations first commissioned before 1 January 1990 that did not renew their main components since 31 December 1989 will not be able to claim ROCs. An exception to this rule applies to:

- micro hydro generating stations[11]
- generating stations that have converted to being fuelled wholly by biomass (subject to set fuelling history criteria), and
- generating stations fuelled partly by fossil fuel and partly by biomass

2.23. Generating stations first commissioned before 1 January 1990, to which the above exceptions do not apply, will need to provide us with evidence to show they have renewed all main components since 31 December 1989 if they are to be accredited under the RO.

2.24. The equipment that must be renewed will depend on the type of generating station. This is because there are different requirements for hydro and non-hydro generating stations.

Main components of hydro generating stations

2.25. For hydro generating stations, we need to be satisfied that the following parts have been installed in the generating station after 31 December 1989 and that these were not used for the purpose of electricity generation prior to their installation:

[10] Article 18 of the Orders.
[11] Micro hydro generating station means a hydro generating station that has a DNC of 1.25MW or less that has never generated electricity under a NFFO, SRO or Northern Ireland NFFO (NI NFFO) contract.

- either all the turbine runners or all the turbine blades or the propeller, and
- either all the inlet guide vanes or all the inlet guide nozzles.

Main components of non-hydro generating stations

2.26. For non-hydro generating stations, we need to be satisfied that the following parts have been installed in the generating station after 31 December 1989 and that these were not used for the purpose of electricity generation prior to their installation:

- all the boilers, and
- all the turbines (driven by any means including wind, water, steam or gas).

Evidence required

2.27. We generally expect operators of generating stations to provide evidence to demonstrate the date of the installation of the relevant parts set out above. Such evidence includes:

- a copy of the manufacturer's receipts for the equipment which should specify the relevant date(s)
- copies of the relevant parts of the contract(s) (these would include details of the date, the station name, and the equipment) with suppliers
- details of the work programme, or
- the installer's invoice relating to that equipment or work.

2.28. For renewal that has taken place since 1 April 2002, we expect operators of generating stations to provide the evidence listed in the previous paragraph. For renewal that has taken place before this date where this evidence is not available we may accept a declaration that the refurbishment has taken place.

Offshore generating stations excluded on the basis of their location

2.29. Generating stations located outside the United Kingdom (unless section 2.30 applies), are unable to benefit from ROCs. For the purpose of the Orders, the expression "the United Kingdom" includes the territorial sea of the United Kingdom and waters in any area designated under Section 1(7) of the Continental Shelf Act 1964. This also includes Renewable Energy Zones[12].

2.30. Under the RO and ROS Orders only, the following generating stations are able to claim ROCs and apply for accreditation under the scheme:

[12] A Renewable Energy Zone is an area which is designated by order under Section 84(5) of the Energy Act 2004.

- offshore generating stations located within the territorial waters of the United Kingdom or waters in any area designated under Section 1(7) of the Continental Shelf Act 1964, and
- offshore generating stations, located outside of the United Kingdom, but that are directly and exclusively connected to a transmission or distribution network located in Northern Ireland.

2.31. Offshore generating stations directly connected to a transmission or distribution network in Great Britain need to provide evidence of this when applying for the RO.

2.32. Offshore generating stations directly and exclusively connected to a transmission or distribution network in Northern Ireland need to provide evidence of this when applying for the RO. Appendix 3 provides further information on the evidence that may be required.

Generating stations subject to a Non Fossil Fuel Obligation (NFFO) arrangement (also referred to as NFFO, SRO or NI NFFO contract)[13]

2.33. Articles 21 to 23 of the Orders set out specific conditions for generating stations situated at locations where a NFFO, SRO or NI NFFO contract[14] (known as a "NFFO arrangement" in the legislation) exists[15].

- where an applicable NFFO arrangement has been terminated due to an unremedied breach by the operator of the generating station, a generating station at the location to which the applicable NFFO arrangement applied at the time it was commissioned or which is at the location, and
- is owned or operated by a person who is party to the applicable NFFO arrangement (or a person connected or linked to such person) is unable to claim ROCs and therefore we will not be able to accredit that station.

Generating stations built on sites of non-commissioned generating stations subject to a NFFO arrangement[16]

2.34. If an existing applicable NFFO arrangement has not been commissioned, a generating station at the location of the applicable NFFO arrangement which is owned or operated by a person who is party to that arrangement or is a connected or linked person[17] in relation to that party is unable to claim ROCs and therefore we will not be able to accredit that station.

[13] The NFFO, the SRO and the NI NFFO Orders were the initial means used by the government to implement its renewable energy policy prior to the introduction of the RO. These required the then Public Electricity Suppliers to purchase electricity from renewable generators and provided for this electricity to be purchased at fixed prices for long term contract periods (typically 15 years).
[14] Article 20 ROO.
[15] Where the contract provides or provided for the building of a generating station.
[16] Article 21 ROO.
[17] Please refer to section 2.37for definitions of "connected" and "linked" persons.

2.35. Where section 2.33 and 2.34 apply, a generating station is unable to claim ROCs in any month it generates electricity other than that which is only sold pursuant to another NFFO, SRO or NI NFFO contract.

Connected or linked person

2.36. To establish whether a generating station that will be located on a site where a NFFO Arrangement exists can claim ROCs and therefore become accredited, we have to determine whether the generating station is owned or operated by a person who is a party to the applicable NFFO arrangement or who is a connected person or linked person to a party to the NFFO Arrangement. The Orders define a "connected person" and a "linked person".

2.37. Article 2 of the Orders for example defines:

- A "connected person" as "in relation to the owner or operator of a generating station, or any party to a NFFO arrangement, means a person connected to the owner, generator or party, within the meaning of Section 839 of the Income and Corporation Taxes Act 1988"[18].
- A "linked person" as "in relation to a person who is a party to a NFFO arrangement ("the first person"), means another person who has given or who has arranged to give to the first person or has ensured or has arranged to ensure that the first person is given a financial or other inducement relating to any right or interest in, or in respect of, the construction or operation of a generating station at the location".

2.38. Operators of generating stations on a site where a NFFO arrangement exists, must provide us with an annual declaration[19] confirming that: they are not owners or party to a NFFO arrangement, and that they are not a connected or linked person to an owner or operator of a generating station that is a party to such NFFO arrangement[20] that provided for the building of a generating station at a particular location.

2.39. We do this by requiring generators to sign an "export only" or "permitted ways" declaration each year, normally online in our Register. In some cases we may require further information supported by evidence to establish that the generating station is entitled to continue to receive ROCs for electricity generated on the site. We would advise all parties to read the relevant articles in the Orders and take their own legal advice before signing the relevant declaration.

Biomass generating stations in Scotland with a Total Installed Capacity (TIC) >15MW[21]

2.40. Biomass generating stations with a total installed capacity (TIC) >15MW that are first commissioned from 1 April 2014, and generate electricity from relevant biomass,

[18] Section 839 of the Income and Corporation Taxes Act 1988 was repealed by the Corporation Taxes Act 2010 and replaced under section 1176 the Corporation Taxes Act 2010 with definitions of "Connected person" and "Control" in sections 1122 and 1124.
[19] Article 39 declaration or equivalent declaration (as the case may be).
[20] These are known as "NFFO arrangements".
[21] Article 22C ROS.

either alone or alongside other biomass fuels, may not be eligible to receive SROCs. Relevant biomass is defined as biomass "which is composed wholly or partly from wood which is not an energy crop". A generating station would not be eligible for SROCs in any month in which these circumstances apply:

- unless the station was accredited under CHPQA when first commissioned and is accredited under CHPQA during the relevant month and
- if the generating station has not been a qualifying CHP generating station during the whole or part of 5 or more obligation periods.

2.41. The cap does not apply to co-fired generating stations.

2.42. We understand that the Scottish Government may provide further clarity on eligibility for SROCs in circumstances where this article applies to a generating station during 2014.

Requirements for the supply of electricity

2.43. Under the RO, in addition to the eligibility requirements linked to the generating station itself, there are requirements about the use and supply of electricity on which ROCs can be issued. The RO Orders set out that ROCs can only be issued on electricity supplied to customers in GB and NI or electricity used in a permitted way. This can include electricity exported to the 'grid' and supplied by a licensed supplier to customers in GB and NI, electricity used on site by the operator of the generating station and electricity supplied to a third party via a private wire.

2.44. On an annual basis, generators are required to sign declarations about the supply of electricity on which ROCs are to be issued – 'export only' or 'permitted ways'[22] declaration. Before signing any declarations it is the generator's responsibility to ensure that those provisions apply.

2.45. Depending on the circumstances, generators may also be required to provide evidence of relevant contractual arrangements and other information to demonstrate that the electricity is supplied to customers in the UK. Appendix 3 provides details of the evidence that may be required to demonstrate supply to customers in GB and NI and the circumstances under which it may be required.

Own use of electricity (eligible onsite use)

2.46. Electricity (other than input electricity) that is generated and used on-site by the operator of the generating station may be eligible for ROCs. Input electricity under the RO is electricity used for a purpose directly related to the operation of the generating station. Appendix 1 and chapter 3 provide further information regarding loads that would typically be regarded as input electricity.

2.47. To claim ROCs on onsite use, the operator of the generating station needs to sign a "Permitted Ways" declaration and submit this to us each year. This is done through the

[22] Article 16, ROO.

Register. Appendix 3 provides more information on the 'permitted ways' and other declarations.

Export to a third party

2.48. Generators may also be able to claim ROCs if renewable electricity is supplied to a third party through a licence exempt distribution network or a "private wire" arrangement.

2.49. Where a generating station has a total installed capacity of more than 10MW and the electricity has been supplied via part of the national transmission or distribution network, the electricity will not be eligible for ROCs under the "permitted ways" provisions[23].

2.50. To claim ROCs for eligible electricity used in the way described above, the operator of the generating station needs to sign a "Permitted Ways" declaration and submit this to us each year. Appendix 3 provides more information on declarations.

2.51. Where the Total Installed Capacity (TIC) of the station is less than or equal to 10MW and before the electricity is supplied to the third party it is transmitted or distributed via part of the licensed network, we will need contractual evidence that shows that this supply was via a licensed supplier before we could issue ROCs. Appendix 3 gives further information on these contractual arrangements.

2.52. Where it is not clear who is consuming the electricity, we will consider who is bearing its cost. This is in order to determine whether the electricity is to be regarded as own use electricity or export to a third party through a licence exempt distribution network.

Technology and fuel specific eligibility

2.53. The Orders specifically list the types of non fuelled technologies that may be able to receive support under the RO. Where a generating station uses a fuel, the Orders set out the types of fuel, or combinations of fuels that may be eligible for RO support. Where a specific renewable technology was not envisaged at the time of the introduction of the Orders, such a technology may be eligible for support at 1 ROC/MWh level. For further information on eligible technologies and the level of support they may qualify for see appendix 6 and 7.

MCS for PV and onshore wind in Northern Ireland

2.54. Onshore wind and PV microgenerators in Northern Ireland are required to provide us with evidence that the plant or apparatus used at the generating station meets the requirements of the Microgeneration Certification Scheme (MCS) or equivalent. This requirement has to be met if such generating stations are to be accredited under NIRO. In practice, we will require a copy of a valid MCS certificate from the generator before we can grant accreditation.

[23] Article 16 ROO.

Wave and tidal

2.55. Enhanced tidal stream and wave generating stations can realise the enhanced level of SROCs on their generation if the device[24] is not in receipt of a statutory grant that was awarded on or before 19 September 2008.

2.56. Wave and tidal technologies under RO, ROS and NIRO receive support at 5 ROCs/MWh for 2012/17 marine capacity up to 30MW provided that the capacity is installed and has generated electricity on which ROCs could be issued before 1 April 2017. This level of support is only available for capacity that forms part of the station from a date no earlier than 1 April 2012 and no later than 31 March 2017.

2.57. Any 2012/17 marine capacity added between 1 April 2012 and 31 March 2013 (or 30 April 2013 under the NIRO) only receives the higher level support for any generation that took place on or after 1 April 2013 (or 1 May 2013 under the NIRO). Support for any installed capacity exceeding 30MW limit receives 2ROCs/MWh.

Offshore wind in Scotland

2.58. Certain offshore wind generating stations which are located in Scotland may be eligible for support under two new bands. These bands were introduced in April 2014 and are as follows:

- Offshore wind – Demonstration turbines[25] or
- Offshore wind – Floating turbines[26].

2.59. The definitions that a generating station would need to meet to be eligible for support under these bands and the relevant level of support are set out in appendices 6 and 8. The sections below should be read in conjunction with Chapter 3, which provides full details on the process of seeking accreditation under the RO.

Offshore wind generating stations using test and demonstration wind turbines

2.60. In order to be issued with SROCs in accordance with this band, electricity must be generated by an offshore wind station that uses only eligible wind turbines as defined in article 30C of the ROS[27].The operator of the station is also required to submit a written declaration confirming that the station uses only eligible turbines. Additionally, the lease in respect of which the generating station is entitled to operate under at that particular area of seabed must be a demonstration lease[28] issued by the Crown Estate.

[24] Article 17 ROS Order (as amended)
[25] Article 30C of the ROS
[26] Article 30D of the ROS
[27] 'eligible wind turbine' is defined in Article 30C as 'a wind turbine which in the Authority's view forms part of the generating station from a date no earlier than 1st April 2014
[28] 'demonstration lease' is defined in Article 30C as 'a lease granted by the Crown Estate, one of whose purposes is testing, demonstrating and approving the viability of a wind turbine'.

2.61. Applicants under this band will be sent an example declaration form that may be used. During the accreditation process, we will also verify that the site of the generating station is covered by a 'demonstration lease'.

Offshore wind generating stations using floating wind turbines

2.62. In order to be issued with SROCs in accordance with this band, electricity must be generated by an offshore wind station that uses only floating wind turbines[29].

2.63. The station must also meet the following criteria:

- The station must have preliminary accreditation that takes effect on or before 31 March 2017, and

- The station was commissioned before 1 October 2018.

2.64. At the preliminary accreditation stage we will request evidence to demonstrate that the turbines to be installed will meet the definition of 'floating wind turbine'. At a minimum, we will expect this evidence to include:

- a marine licence issued by Marine Scotland which refers to the fact that the generating station will comprise of floating wind turbines, and

- a full description of the generating equipment to be installed from the turbine manufacturer.

2.65. In order to realise SROCs under this band, the operator of the station is also required to submit a written declaration that confirms all electricity generated by the station was generated using only floating wind turbines. Applicants under this band will be sent an example declaration form that may be used

2.66. Once preliminary accreditation has been granted, we will place a condition on it such that an independent engineer's report is submitted to us in conjunction with the application for full accreditation. This report should detail the construction of the generating station, refer to the accuracy of the information provided throughout the preliminary accreditation process and discuss the nature of the turbines that are in place at the generating station.

Fuelled stations using biomass, fossil derived bioliquids, waste and co-firing stations

2.67. The eligibility of fuelled stations to claim ROCs depends on the fuel mix used each month in addition to meeting RO eligibility criteria. From 1 April 2013 (or 1 May 2013 under the NIRO) certain generating stations may have to report fuelling information on a unit by unit rather than a station-wide basis. Additionally stations using bioliquids that

[29] 'floating wind turbine' is defined in Article 30D as ' a wind turbine which is fixed or connected to the seabed by means of a chain, tension leg or other flexible mooring'.

were previously not required to measure and sample their fuels may need to do so, so that ROCs subject to the bioliquid cap can be identified.

2.68. Our FMS guidance provides further information on the fuels and fuels mixes that may be eligible for ROCs and the FMS procedures that may need to be put in place for unit by unit stations and stations using bioliquids. Chapter 5 provides more information on the bioliquid cap.

2.69. Generating stations that generate electricity using biomass are required to, in addition to having to agree FMS procedures, provide information against set sustainability criteria.

2.70. Where bioliquids are used, meeting the criteria is linked to ROC issue and this information needs to be verified annually via the annual sustainability audit report.

2.71. Generating stations using solid biomass and biogas will need to report against the criteria, however meeting the criteria is not linked to ROC issue. Operators with a TIC of ≥1MW are required to submit a sustainability audit report to us which independently verifies the information submitted on an annual basis[30].

2.72. Please see our Renewables Obligation: Sustainability Criteria guidance document for more information regarding sustainability within the RO and the associated reporting requirements. Further information on the annual sustainability audit can be found in our Renewables Obligation: Sustainability Audit – Guidance for Operators and Auditors document.

Unit by unit approach

2.73. From 1 April 2013 (or 1 May 2013 under the NIRO) generating stations with more than one combustion unit[31] wishing to claim support under one of the conversion bands or one of the co-firing bands will be asked to submit FMS information for each unit.[32] While the submission of unit by unit data is done individually, ROCs continue to be issued on a station-wide basis. Generators are able to move between conversion and co-firing bands on a month to month basis provided that they meet the required percentage of biomass by energy content by unit. See the FMS guidance for further details.

Dedicated biomass (with CHP) band and Relevant Fossil Fuel Generating Stations (RFFGS)

2.74. Changes made to the RO on 1 April 2013 (or 1 May 2013 under the NIRO) meant that stations meeting the definition of RFFGS[33] are no longer able to claim ROCs under

[30] As noted in the UK government response on biomass sustainability, from 1 April 2015, operators of generating stations using solid biomass and biogas fuels to generate electricity, with a TIC of ≥1MW, are expected to be required to meet the sustainability criteria in order to be eligible to receive ROCs.

[31] A combustion unit is defined as a boiler, turbine or engine.

[32] There is an exception to this for generating stations that do not co-fire biomass / energy crops in any unit at 50 per cent or above. Refer to section 2.50 of the FMS guidance.

[33] Schedule 2 RO - "relevant fossil fuel generating station" means—
(a) a generating station—
(i) which is not a 2009/11 dedicated biomass generating station, and

the dedicated biomass band. Instead any generation that would have fallen under the dedicated biomass band ROCs may be issued under one of the conversion (with CHP) bands.

2.75. In determining whether a station meets the RFFGS definition we will look at:

- whether the station received ROCs for generation wholly from biomass that took place between 1 April 2009 and October 2011 (inclusive), and
- whether fossil fuel contributed more than 15 per cent by energy content towards the overall output generated by the station in any six month period since it was first commissioned or since 1 November 2011

to determine whether electricity was generated wholly from biomass no account is taken of fossil fuel used for permitted ancillary purposes[34].

Generating stations fuelled by waste

2.76. Generating stations fuelled by waste (not meeting the definition of biomass) are not eligible for accreditation unless:

- they are Combined Heat and Power (CHP) stations
- the waste is processed by anaerobic digestion, gasification or pyrolysis, or
- the waste is used alongside other fuels and the overall biogenic content of the fuel mix is greater than or equal to 90 per cent.

This does not apply to stations that use waste for permitted ancillary purposes[35].

2.77. Stations using waste that wish to apply for accreditation on the basis of point 1 above will need to be accredited under the Combined Heat and Power Quality Assurance (CHPQA) programme before seeking accreditation. The CHPQA programme is a scheme

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(ii) which has, in any 6 month period since it was first commissioned, generated electricity from fossil fuel, where the energy content of the fossil fuel was more than 15 per cent of the energy content of all of the energy sources used by the station to generate electricity during that 6 month period, or

(b) a generating station—

(i) which is a 2009/11 dedicated biomass generating station, and

(ii) which has, in any 6 month period since 1st November 2011, generated electricity from fossil fuel, where the energy content of the fossil fuel was more than 15 per cent of the energy content of all of the energy sources used by the station to generate electricity during that 6 month period;

"2009/11 dedicated biomass generating station" means a generating station which has, in any month after March 2009 and before November 2011, generated electricity—

(a) only from biomass, and

(b) in respect of which ROCs were issued for all or part of the electricity so generated during that month.

[34] Article 22(3) ROO.

[35] Article 22(3) ROO, article 22(3) ROS and article 21(3) NIRO.

operated by RICARDO-AEA on behalf of DECC. For further information on the CHPQA accreditation please refer to Guidance Note 44 available at www.chpqa.decc.gov.uk.

2.78. Under the RO, CHP stations fuelled by waste receive ROCs on the qualifying proportion of the net renewable output. This means that the renewable fraction of the output as well as CHPQA efficiency ratios are taken into account when determining the number of ROCs to be issued. Chapter 2 of our FMS guidance provides further information on CHPQA accreditation and CHP stations under the RO in general.

Fossil derived bioliquids

2.79. Fossil Derived Bioliquids (FDBLs) are treated the same as other biomass fuels. However, any fossil fuel elements of the fuel still need to be accounted for when claiming ROCs. Our 'Renewables Obligation: Biodiesel and Fossil Derived Bioliquids' guidance document provides further information on determining the fossil fuel content of FDBLs. Further information on using FDBLs can be found on our website[36].

Energy crops

2.80. The energy crop uplift is available to fifteen specific species. Further detail can be found in our FMS guidance.

Qualifying Combined Heat and Power (CHP) Stations

2.81. CHP generating stations wishing to claim CHP ROCs, as described in Schedule 2 of the Orders, will need to be issued with a CHPQA ROCs Eligibility Certificate under the Combined Heat and Power Quality Assurance (CHPQA) programme in addition to being accredited under the RO before they can be issued CHP ROCs. The CHPQA programme is managed by RICARDO-AEA Technology on behalf of DECC. For further information on the CHPQA accreditation process please refer to Guidance Note 44[37].

2.82. The station should inform us once it has received a CHPQA ROCs Eligibility Certificate. In the first year that a generating station is eligible for CHP ROCs, these will be issued as of the date that the CHPQA ROCs Eligibility Certificate was issued providing the CHP scheme has also been commissioned.

2.83. Each year the station will need to apply to the CHPQA for annual certification renewal. We will then apply the details from the renewed certificate to the new obligation year (1 April to 31 March). To ensure there are no delays in issuing ROCs to the station, we ask that the operator ensures their certification is in place, and that we are notified of this, by the first week of July in each obligation year.

The quantity of CHP ROCs to be issued

2.84. The number of CHP ROCs issued to a station accredited under the CHPQA programme is dependent on CHPQA's assessment of that scheme, to produce a Quality

36 http://www.ofgem.gov.uk/Sustainability/Environment/RenewablObl/FuelledStations/Pages/FS.aspx

37 Available from the CHPQA website: http://chpqa.decc.gov.uk/

Index (QI) score and determine the scheme's qualifying power output (QPO). This considers the heat and power efficiencies of that scheme, its overall capacity and the fuel type utilised.

2.85. From this assessment, the QPO and total power output (TPO) are determined. These are defined below:

- CHP QPO: Registered annual power generation (MWh) qualifying as output from 'Good Quality' CHP[38]
- CHP TPO: Total annual power generation (MWh) from a CHP Scheme.

2.86. For generating stations where TPO = QPO ie 100 per cent of generation is considered good quality, the station will receive the relevant ROC banding uplift (outlined in Appendix 3) on 100 per cent of their renewable generation in a given month.

2.87. Where QPO ≠ TPO the relevant uplift will only apply to the percentage of output considered good quality (eg QPO/TPO). For example for a station where QPO = 1000 MWh and TPO = 2000 MWh, QPO/TPO = 1000/2000 = 0.5 or 50 per cent. In this scenario 50 per cent of the renewable generation (the 'qualifying output') within a given month would receive CHP ROCs while the remaining 50 per cent (the 'non-qualifying output') would be issued ROCs at the relevant banding.

2.88. The 'energy from waste with CHP' band is not considered as the 'CHP uplift' as being a qualifying CHP generating station is a determining factor for eligibility for this band. As such, for a station generating electricity using energy from waste with a QPO ≠ TPO, ROCs are only issued for the qualifying output. The non-qualifying output in that month would receive no ROCs.

2.89. Where an operator wishes to claim the CHP uplift on any of the co-firing bands, the fossil fuel and biomass/energy crop must have been burnt within separate units[39].

2.90. The CHP uplift can only be issued on electricity generated by equipment that is within the CHPQA scheme boundary. As such, Ofgem must have regard to the generating equipment within, and outside of, the CHPQA scheme boundary when reviewing a station's RO accreditation application.

2.91. In most cases it is expected that the generating equipment included within the CHPQA scheme boundary will constitute all of the generating equipment described in the station's[40] application for accreditation under the RO.

2.92. Where it is the case that some generating equipment that is included in the station's application for RO accreditation is not within the CHPQA scheme boundary, the CHP uplift cannot be claimed on any electricity generated by such equipment.

[38] See the following link for further information on CHPQA: http://chpqa.decc.gov.uk/
[39] See the wording of the relevant bands in Schedule 2 of the Order.
[40] Reference section in Appendix 1

2.93. In these circumstances it may be necessary for stations to submit two separate RO accreditation applications in order to ensure that the CHP uplift can be awarded correctly:

- one RO accreditation application for the generating equipment inside the CHPQA scheme boundary, and
- one RO accreditation application for the generating equipment outside the CHPQA scheme boundary.

CHP uplift and the Renewable Heat Incentive (RHI)

2.94. As set out above, under the RO, CHP generating stations can receive additional support under any of the CHP bands for heat produced. This is called 'the CHP uplift'. In order to gain the uplift the generating station must first meet CHPQA requirements.

2.95. From 1 April 2013 (or 1 May 2013 under the NIRO), stations who wish to apply for new accreditations or add additional capacity under the RO from 1 April 2013 (or 1 May 2013 under the NIRO) to 31 March 2015 (2013/15 capacity) will have a one off choice to receive the RO CHP uplift. Generators may not wish to claim the RO CHP uplift if they wish to seek support under the RHI. The Orders prevent a station from receiving the RO CHP uplift if their heat is supported elsewhere. Support under the RHI will only be available to generating stations that have submitted an application to the RHI that demonstrates they meet the conditions and eligibility criteria for the scheme. For further information on the eligibility requirements for the RHI, please refer to our website: www.ofgem.gov.uk/rhi.

2.96. To claim the CHP uplift for 2013/15 capacity operators will need to declare to us that they will not claim support under the RHI for the heat produced by the generating station. Further details of the declaration are provided in section 3.82 - 3.91.

2.97. From 1 April 2015, new generating stations or existing stations that add additional capacity will no longer have the choice to opt for the CHP uplift under the RO and will only be able to apply for RHI support, if eligible, in respect of heat generated. Separate accreditation applications would need to be made to each scheme in this instance.

2.98. The only exception to this rule will be where the heat produced is from a technology or fuel source that is not eligible for the RHI. In this instance new accreditations and additional capacity may still be eligible for the CHP uplift under the RO. Where this is the case, a declaration would need to be made in accordance with the requirements set out in the Guidance for Generators.

2.99. Where an operator makes an accreditation application to the RO and the RHI they should be aware that these schemes are underpinned by different legislation and administered by separate teams within Ofgem. Therefore, each scheme may have different FMS requirements and documentation and the operator will need to make a separate FMS proposal as part of each accreditation application. Before submitting the FMS proposal, the operator should consider the requirements of each scheme to ensure their proposed FMS procedures are consistent, where possible, while also meeting the individual requirements of each scheme.

DETI's extension of the CHP uplift for NI CHP projects

2.100. Under the NIRO there is a five month extension to the period in which an operator will have the choice to receive support for the heat fraction of their output in the form of the CHP uplift under the RO or under the RHI. This applies to stations accredited or additional capacity added in that six-month period (ie on or after 1 April 2015 but on or before 30 September 2015)[41]. For any stations accredited or adding additional capacity on or after 1 October 2015 the same rules as in England, Wales and Scotland will apply.

Landfill gas

2.101. Generating stations accredited or additional capacity added under the 'landfill gas' band on or after 1 April 2013 (1 April 2015 for NIRO) receive zero ROCs. Some landfill gas stations may still be eligible for support under two new bands - 'closed landfill' gas (from 1 April 2013 for RO and ROS, 1 April 2015 for NIRO) and 'landfill gas heat recovery' (from 1 April 2013 for RO, ROS and from 1 April 2015 for NIRO). The definitions that a generator would need to meet to be eligible for support under these bands and the appropriate level of support are set out in appendix 6 and 7.

Closed landfill gas

2.102. To be eligible for the 'closed landfill' band all electricity generated by the station must be generated using gas formed in landfill that has stopped accepting waste for disposal. Generators will need to demonstrate as part of the accreditation application process that the relevant landfill site has finally ceased to accept waste for disposal.

Landfill gas heat recovery

2.103. The 'landfill gas heat recovery' band applies when electricity is generated using the heat from a turbine or engine, where the turbine or engine is generating electricity from landfill gas.

Gasification and pyrolysis

2.104. Gasification and pyrolysis are examples of advanced conversion technologies (ACTs). These technologies use waste and biomass feedstocks to produce either a synthesis gas (syngas) and / or liquid fuels (bio-oils) which can be used to generate electricity.

2.105. Generating stations using these technologies may be eligible for support under the 'standard gasification / pyrolysis' or the 'advanced gasification / pyrolysis' bands. Support under these bands requires the generator to measure the GCV of the syngas or pyrolysis oil that is used to generate electricity to determine their band:

[41] Article 26 of the NIRO (Amendment) Order 2013.

- For gaseous fuels produced by gasification or pyrolysis, eligibility for the standard gasification and pyrolysis bands in any month is dependent on the fuel having a minimum GCV of 2 MJ/m^3.

- Eligibility for the advanced gasification and pyrolysis bands is dependent on the fuel having a minimum GCV of 4 MJ/m^3.

- Eligibility for liquid fuels at any of the gasification and pyrolysis bands is dependent on the fuel having a minimum GCV of 10 MJ/kg.

2.106. Generators wishing to claim ROCs under this band must demonstrate at the time of accreditation that their stations meet the definitions of gasification or pyrolysis. Further information on gasification and pyrolysis and advice on the FMS requirements for these technologies are provided in chapter 3 of the FMS guidance.

3. Accreditation under the RO

Chapter summary

Explains the process of seeking preliminary accreditation and accreditation under the RO. It also sets out how accreditation is granted, the conditions of accreditation we may attach, and how we deal with the withdrawal of accreditation.

3.1. The Orders[42] set out how we should grant and withdraw preliminary accreditation and accreditation. It also details when we may attach and amend conditions to any preliminary accreditation or accreditation.

How to apply for accreditation

3.2. Generating stations that want to receive ROCs need to be accredited by us as a generating station capable of generating electricity from eligible renewable sources. The application for accreditation and preliminary accreditation is made via the Register[43]. This is an integrated web based system enabling us to discharge our functions under the RO and the other renewable and CHP schemes that we administer under statute.

3.3. Before making an application for accreditation an operator of a generating station must register an account for their organisation (or themselves as applicable). The account is a means of access to the Register only and is not an application for accreditation. When first creating an account, operators will be required to provide us with an authorisation letter signed by a suitable representative of their organisation.

3.4. Once an account has been set up and an application has been filled out (via the accreditation tab of the account), the operator will be required to sign appropriate declarations. One declaration covers the manner in which the electricity generated is used or supplied. The other is an information declaration. The information declaration covers the information that has been and is to be provided to us under the RO by the generator or anyone acting on their behalf. It also includes a statement that if, at any time, the generating station or fuel used by the generating station is altered or updated in any way that the generator ensure that the Authority will be notified within two weeks of the alteration or update occurring.

3.5. Where an account holder wishes to nominate somebody to act on their behalf in the Register, they, the account "super-user", can add "normal users" to their account. They will then be able to select the functions that these people can carry out on their behalf. For example, this can allow operators to nominate people to submit output data but prevent them from carrying out ROC transfers.

3.6. Operators of generating stations with a declared net capacity of 50kW or less may appoint an agent to act on their behalf. Once appointed, using a dedicated appointment form, the agent is able to apply for accreditation, make declarations and receive ROCs on the operator's behalf. We will treat the appointed agent as the sole point of contact

[42] Article 58 of the Orders.
[43] https://www.renewablesandchp.ofgem.gov.uk/

and all correspondence will be with the agent, rather than the operator. See our 'RO Guidance for agents'[44] for further information.

3.7. Guidance on how to create an account, submit an application and other functions of the Register is published in the Renewables and CHP Register guide[45].

Preliminary accreditation

3.8. The RO allows a person who proposes to construct or operate a generating station to apply for preliminary accreditation via their generator account.

3.9. Preliminary accreditation gives applicants more certainty about future accreditation at the planning stage. It does not guarantee the issue of ROCs or the level at which ROCs might be issued once the station is commissioned. Once preliminary accreditation has been granted, it is only in certain situations[46] that accreditation would not be granted automatically when applied for later.

3.10. There are a number of requirements in applying for preliminary accreditation, including that one of the following relevant planning consents to build the generating station has been obtained:

- consent under Section 36 of the Electricity Act 1989 or article 39 of the Electricity (Northern Ireland) Order 1992, or
- planning permission under the Town and Country Planning Act 1990, the Town and Country Planning (Scotland) Act 1997, or the Planning (Northern Ireland) Order 1991 (as appropriate), or
- development consent under the Planning Act 2008 (which only applies to stations in England, Wales and Scotland).

3.11. Due to time limits on planning consents and permissions, we will only grant preliminary accreditation if the consent or permission is current.

Conditions of preliminary accreditation

3.12. Preliminary accreditation of a generating station under the Orders will be subject to a generic condition that the applicant tells us about major and material changes to the generating station after preliminary accreditation has been granted. In this context "major changes" means changes that might affect the eligibility of the generating station under the RO. "Material changes" include major changes and any changes that mean the generating station as planned or built is no longer eligible under the RO.

3.13. The Orders also permit us to attach any other conditions that appear to us to be appropriate when granting preliminary accreditation. These will depend on the nature of

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44 http://www.ofgem.gov.uk/Sustainability/Environment/RenewablObl/Documents1/RO%20Generator%20Guidance%20May%202011%20final.pdf

45 http://www.ofgem.gov.uk/Sustainability/Environment/RCHPreg/Pages/RCHPreg.aspx

46 See article 58 of the RO Order.

the proposed generating station. The conditions attached to a preliminary accreditation can be varied or added to under certain circumstances.

Confirmation of preliminary accreditation

3.14. We will confirm preliminary accreditation in writing to the applicant. Preliminary accreditation is effective from the date we received the application. The letter will specify any conditions attached to the preliminary accreditation. It will also set out the process that needs to be followed before accreditation can be granted.

3.15. We will publish on our website the following information about generating stations that have been granted preliminary accreditation:

- the name and address (including country) of the generating station
- the proposed technology
- the proposed total installed capacity
- the generator company
- the unique preliminary accreditation number
- the proposed commissioning date
- the date the generating station was granted preliminary accreditation, and
- any conditions attached to the preliminary accreditation.

Obtaining accreditation where preliminary accreditation has been granted

3.16. To convert a preliminary accreditation into full accreditation the operator of the generating station should use the 'convert' function within their generator account on the Register.

3.17. In circumstances where the applicant provides sufficient information to enable us to grant preliminary accreditation, but not all the information requested on the application (such as metering information), we will require the missing information to be provided in full before we grant accreditation. The applicant can amend their application to include this information when an application for full accreditation is made.

3.18. Where conditions are attached to the issue of a preliminary accreditation, the operator of the generating station will need to satisfy us that these have been met before full accreditation can be granted.

3.19. In circumstances where the generating station has been built differently to that described in the application for preliminary accreditation, we will require the generator to submit a new application or resubmit an amended application. We will assess this in the same way as other applications and confirm accreditation when we are satisfied that the generating station is eligible under the RO.

3.20. For preliminary accreditation it will be the responsibility of the applicant to keep us informed of major or material changes to the generating station in the period up to

when accreditation is sought. When informed of such changes, we will be required to take a view as to whether the preliminary accreditation is still valid.

Reasons why accreditation would not be granted automatically[47]

3.21. If, in our view, there has been a material change in circumstances since the preliminary accreditation was granted we cannot grant accreditation. We will determine whether the changes are material on an individual application basis.

3.22. If we have reason to believe that the information provided by the generator on which the decision to grant preliminary accreditation was incorrect in a material particular where material has the same meaning as in section 3.12, we cannot grant full accreditation automatically. Again, we will determine this on an individual application basis.

3.23. We will also not automatically grant accreditation if, in our view, there has been a change in the applicable legislation since the preliminary accreditation was granted, that means that under the amended legislation the preliminary accreditation would not have been granted.

3.24. In addition, for stations applying under the ROO and ROS we will not grant preliminary accreditation if a CfD has been entered into, or if an investment contract has been entered into[48], unless the investment contract has been terminated[49].

Accreditation

3.25. Where preliminary accreditation has not been sought or granted, to become accredited under the RO, the operator of the generating station (or in some cases the generator's appointed agent) must submit an application for accreditation to us. The application must relate to the entire generating station that is to be accredited[50].

3.26. For newly-built generating stations, this should be done at or just prior to the generating station being commissioned. We will not process applications received more than two months before the date on which the generating station is commissioned.

3.27. Accreditation in itself does not guarantee that ROCs will be issued as other statutory requirements must also be satisfied. For example, we cannot issue ROCs unless we are satisfied that the information submitted in relation to a ROC claim is accurate and reliable. In addition, we can only issue ROCs once accreditation has been granted. ROCs cannot be issued on any generation before the accreditation date nor can we backdate accreditation to before an application was first made to us.

3.28. When accreditation is granted, it will be effective from the later of the following dates:

[47] Article 58(2) of the ROO and ROS and article 50(5) of the NIRO.
[48] Article 58(2) of the ROO and the ROS.
[49] Permitted termination events are defined in article 58(4) of the ROO and the ROS.
[50] See appendix 1 for information on what we consider to be a generating station for the purposes of the RO.

- the date the application was received by us, that is the date the application is submitted to us via the Register (if the generating station is already commissioned when we receive the application),
- the date on which the generating station is commissioned, if the generating station has been granted preliminary accreditation or we receive the application for accreditation before the date on which it is commissioned, or
- if the generating station first commissioned before 1 January 1990 and has been refurbished, the date that the renewal of main components was completed (see sections 2.25 and 2.26 for further information on what constitutes "main components")

3.29. Once an application has been submitted, generators should begin submitting output data for generation from the date on which the accreditation is effective. For example, if a generating station commissioned on 1 July 2013 but did not submit an application for accreditation to us until 17 July 2013, ROCs can only be claimed for generation that took place from 17 July onwards.

3.30. Generators should not wait for confirmation of accreditation before submitting data. Output data and any supporting evidence should be submitted within the statutory timeframe even whilst the application is being processed. See chapter 4 for further details.

3.31. ROCs will be issued based on this data once accreditation has been granted and we are satisfied that it is accurate and reliable and all other relevant criteria have been met.

3.32. The Orders set out[51] that ROCs cannot be issued on generation that occurred beyond 31 March 2037. The Orders also limit the overall length of time that ROCs can be issued to each generating station/additional capacity to 20 years. For certain generating stations, ROCs can only be issued on generation that occurred up to the original end date of the RO (ie 31 March 2027). See section 5.20-5.23 for further information on how long ROCs can be issued for.

Definition of Total Installed Capacity (TIC) and Declared Net Capacity (DNC)

3.33. TIC and DNC of a generating station are defined in article 2 of the Orders as:

"total installed capacity" in relation to a generating station means, the maximum capacity at which the station could be operated for a sustained period without causing damage to it (assuming the source of power used by it to generate electricity was available to it without interruption)'

"declared net capacity", in relation to a generating station, means the maximum capacity at which the station could be operated for a sustained period without causing damage to it (assuming the source of power used by it to generate electricity was available to it without interruption) less the amount of electricity that is consumed by the plant

[51] Article 17A of the Renewables Obligation (Amendment) Order 2010, article 17A of the Renewables Obligation (Scotland) Amendment Order 2010 and article 18A of the Renewables Obligation (Amendment) Order (Northern Ireland) 2010 refers.

3.34. When assessing applications for accreditation, we must have regard for the above definitions of TIC and DNC. The generator will declare the TIC and DNC of their generating station as part of their application for accreditation. In the main, we would consider the capacity rating of the generating equipment to indicate the TIC of the generating station, with any other restrictions, such as the capacity of parasitic loads, being factored into the DNC.

3.35. Given the importance of TIC and DNC when determining banding for small generating stations under NIRO and also where different types of generating capacity are present at a generating station, we may request third-party verification of both during the accreditation process.

3.36. Such verification could be a declaration made by the installer or manufacturer of the generating equipment. If, for any reason, we remain unclear as to the TIC and DNC of the generating station, we will request that the applicant arranges for an independent audit report to be submitted to us. This report will verify the TIC and DNC of the generating station, with reference to the legislative definition.

De-rating or altering capacity of generating equipment

3.37. Where an applicant wishes to declare a TIC/DNC which deviates from the nominal capacity rating of the generating equipment, it is their responsibility to declare this to us in the first instance. Additionally, they should provide sufficient evidence to satisfy us that the TIC and DNC claimed in their application is in accordance with the RO Order. We have developed specific criteria that need to be met and further information can be provided upon request by email on renewable@ofgem.gov.uk.

Electrical set up and metering requirements

3.38. The Orders set out the way in which output that is eligible for ROCs (net renewable output) is calculated. This is:

Net Renewable Output = (Gross Output – Input Electricity) x Renewable Qualifying Percentage

3.39. To issue ROCs, the operator of the generating station is required to provide us with accurate and reliable gross generation and input electricity data. This data must be supplied on a monthly basis by the end of the second month after the month of generation. Both output and input electricity must be measured using an approved meter.

3.40. Generating stations using fuels will also need to agree procedures (FMS procedures) that will enable them to determine the qualifying percentage of the output. Our FMS guidance gives further information on this process. For offshore wind generating stations there are specific requirements, see section 3.76– 3.81.

3.41. Where a station comprises a number of different types of generating capacity, the output attributed to each one is determined on the basis of the TIC of each type of

generating capacity[52]. Under certain circumstances the RO provides for part of the output of the station to be separately measured. See article 30 of the RO Orders.

Metering set up

3.42. When applying for accreditation, generators must provide the make, model and serial number of any meters used at their station. These details must also be clearly identified on the electrical schematic diagram submitted with the application.

3.43. This is so that we can determine whether or not any meter used to measure eligible renewable output is approved. It also enables us to determine whether the metering set up enables the generator to accurately measure the output of the generating stations well as all input electricity[53].

Standby generation

3.44. Standby generation is defined in the Orders[54] as:

"the generation of electricity by equipment which is not used frequently or regularly to generate electricity and where all the electricity generated by that equipment is used by the generating station"

3.45. Generating stations which have standby generators must have mechanical interlocking arrangements, or equivalent, in place to prevent the electricity generated from such generators being exported or used in such a way that might augment the monthly ROC claim.

3.46. If the use of standby generation meets the definition of input electricity it must be reported as part of the stations monthly data submissions. Any standby generators present at a generating station must be declared on the application for accreditation so we can determine how they should be treated for the purposes of claiming ROCs.

What type of meters are required to be installed

3.47. The Orders set out that electricity in respect of which ROCs are to be issued must be measured using an approved meter[55]. In practice this means that we will generally require the meter to be on the Schedule 4 list of approved meters. This list is available in the metrology section of our website[56] and also on the NMO[57] website. Alternatively, we will require evidence in the form of an MID[58] certificate that demonstrates that the meter is MID approved. Appendix 2 provides further information on metering requirements under the RO.

[52] Article 27 ROO.
[53] Article 53 ROO.
[54] Article 22 ROO, article 22 ROS and article 21 NIRO.
[55] Article 36 (2)(b) of the ROO, article 36(2)(b) of the ROS and article 34(2(b) of the NIRO refers.
[56] http://www.ofgem.gov.uk/Markets/sm/metering/crf/metrology/mid/Pages/mid.aspx
[57] National Measurement Office: http://www.bis.gov.uk/nmo
[58] Measuring Instruments Directive.

3.48. Non-approved meters used for the purposes of claiming ROCs need to be replaced with approved meters. Generators will not be able to claim ROCs on output unless it has been measured by an approved meter, and we may withhold accreditation until approved metering is in place. There are certain exceptions to this that apply in circumstances where the generator has agreed with us to submit an estimate instead of a measurement using an approved meter. Please refer to chapter 4 for further information about estimates.

3.49. Please refer to chapter 3 and appendix 2, for information about metering requirements under the RO. If those requirements are not complied with we may withhold accreditation until this is rectified by the operator of the generating station.

Conditions of accreditation

3.50. Accreditation of a generating station under the Orders will be subject to the following general conditions:

(a) granting access to the premises from where the electricity is generated to any person authorised by us

(b) providing reasonable assistance to that authorised person

(c) allowing that authorised person to take samples and photographs

(d) allowing that authorised person to inspect or test anything on the premises (including the inspection of meters) and remove any items for analysis and / or inspection

(e) allowing that authorised person to inspect and / or copy records connected with the generation or supply of the electricity and the provision of meter volumes

(f) agreeing to on-site visits and / or random checks to verify the accuracy of information provided (for example to verify the accuracy of information provided at the time of accreditation or to verify the accuracy of meter readings or volumes provided or the monthly sample analysis)

(g) where off-site measurement takes place, allowing access to off-site measurement facilities by doing all that it can to ensure that any party with which it contracts complies with conditions (a) to (f) above

(h) agreeing to provide an annual declaration if requested that the operator of the generating station will comply with the relevant Order

(i) agreeing to provide an independent auditor’s report if requested, and

(j) meeting any other evidential requirements and conditions that may be applicable in individual circumstances (this might be dependent on the type of generating station).

3.51. We may also attach bespoke conditions that appear to us to be appropriate when granting accreditation. All conditions of accreditation will be confirmed at the point accreditation is granted.

Confirmation of accreditation

3.52. Where we are satisfied that the generating station is eligible under the scheme, we will confirm accreditation in writing to the operator of the generating station.

3.53. The accreditation confirmation letter will state the basis on which the generating station has been accredited (ie what eligible renewable source the generating station is accredited for). It will also confirm the total installed capacity of the station, the accreditation date, the accreditation code and any conditions attached to the accreditation. The letter will also explain how and when monthly generation data must be submitted to us.

Accreditation number

3.54. When a generating station is granted accreditation, we will allocate it a unique accreditation number. For example, for a landfill gas generating station in England, we could allocate a number such as R 00001 RJ EN.

3.55. In this example:

- "R" signifies a RO code
- "00001" is the sequential generating station number (in other words, this might be 00001 for the first generating station of that technology type to be accredited, 00002 for the second generating station of that technology type to be accredited, etc)
- "RJ" is the technology code for landfill gas under the Orders, and
- "EN" is the code for England, the country in which the generating station is located.

Preliminary accreditation number

3.56. When a generating station is granted preliminary accreditation, we will allocate it a unique preliminary accreditation number. Preliminary accreditation numbers are identical in format to accreditation numbers, with the exception that they will be prefixed with a "P" instead of an "R". Once accreditation has been granted, the "P" will simply change to an "R".

Technology codes

3.57. A list of technology codes for all generating stations accredited under the RO, ROS and NIRO is included in appendix 4. The technology codes are different for each

scheme due to the differing provisions of each Order, particularly the requirement on us to publish separately the number of ROCs, SROCs and NIROCs issued.

3.58. If the technology used at a generating station does not fall into any of the categories listed in appendix 4, the applicant should contact us with details of the technology and generating station before completing an application.

Refusal to accredit

3.59. We will refuse to accredit a generating station in circumstances where we are not satisfied that it is capable of generating electricity from eligible renewable sources or where it is unlikely that ROCs could ever be issued on electricity generated by the station. We will also refuse to accredit a generation station if the application has been made fraudulently or by a party not entitled to apply for accreditation[59]. We cannot grant accreditation unless a generating station has been commissioned.

3.60. In addition, we will not grant accreditation if:

- an application for a CfD has been made at any time, unless that application for a CfD has been rejected by National Grid (in its function as CfD Delivery Body).
- an investment contract has been entered into, unless that investment contract has been terminated as per the "permitted termination events".[60]

Withdrawal of accreditation

3.61. We may withdraw accreditation or preliminary accreditation in the following circumstances[61]:

- where, in our view, there has been a material change[62] in circumstances since the accreditation or preliminary accreditation was granted
- any condition of accreditation or preliminary accreditation has not been complied with
- we have reason to believe that the information on which the decision to grant the accreditation or preliminary accreditation was incorrect in a material particular that would mean the station would be ineligible, or
- there has been a change in the applicable legislation since the accreditation or preliminary accreditation was granted such that had that legislation been in effect the accreditation or preliminary accreditation would not have been granted.

3.62. Where operators believe the grounds for withdrawal of accreditation have been met they should set out to us the basis on which the accreditation should be withdrawn. Reference should be made to the circumstances above and third party evidence should be provided as appropriate. We will look to understand whether the generating station is

[59] Refer to article 58(2) and (4) for further detail.
[60] Article 58(4) of the ROO and ROS.
[61] See article 58(8) of the Orders.
[62] See section 3.12 for information on what constitutes a material change.

still in existence in the context of the plant, apparatus, infrastructure etc. that was the subject of the original accreditation.

3.63. In the case of stations that have been decommissioned, the operator should set out exactly what changes were made to the station and what equipment / infrastructure was removed and what remains in place. In addition, suitable third party evidence such as decommissioning certificates, photographic evidence and other similar documents should be provided.

3.64. When making representations to us, applicants should refer to appendix 1 of this document with regard to what sets of equipment we would typically consider to comprise a generating station.

3.65. Before reaching a decision, we will take account of representations made by the operator of the generating station. We will confirm our decision, including the date of withdrawal of accreditation, as appropriate. Depending on the reason for accreditation being withdrawn, we may revoke some or all of the ROCs issued. Chapter 5 deals with the circumstances in which we may revoke ROCs.

Audits

Technical

3.66. We carry out a programme of audits of accredited generating stations on an ongoing basis. Their purpose is primarily to guard against fraud and error. They also ensure that a generating station remains an eligible renewable generating station for the purposes of the RO, that we hold the most up-to-date information for a station and that the correct number of ROCs has been issued to the generator in question.

3.67. The auditors review, amongst other things, metering arrangements and the data that has been submitted monthly for ROC claims. Given this, operators of generating stations should keep appropriate records so that a full audit trail can be provided at the time of audit.

3.68. Following an audit we will write to the generator concerned outlining any issues identified and include a copy of the auditor's report. The generator is expected to then address these issues and report back to us. In certain circumstances we can suspend ROC issue until the issues have been resolved. We also have the power to withdraw accreditation in certain circumstances and revoke or permanently withhold ROCs from a future ROC issue as appropriate.

Enquiries and investigations

3.69. One of our functions under the Orders is to monitor the implementation of the RO and to monitor compliance by operators of generating stations with the Orders. This includes compliance with the conditions attached to their accreditation.

3.70. This monitoring may include conducting enquiries or investigations into:

- the quantities of electricity generated from eligible renewable sources by accredited generating stations
- the quantities of such electricity supplied to customers in the United Kingdom and
- the transfer and holding of ROCs in the Register.

3.71. This monitoring may also include conducting enquiries or investigations into the effect of the RO on the operators of generating stations. We may publish reports of any such enquiries and investigations as appropriate.

Installing additional capacity/reducing capacity

3.72. Where the capacity of an accredited generating station changes, the generator will need to amend the details in the existing accreditation to reflect the changes. This can be done through the accreditation tab of their account. Generators should ensure that they provide a revised schematic diagram showing the position of the additional generating equipment and any changes to metering.

3.73. Once the accreditation has been edited and submitted back to us we will review it to ensure that the revised arrangement will still allow the claim of ROCs and will not make the station ineligible under the RO.

3.74. Generators may wish to ensure that any amendments to their application are made as close to the time of the change to the station as possible. This is because the issue of ROCs will be suspended whilst the amendment to the application is being processed. Any proposed amendments to an accredited generating station cannot be approved before the changes have actually taken place.

Registering additional capacity[63]

3.75. Under the Orders we may register any additional capacity that is added to a station which is already accredited under the RO and ROS from 1 April 2014. To do so generators will be required to follow the same process as set out in 3.72. As previously mentioned in section 2.8 generators registering additional capacity will have to make certain declarations[64] via the information declaration.

Technology specific processes

Offshore wind generating stations

3.76. Operators of offshore wind generating stations, in addition to applying for accreditation under the RO, must register turbines with us in order to claim ROCs. This is because, as of 1 April 2011, ROCs cannot be issued on any generation using offshore wind turbines that have not been registered with us.

[63] Article 58B of the ROO and the ROS.
[64] Article 58(4) of the ROO and the ROS.

3.77. For these stations, the 20 years of RO support does not apply to the accredited capacity of an offshore wind station from the point of accreditation. Instead, 20 years of RO support is realised on each group of turbines from the date that they were registered with us. This rule applies only to new stations accredited on or after 1 April 2011 or any additional turbines added to an existing accredited station on or after 1 April 2011.

3.78. It is up to the generator of the station to decide on their registration strategy eg whether they register the first group of turbines as of the date the accreditation is effective from or some time after that, whether they register turbines in up to five phases as and when turbines are deployed or the whole capacity of the station upfront.

How to register offshore wind turbines

3.79. An application to register turbines must be submitted to us at the latest on the day the applicant wishes the registration to be effective from. The application must be made in writing and must meet the following criteria:

1. The request must[65]:
    - identify each turbine to be registered,
    - identify its location or proposed location,
    - specify the total installed capacity of each turbine, and
    - specify the date the generator wishes to register it from.

- When registering turbines in respect of an offshore wind station that was accredited on or after 1 April 2011, the generator should be mindful of the following requirements:
    - The first registration request must be made in respect of turbines with a total installed capacity equivalent to at least 20 per cent of the accredited capacity of the generating station under the first registration.
    - Turbines that are being registered can be both operational and those yet to be deployed.
    - The generator can register turbines that form part of the accredited capacity in a maximum of five phases, and
    - Turbines cannot be registered five years or more after the date on which the generating station was accredited.

- When registering turbines in respect of additional capacity added to an offshore wind station that was accredited before 1 April 2011 ("registrable additional turbines"[66]), the generator should be mindful of the following requirements:
    - The generator can only register such turbines in a maximum of five phases, and

[65] Article 58A of the Orders.
[66] "registrable additional turbine" means a wind turbine which—
(a) forms part of the capacity of a generating station which is offshore;
(b) does not form part of the capacity of the station as accredited; and
(c) was not used to generate electricity before 1st April 2011.

- Turbines cannot be registered five years or more after the date on which the registrable additional turbines were first added to the station and used to generate electricity.

3.80. Once we have considered an application to register turbines, we will notify the operator of the generating station in writing of our decision. If the application has been approved, we will specify the date on which the registration of the wind turbines is to take effect. In the vast majority of cases we would expect this to be the date on which the application to register the turbines was made to us.

3.81. The Orders set out that ROCs cannot be issued on any generation by offshore wind turbines that have not been registered with us. In instances where monthly output figures represent generation by registered and unregistered turbines[67], generators will need to contact us to agree a methodology that will enable them to determine the output of the generating station that should be attributed unregistered offshore wind turbines and the part of the output eligible for ROCs. Chapter 4 provides further information regarding the methodology.

CHP uplift and the Renewable Heat Incentive (RHI) scheme[68]

3.82. Some CHP generating stations may be able to receive additional support under one of the CHP bands for heat produced. This is called 'the CHP uplift'. In order to gain the uplift the generating station must meet CHPQA requirements. In addition, in order to claim CHP uplift under the RO for any capacity added on or after April 2013 (or May 2013 under the NIRO) there are additional requirements that must be met.

Accreditations or additional capacity added before 1 April 2013 (or 1 May 2013 under the NIRO)

3.83. Any pre-1 April 2013 (or pre-1 May 2013 under the NIRO) capacity already receiving the CHP uplift will continue to receive the uplift after 1 April 2013 (or 1 May 2013 under the NIRO) subject to continuing to meet the eligibility criteria.

Accreditations or additional capacity added between 1 April 2013 (or 1 May 2013 under the NIRO) and 31 March 2015

3.84. Stations accredited or additional capacity added in the period 1 April 2013 (or 1 May 2013 under the NIRO) to 31 March 2015 will have a one off choice between claiming for the heat element of their output under the RO with CHP bands or receiving support under the RHI scheme and potentially claiming support for electricity only under the RO.

3.85. Availability of the CHP uplift or support under the RHI is subject to meeting the relevant criteria. Once a generating station has opted for the RO CHP support for a particular capacity this choice cannot be withdrawn.

[67] "unregistered offshore wind turbine", in relation to a generating station, means a wind turbine which—
(a) is not registered under article 58A; and
(b) where the generating station was accredited as at 31st March 2011, is a registrable additional turbine.
[68] Article 28 of the ROO, article 28 of the ROS and article 26 of the NIRO.

3.86. To claim the CHP uplift for 2013/15 capacity the operator of the generating station will need to make a declaration in writing to Ofgem. The content of the declaration is set out in article 28 of the ROO[69].

3.87. One declaration covers all the capacity added during the relevant period of that type of generating capacity.

Accreditations or additional capacity added on or after 1 April 2015

3.88. Generating stations accredited or adding additional capacity on or after 1 April 2015 will only be able to claim the CHP uplift under specific circumstances. Where the heat produced is from a technology and / or fuel source which does not, and has never met the RHI eligibility criteria the generator may still be able to claim the CHP uplift under the RO for 2015/16 and post-16 capacity.

3.89. To claim the CHP uplift for 2015/16 capacity and post-2016 capacity the generator will need to make a declaration to us. The content of the declaration is set out in article 28 of the ROO.

3.90. One declaration covers all the capacity added during the relevant period of that type of generating capacity.

3.91. Under the NIRO there is a five month extension to the period in which an operator will have the choice to receive support for the heat fraction of their output in the form of the CHP uplift under the RO or under the RHI. This applies to stations accredited or additional capacity added in that six month period ie on or after 1 April 2015 but on or before 30 September 2015[70]. For any stations accredited or adding additional capacity on or after 1 October 2015 the same rules as in England, Wales and Scotland will apply.

[69] Article 28 of the ROS and article 26 of the NIRO.
[70] Article 26 of the NIRO.

4. Data submission and supporting evidence

Chapter summary

Sets out the information we require to determine whether ROCs should be issued. It also provides the timetable for the submission of information, how we will deal with situations when information is provided outside the timetable and how we will deal with errors in the data.

Introduction

4.1. The Orders set out the way in which the net renewable output is to be calculated for the purposes of issuing ROCs. This is as follows:

Net Renewable Output = (Gross Output – Input Electricity) x

Renewable Qualifying Percentage

4.2. For us to issue ROCs to an accredited generating station, the generator must provide us with accurate and reliable gross generation and input electricity data. For stations using fuels we may also require information such as the fuels' calorific value (as agreed as part of the station's FMS procedures[71]) to determine the qualifying renewable fraction of the fuels used.

4.3. Output data is submitted through the generator's account on the Register. Any supporting evidence required should be sent to monthlyoutputdata@ofgem.gov.uk. All stations with declared net capacity of greater than 50kW are required to submit data monthly. Microgenerators[72] have a choice of claiming ROCs monthly or annually.

Responsibility for data submissions

4.4. It is the responsibility of the generator to ensure that we have received the relevant information for their ROC claim within the set legislative deadlines. On submitting an application for accreditation to us, the operator will be sent an email notification by our administrators to confirm receipt of the application. This notification makes clear that the operator should not await confirmation of accreditation before submitting data to us. Instead, they should submit data by the relevant deadlines (see section 4.42– 4.46) via their account on the Register.

4.5. If a generating station is in the preliminary accreditation process but has since commissioned, the generator should contact us at renewable@ofgem.gov.uk. The reason for this is they will be unable to submit generation data via their Register account and will hence need to agree alternative arrangements.

[71] See our FMS guidance for further information regarding FMS procedures for fuelled stations.
[72] Operators of generating stations with declared net capacity 50kW or less.

4.6. It is possible for the generator to authorise a third party, eg their supplier or a data collector, to provide the data on their behalf. Where a generator wishes to use a third party for this role, they can nominate them as a contact through their generator account. In this instance, it is still the responsibility of the generator to ensure that we have received the relevant information, and that there is no duplication of data submissions.

4.7. Operators of generating stations that are subject to NFFO, SRO or NI NFFO contracts are not required to provide the electricity information for the data submission to us. This information should instead be provided by NFPA for NFFO and SRO contracts and Power NI for NI NFFO contracts. Stations using biomass or waste to generate electricity will still need to provide fuelling and sustainability information to us.

4.8. Where NFFO, SRO or NI NFFO contracts end, there is a process in place for submitting data, to ensure that the correct amount of certificates are issued up to the end of the contract. Generators should contact us for details on this process where it is required.

Microgenerator data submissions

4.9. As part of the initial accreditation application, microgenerators can opt to claim ROCs on a monthly or annual basis[73], and so the provision of output data to us will relate to the chosen period.

Monthly data – this relates to a calendar month

Annual data – this relates to an obligation period (1 April – 31 March)

4.10. For those opting for annual submissions, readings should be taken on 31 March each year where possible. Microgenerators can take their meter readings up to two months after the end of the period of generation. Where this occurs, the data will be pro-rated, based on the time and day the reading was taken.

Changing the frequency of ROC issue

4.11. If a generator of an accredited generating station wishes to change the frequency of ROC issue (ie from monthly to annual or vice versa), we must receive at least one month's notice before the beginning of the next obligation period. The deadline for this notification is 28 February.

4.12. Once we have received this notification, we will confirm the changes to the generator in writing. The new frequency will take effect as of the new obligation period and will remain so until we are notified otherwise.

[73] Article 60 of the ROO and ROS and article 52 of the NIRO.

Information to be submitted

Electrical Information

4.13. When generators apply for accreditation under the RO, they are asked to set out the position of their metering and how they wish to claim ROCs, eg from a single net output meter, from multiple meters determining on site usage and export, input electricity. This will determine what generation information they need to provide when making each output data submission.

4.14. The generation and input electricity information provided should be based on meter readings taken by, or on behalf of, the generator. The readings should be taken on the first day of each month (or within one day either side of this date).

4.15. There are two types of meter readings commonly used to claim ROCs:

- Manual meter readings: these are readings physically taken from the display of the meter at the beginning / end of each month. Where manual readings are taken the readings should be submitted via the 'enter non-half hourly or estimated data' tab on the output data submission page. The difference between the start and end reading should then be submitted as output / input.
- Half hourly data: this is data provided to the generator by a supplier / data collector in a spreadsheet showing generation in each half hour period in that month.

4.16. All readings should be recorded and retained together with supporting evidence such as dated photographs of the meter reads and third-party evidence such as half hourly data and invoices. This information will be required for audit purposes. Table 1 outlines the key terms for output data submissions.

Table 1 Key terms for output data submissions

Term	Definition
Gross Output	The total amount of electricity generated by a generating station[74]
Input Electricity	The total amount of electricity used by the generating station for purposes directly related to the operation of that generating station (including fuel handling, fuel preparation, maintenance and the pumping of water) whether or not that electricity is generated by the station or used while the station is generating electricity[75]. For more information with regards to input electricity please see Input Electricity section below.
Net Output	This is the gross output less any input electricity

[74] Article 25(6) of the ROO and the ROS and article 23(6) of the NIRO.
[75] Article 24(6) of the ROO and the ROS and article 22(6) NIRO.

Input Electricity

4.17. Input electricity is defined in legislation and this definition is set out in table 1. Sources of input electricity include the following:

- Electricity generated by the generating station used by loads directly associated with the operation of the station
- Imported electricity, and
- Standby generation electricity

Accounting for input electricity

4.18. The Orders[76] require input electricity to be deducted from the gross output in order to calculate the net renewable output. This includes any electricity used by the sets of equipment (as described in appendix 1) and any used for maintenance, which also must be deducted in the monthly calculations.

4.19. Where input electricity to the generating station does not exceed 0.5 per cent of the station's gross output in a month, the input electricity does not need to be deducted for the purposes of ROC issue[77]. The input electricity data should still be submitted as the output data template on the Register is set up to determine whether the input electricity is below the 0.5 per cent threshold, in which case it disregards this for the calculations.

4.20. There are specific input electricity provisions in the Orders for stations generating electricity using hydrogen. Please refer to the legislation for further information[78].

Supporting evidence

4.21. Once a station is accredited under the RO, the generator will be notified of this in writing (see section 3.52– 3.53). The accreditation letter will set out any on-going requirements and whether any supporting evidence is required alongside each output data submission.

4.22. Supporting evidence may be in the form of meter readings, any calculations agreed as part of the accreditation or information regarding fuelling and sustainability.

4.23. Where information cannot be provided as part of the submission via the Register, it can instead be submitted to the team by email to monthlyoutputdata@ofgem.gov.uk.

[76] Article 25 and 25 of the ROO and ROS, and articles 23 and 24 of the NIRO.
[77] Article 25(1) of the ROO and ROS, and article 23(1) of the NIRO.
[78] Article 24(6) of the ROO and the ROS and article 22(6) NIRO.

Fuelling information

4.24. As part of the initial accreditation process, fuelled generating stations are required to provide details of any fuels used at the station and agree FMS procedures, where required.

4.25. Once the FMS is agreed, the generator will need to set up any fuels in their account via the fuel maintenance portal[79]. When making each output data submission, the generator will need to select the relevant fuel(s) used in that period.

4.26. Where it has been agreed that generators must undertake FMS procedures, we will often ask for supporting evidence of these procedures (such as fuel delivery notes and laboratory analysis certificates) to be provided with each output data submission.

4.27. Each FMS, and therefore what supporting evidence is required, is agreed on a case by case basis. For more information about this process please refer to the FMS guidance[80].

Sustainability information

4.28. The Orders require generating stations using biomass to provide information against sustainability criteria in respect of renewable fuels used to generate electricity. This information is provided as part of each output data submission via the Register. Please see our Renewables Obligation: Sustainability Criteria guidance document for more information[81].

Information submitted by offshore wind farms

4.29. Offshore wind generating stations accredited on or after 1 April 2011 or additional capacity added to stations on or after that date cannot claim ROCs on any generation using turbines that have not been registered with us. Refer to chapter 2 for further information regarding the registration process[82]. Where any generation not eligible for ROCs is not measured separately ie bespoke, approved metering, it must be expressed as a percentage of the total installed capacity of the unregistered turbines that generated electricity against the total installed capacity of the station as at the date of generation of the electricity.

4.30. Unregistered turbines for the purposes of the calculation are turbines other than those:

- that formed part of the accredited capacity of a generating station as accredited on or before 31 March 2011, or

[79] Detailed steps on how to do this can be found in the Renewables and CHP Register User Guide, which is accessible on the Ofgem website http://www.ofgem.gov.uk/Sustainability/Environment/RCHPreg/Pages/RCHPreg.aspx
[80] Available on the Renewables Obligation: Fuelled Stations page of the Ofgem website: http://www.ofgem.gov.uk/Sustainability/Environment/RenewablObl/FuelledStations/Pages/FS.aspx
[81] https://www.ofgem.gov.uk/environmental-programmes/renewables-obligation-ro/information-generators/biomass-sustainability
[82] Article 17AB of the RO Orders.

- turbines added to such a generating station before 1 April 2011 that were used to generate electricity before that date, or
- turbines registered under article 58A.

4.31. It is for the generator to propose a methodology suitable for their generating station to us. We assess each methodology proposed to us on a case by case basis and as such there is not one specific methodology that must be followed by all stations.

4.32. When submitting a methodology to us generators should clearly explain how they will identify the number of unregistered turbines that should be taken into account in the calculations and how they will determine the total installed capacity of the station as at the date of generation of the electricity. They should also explain what evidence they are proposing to submit each month to support their claim. Once a methodology has been submitted we will work with the generator on the detail.

First meter reading and data submission

4.33. ROCs can only be claimed on electricity that has been generated on or after the accreditation date. The first data submission may therefore not represent the whole month generation figure (or a whole year in the case of annual data submissions).

4.34. Assuming the station has already been commissioned; applicants for both monthly and annual issue of ROCs should therefore take an initial meter reading as soon as we confirm receipt of their application for accreditation as this reading will coincide with the date of accreditation.

4.35. From that point on the data submissions should reflect the month / year in question as described in the above sections.

Internal data review and output data exceptions

4.36. All output data submissions should be completed via the generator's account on the Register, with any supporting evidence being submitted by email. When the generator submits output data, it is reviewed by us before ROC issue takes place.

4.37. In addition to an internal review, the Register itself undertakes a range of checks with respect to each submission made. Whilst not an exhaustive list, these checks include:

- the feasibility of the gross output
- a comparison with the same month in previous years
- whether the data is first submitted within the statutory two month deadline (see section 4.42– 4.46 for more details)
- whether the data has been amended (see section 4.51– 4.60)
- whether the accreditation has been approved, including any accreditation amendments
- whether there are any new fuels used which are pending approval

- whether there are any outstanding declarations to be agreed by the Super User of the account.

4.38. Where the system flags any queries with the output data it will show the user the relevant output data exception(s) upon submission.

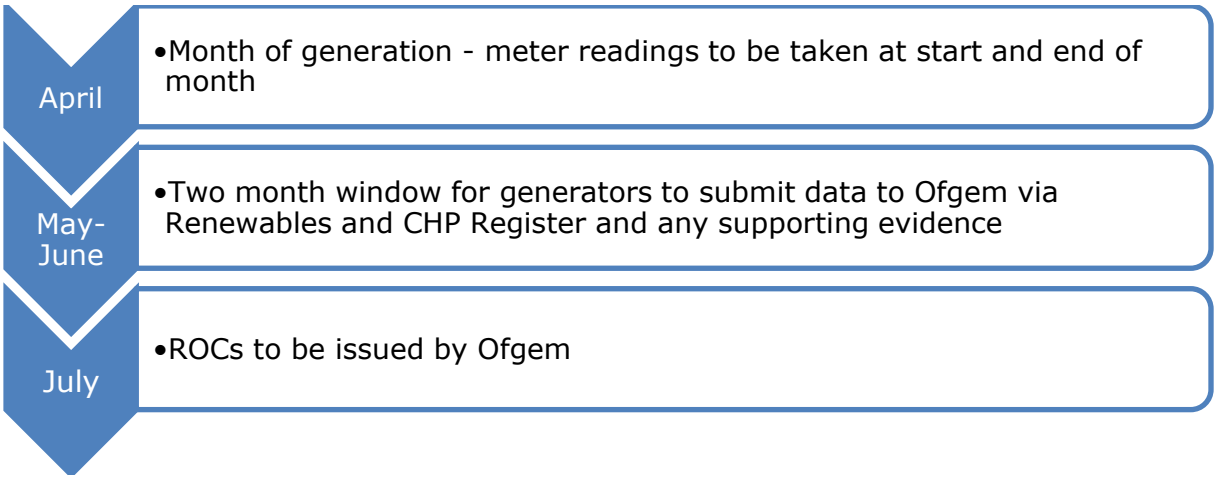
4.39. Generally, the system provides a comments box to add any information which may be relevant to the exception. Where this occurs, the generator should be sure they understand the exception and can provide an appropriate comment. These comments will then be reviewed by our internal team as part of the data review process. To minimise delays to the certificate issue the generator should provide as much relevant information in their explanation as possible.

4.40. There are instances where exceptions are flagged but no comment is needed by the generator. In this case no response box will be provided when the exception is detailed.

4.41. Each output data exception, and any action needed by the generator, is detailed in the glossary on the Register. This can be accessed by clicking on the link for 'output data exceptions' when exceptions arise upon submission.

Timelines for data submission

4.42. Generators have two months after the month of generation to submit their data to us[83]. This following flow diagram provides an example of this timeline:



4.43. In the case of annual submissions, this two month submission period also applies. For example, data for annual submissions (1 April – 31 March) should be received by the 31 May.

4.44. The timelines for data submission and certificate issue are published annually on our website[84].

[83] Article 53(3) of the ROO and ROS and article 45(3) of the NIRO.

4.45. If a generator knows in advance of the deadline as to a reason why they will not be able to submit data, they should contact us to discuss these reasons before the submission deadline.

4.46. Where there is any doubt as to whether we have received this data, we will require evidence from the generating station that the required information was sent before the deadline such as a notification email sent by the Register. We strongly recommend that generators make use of this functionality. For assistance in setting up this functionality please contact the team on 0207 901 7310.

Late data

4.47. The Orders provide us with discretion to accept generation data submitted outside of the two month deadline[85] assuming that we consider it appropriate to do so. Each request for late data is considered on a case by case basis.

4.48. When considering late data cases we will take into account the reasons for the late submission, how many times data has been submitted late for the station and any previous correspondence with a generator regarding previous late data cases. If data is submitted late on a regular basis, the relevant ROCs will not be issued. If there have been repeated but infrequent instances of late submissions, circumstances must be truly exceptional if ROCs are to be issued.

Process for late data

4.49. When a generator submits data late via the Register, they will receive an output data exception upon submission which flags the data as late. At this point the data will be suspended and the generator must provide a clear statement as to the reason(s) for the late submission.

4.50. Supporting evidence for the late data claim should be sent to renewable@ofgem.gov.uk. The generator should also set out whether we had been previously notified that the claim would be late. This email should state the name of the generating station and the period(s) to which the claim relates. Once this information has been received, the case will be reviewed and the generator will be informed in writing as to the outcome.

Data amendments

4.51. The Orders also enable us, where we consider it appropriate, to accept amended data submissions. Data may require amendments for a number of reasons. For instance, the generator may subsequently realise that the information originally submitted is incorrect or we have become aware of this through another route, such as an audit.

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[84] See Renewables Obligation page on Ofgem website http://www.ofgem.gov.uk/Sustainability/Environment/RenewablObl/Pages/RenewablObl.aspx

[85] Article 53(4) of the ROO and ROS and article 45(4) of the NIRO.

4.52. We will consider each request to issue ROCs on revised data on a case by case basis. The general principles that we will adopt are:

- taking a consistent approach to errors in both directions. This means that we will treat errors that result in the issue of too many ROCs in exactly the same way as errors that result in the issue of too few ROCs,
- correcting all errors that are identified before the ROCs are issued, and
- applying a significance test to errors identified after the ROCs have been issued.

4.53. Where ROCs have already been issued, we propose to correct significant errors only. To decide where correction is required, we will have particular regard to the following factors:

- the number of ROCs involved,
- the proportion of the total ROC claim, and
- the length of time since the ROCs were issued.

4.54. If a generating station, or other party, chooses to trade a ROC that is subject to a data error enquiry, it does so in the knowledge that the ROC could be revoked at any time.

4.55. If the outcome of the process is a revocation of ROCs which have already been transferred, it is the responsibility of the generator to liaise with the party in receipt of these ROCs.

4.56. As the Orders require us to be satisfied as to the reliability and accuracy of information provided to us, where errors occur on a continuing basis, we may refuse to issue ROCs to the generating station concerned until we are satisfied that robust procedures are in place.

Process for amending data

4.57. Where data is amended by the generator through their account on the Register outside of the two month data submission window, they will receive an output data exception flagging that the output data has been amended upon re-submission.

4.58. This provides the generator with an opportunity to set out in the text box provided why the data was incorrect and what amendments have been made.

4.59. To ensure that the amendment can be reviewed in an orderly manner, we would recommend that once the data has been resubmitted, the generator email details to the team at renewable@ofgem.gov.uk. This email should clearly state the name of the generating station and the period(s) which the data amendment is in respect of. The email should also outline why the data was erroneous in the first instance, outline what amendments have taken place, and what steps will be implemented to ensure that data procedures at the station are robust to prevent another occurrence.

4.60. The case will then be reviewed and the generator will be notified of the outcome. If the case results in the revocation or withholding of future ROCs we will ensure that we are in contact with the generator before this action is carried out.

Estimated data

4.61. The Orders allow us to accept estimated data for ROC issue purposes where a generator satisfies us that it will never be possible for them to provide accurate data. An example of this could be failure of metering equipment which means that an accurate reading is not possible.

4.62. The method for estimating will need to be conservative and agreed in advance of submitting output data via the Register. The onus is on the generator to contact us as soon as the need for estimation arises. We should be notified before the relevant data submission deadline or, if the data has been entered erroneously, within two weeks of the need for estimated data being identified. Estimated data cases may not be accepted if they are submitted outside of these deadlines.

Process for making an application for estimated data

4.63. The generator should make an application for estimated data via their account on the Register. The generator should detail why an estimate is required, the proposed methodology and the period for which the estimate will cover. In order for us to assess this application for the use of estimated data the following information will be required:

- Details of why an estimate is required and the date(s) on which the issue occurred.

- Details of how and when the issue was/will be resolved.

4.64. Operators of generating stations that export to the network will be required to provide correspondence from the data collector attesting that actual meter reads cannot be recovered. They should also provide supporting evidence that export occurred for the relevant time period. This can be obtained from a supplier and will preferably be in the format of a 'Supplier Export Report'.

4.65. Onsite use and private wire generating stations with meter failures will be required, as a minimum, to provide supporting correspondence from the engineer repairing/replacing the meter. The proposed methodology for the estimate, clearly showing all relevant calculations, should also be provided.

4.66. All supporting evidence should be sent via email to renewable@ofgem.gov.uk.

4.67. Estimated data will not be accepted for a metering communication failure for a period of longer than a month, unless evidence of exceptional circumstances can be provided. If there has been a metering communication failure, but meters are still operational, manual meter readings (supported by photographic evidence) can be taken to replace remote readings until communications are restored.

4.68. To ensure that the estimate can be reviewed in a timely manner, once an application for estimated data has been made via the Register, the generator should email any associated documentation or calculations to the team at renewable@ofgem.gov.uk. This email should clearly state the name of the generating station and the period which the estimate is in respect of.

4.69. The details provided will then be reviewed to determine whether the proposed methodology is considered appropriate. Where this is deemed not to be the case, ROCs will not be issued. In such circumstances the generator may wish to submit a revised or alternative methodology. Where estimates are accepted, we will issue the ROCs in question accordingly.

5. Renewables Obligation Certificates (ROCs)

Chapter Summary

Describes how we issue ROCs for the purpose of the RO. It also explains the circumstances in which we may revoke ROCs and the technology dependent bands introduced in the period 2009 to 2013.

Introduction

5.1. ROCs are electronic certificates issued to operators of generating stations based upon the net renewable electricity generated by their accredited station. It represents eligible renewable source electricity generated within the United Kingdom and supplied to customers in Great Britain or Northern Ireland or used in a way permitted by RO legislation.

5.2. ROCs are issued into a generator's account held within the Register. Once issued, ROCs can be transferred between registered account holders whether they are other generators, suppliers or other participants in the scheme. A ROC can only be generated, issued, revoked, transferred, redeemed and retired via the Register.

5.3. The amount of electricity, in terms of MWh, that needs to be generated for a ROC to be issued depends on a number of factors. These include:

- the technology used at the generating station
- the location of the station
- the installed capacity of the generating station
- the date that the station was accredited under the scheme
- if applicable the date on which any additional capacity was commissioned, and
- the fuel mix used at the station.

5.4. For more information regarding the number of ROCs issued per MWh of electricity generated by each technology as well as capacity limits, please refer to appendix 6.

Claiming ROCs

5.5. A generating station must be accredited by us as capable of generating electricity from eligible renewable sources before ROCs can be issued. Chapter 3 sets out how we accredit generating stations.

5.6. ROCs will only be issued in respect of renewable electricity that has been generated on or after the accreditation date of the station in question. Refer to chapter 3 for further details.

The process of issuing ROCs

5.7. In order to claim ROCs, a generator must submit output data via their Register account. Chapter 4 sets out how this is done. In addition, further guidance on how to submit data can be found in the Renewables and CHP Register User Guide[86].

5.8. Once submitted, a number of automated and manual checks are carried out on the data. We will raise queries with generators as required. The Register will then generate ROCs and checks are carried out to ensure the correct number and type of certificates have been created. Assuming everything is correct, the ROCs will be issued directly to a generator's account on the Register in accordance with our published ROC issue timetable.

5.9. Should ROCs not be issued in accordance with our timetable, generators should check their accounts to see whether any data queries have been raised by us. It should be noted that email notifications for a variety of functions including when a query is raised on data submission can be set up via the Register. We would strongly recommend making use of this functionality. Whilst the deadline for data is a statutory deadline, the ROC issue date is not. However, we recognise the importance of maintaining stability within the ROC market and have a corporate plan KPI to issue ROCs as per the specified date shown in the ROC issue timetable.

5.10. If queries relating to data submissions remain unresolved when the main certificate batch is created, the ROCs will be issued outside of the ROC issue timetable as part of weekly certificate batches.

5.11. When ROCs are issued, the operator of the generating station will be informed via email notification.

5.12. For the purposes of calculating ROCs the output is rounded to give the nearest whole ROC. This may be both up or down. The Orders do not allow for fractions of a ROC to be carried forward to the following month.

NFFO stations

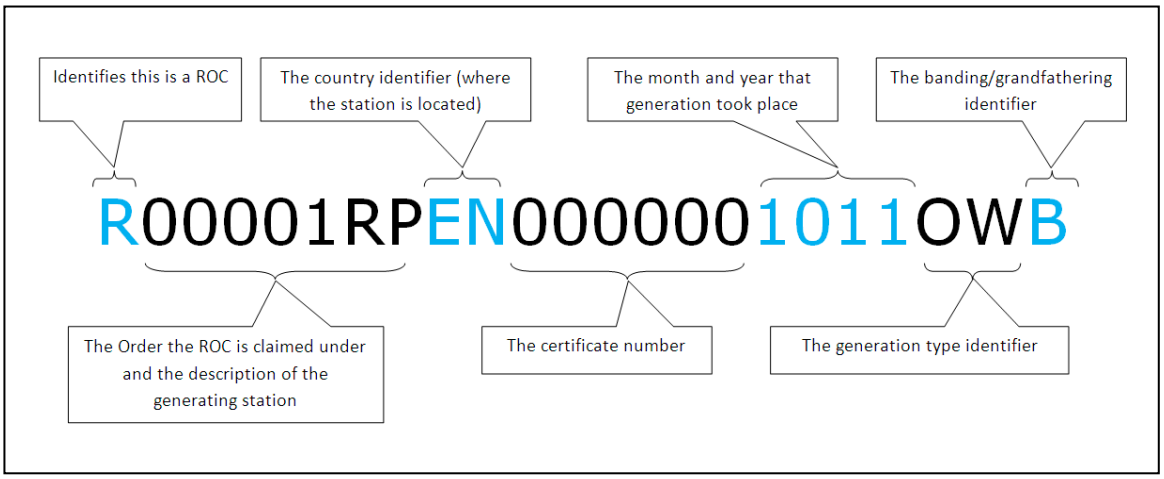
5.13. If a generating station is subject to a NFFO, SRO or NI NFFO contract, ROCs are issued to an electricity supplier nominated by NFPA, NFPA Scotland or Power NI respectively.

5.14. ROCs on additional metered output (AMO) can be issued to the operator of the generating station or the relevant electricity supplier. We look to the three parties mentioned above to provide us with this information as appropriate.

[86] User guide:
http://www.ofgem.gov.uk/Sustainability/Environment/RCHPreg/Pages/RCHPreg.aspx

Information represented by a ROC

5.15. The Orders set out that a ROC must contain certain information[87] and hence each ROC is issued with a specific code along with other information in the Register (the ROC identifier).



5.16. The figure above shows a ROC identifier. The example shows this is the first ROC in a sequence for generation that took place in October 2011. The ROC has been issued to off-shore wind station '000001' located in England claiming under the England and Wales RO Order. The ROC is issued for offshore wind generation, which is banded at the 2009 level and so this ROC represents 1.5 MWh of eligible output.

5.17. ROCs are issued in ranges in ascending numerical order always beginning with 000000 ie zero constitutes the first ROC. For example, if three ROCs for April 2012 are issued to an onshore wind generating station with the accreditation number of R00001RQEN, they would be issued as follows:

'R00001RQEN000000412NWC' to 'R00001RQEN000020412NWC'

5.18. It is possible for generating stations to be issued multiple ROC ranges to denote generation within a single generation period. Reasons for this may be:

- Where a fuelled generating station has generated from multiple fuels, eg energy crops and regular biomass, or
- Where a generating station is claiming on original and additional capacity.

5.19. A complete list of the technology and banding codes is provided in appendix 4. Information on ROCs that have been issued, including details of the certificate range, is available via our public reports on the Register log in page.

[87] Schedule 4 of the ROO and ROS, Schedule 3 of the NIRO.

How long can ROCs be issued for?

5.20. The Orders set out[88] that ROCs cannot be issued on generation that occurred beyond 31 March 2037. The Orders also limit the overall length of time that ROCs can be issued to each generating station / additional capacity to 20 years. For certain generating stations, ROCs can only be issued on generation that occurred up to the original end date of the RO i.e. 31 March 2027.

5.21. The keys dates and criteria are as follows:

- Operators of generating stations that have an accreditation date of on or before 25 June 2008 ("existing generating stations") will not be issued with ROCs in respect of generation beyond 31 March 2027. This includes any additional capacity that was commissioned at the generating station on or before 25 June 2008.
- Operators of generating stations that have an accreditation date after 25 June 2008 ("new generating stations") will see their RO support end on the twentieth anniversary of their accreditation date or 31 March 2037, whichever is the earlier.
- Operators of RO accredited generating stations that have commissioned additional capacity at their station after 25 June 2008 will receive RO support for 20 years from when the additional capacity was commissioned. Again, this support would end on 31 March 2037 if this date came before the 20 years had elapsed.

5.22. The time limit over which ROCs can be issued is based on the twentieth anniversary of the accreditation date of a generating station. If the generator does not claim ROCs, or becomes ineligible to claim ROCs, for a particular period, no extra support can be added to the time limits set out in the legislation.

5.23. Unlike for other technologies, for offshore wind generating stations accredited on or after 1 April 2011 (or additional capacity added to offshore stations after that date), the 20 years of RO support does not apply to the accredited capacity from the point of accreditation. Instead, 20 years of RO support is realised on each group of turbines from the date on which they were registered with us. Please see chapter 3 for further information regarding registration of offshore wind turbines.

Trading of ROCs

5.24. We do not have any role or responsibility in relation to the trading of ROCs, the contractual arrangements for trading ROCs or monitoring/setting the price of ROCs.

5.25. Once certificates have been issued to generators it is their responsibility to ensure that they are transferred in a timely manner to their off-takers. They should also ensure that contractual arrangements with such off-takers accommodate the transfer of their ROCs. The Register sends notifications to inform transferors / transferees as to the progress of a ROC transfer. Despite this, the onus remains on the parties involved in the

[88] Article 17A of the Renewables Obligation (Amendment) Order 2010, article 17A of the Renewables Obligation (Scotland) Amendment Order 2010 and article 18A of the Renewables Obligation (Amendment) Order (Northern Ireland) 2010 refers.

transfer to ensure that the transaction is completed within the relevant statutory and contractual deadlines.

Validity of ROCs

5.26. The Orders place an obligation on licensed electricity suppliers to present ROCs to us[89] on an annual basis in respect of their obligation or pay into a buy out fund. The process of producing ROCs to us for compliance is known as 'redeeming ROCs'.

5.27. Licensed suppliers cannot produce ROCs for compliance to us any later than 31 August following the end of the relevant obligation period or make payment in lieu by 31 October[90]. In meeting their obligation suppliers can use ROCs issued in the obligation period in question and also use a certain percentage of 'banked ROCs' (ROCs issued in respect of the immediately preceding obligation period). No 'older' or 'younger' ROCs can be used.

5.28. For example, ROCs issued in respect of the 2010/11 obligation period (electricity generated between 1 April 2010 and 31 March 2011) cannot be produced by suppliers to us any later than 31 August 2012.

5.29. Given this, once ROCs have been issued, the generator must transfer them in a timely manner such that a licensed supplier can use them against their obligation. Generators should be aware that if ROCs are retained in their accounts for significant periods of time they may be unable to transfer them or the certificates may even expire and become worthless.

5.30. For more information on the role of suppliers, please refer to the 'Guidance for Licensed Electricity Suppliers'[91].

Compliance caps

5.31. Compliance caps limit the number of certain types of ROCs that supplier can use towards meeting their obligation under the RO. As such this limits the overall number of those ROCs likely to be purchased by a particular supplier. There are two caps that affect suppliers under the RO: the 'banked ROCs' cap and the bioliquid compliance cap.

'Banked ROCs' cap

5.32. As part of meeting their Renewables Obligation, suppliers can use 'banked ROCs'. These ROCs have been issued in respect of electricity generated in the previous compliance period eg 2011/12 ROCs produced against the 2012/13 obligation period.

[89] Article 5 of the ROO, ROS and NIRO.
[90] Article 5(2) of the ROO, ROS and NIRO.
[91] This document is available on the RO page of the Ofgem Website - http://www.ofgem.gov.uk/Sustainability/Environment/RenewablObl/Pages/RenewablObl.aspx

Banked ROCs remain subject to a 25 per cent cap of the supplier's total obligation for the period in question[92].

Bioliquid compliance cap

5.33. Licensed electricity suppliers are only able to meet four per cent of their annual obligation by presenting ROCs issued against generation of electricity from bioliquids.

5.34. Despite this, ROCs issued in respect of electricity as set out below are exempt from the bioliquid cap:

- microgenerators
- qualifying CHP stations with a total installed capacity of <1MW
- using advanced fuels
- in a way described as 'energy from waste with CHP', and
- in respect of generation that took place before 1 April 2013.

5.35. For stations that use only regular biomass and also use liquid fuels alongside solid or gaseous fuels, FMS procedures will have to be agreed with Ofgem to account for the energy content of liquid fuels. This is so that ROCs can be awarded according to the physical state of the fuel so that ROCs subject to the cap can be identified. Please refer to our FMS guidance for further information.

Refusal to issue ROCs

5.36. We may refuse to issue a ROC in the following circumstances:

(a) where we are not satisfied as to the reliability or accuracy of the information presented to us in relation to the issue of the ROC[93],

(b) where we consider that the declaration submitted in accordance with article 36 of the ROO[94] is not accurate in relation to electricity upon which we are considering issuing the ROC[95],

(c) where we have reason to believe that the electricity in respect of which we are considering issuing the ROC was not supplied by an electricity supplier to customers in Great Britain or Northern Ireland[96],

(d) where a station using bioliquids does not meet the sustainability criteria[97] where an operator with a TIC ≥1MW, using solid biomass and biogas does not submit an independent audit, verifying the information submitted to Ofgem with respect to ROC issue.

[92] Article 13(2) of the ROO, ROS and NIRO.
[93] Article 41(1)(a) of the ROO and ROS and article 37(1)(a) of the NIRO.
[94] Article 36 of the ROS and article 34 of the NIRO.
[95] Article 41(1)(b) of the ROO and ROS and article 37(1)(b) of the NIRO.
[96] Article 41(3) of the ROO and ROS.
[97] Article 22A(1) of the ROO, ROS and NIRO.

Revoking ROCs

5.37. Where a ROC is yet to be redeemed, the Orders set out instances where we may revoke a ROC and must revoke a ROC[98]. We may revoke ROCs where:

- we are satisfied that the ROC has been issued on the basis of fraudulent behaviour, statement or undertaking on the part of the operator of the generating station or any connected person
- we are satisfied that the information provided to us by a generator or agent in respect of the issue of ROCs is false
- we are satisfied that the ROC is otherwise inaccurate
- we are satisfied that the ROC should not have been issued
- we have reasonable doubts as to the accuracy or reliability of the information on which the ROC issue was based, or
- due to a failure or refusal of any person to provide relevant information, we have been unable to check the accuracy of a ROC or any information on which basis the ROC was issued.

5.38. We must revoke ROCs where UREGNI has notified us that it is not satisfied that the electricity in question has been supplied to customers in Northern Ireland.

5.39. Where we intend to revoke a ROC, we shall notify the person who is the registered holder of the ROC prior to revocation. We will also inform the generator of the electricity to which the ROC relates. Once a ROC has been revoked, the registered holder of the ROC will be sent a notification to this effect.

5.40. All revoked ROCs will have their status changed to 'revoked' in the Register and cannot be redeemed by a licensed electricity supplier when complying with their Renewables Obligation. The Orders require us to make details of revoked ROCs available to the public.[99] This information is published in our public reports.

Withholding ROCs

5.41. Under the Orders, where ROCs cannot be revoked because they have been redeemed, we can still take action[100].

5.42. Where such ROCs are identified, we must refuse to issue further ROCs in respect of electricity generated by the generating station to which the original ROC was issued. The total number of ROCs withheld will align with the number of ROCs that should have been revoked in the first instance.

5.43. This action is subject to the original ROCs not being more than 6 years old and not being issued in respect of electricity generated under a NFFO contract.

[98] Article 41 of the ROO and ROS and article 37 of the NIRO.
[99] Article 57(1)(b) of the RO and ROS and article 49(1)(b) of the NIRO.
[100] Article 41A of the ROO and ROS and article 37A of the NIRO.

5.44. Where we identify that redeemed ROCs should never have been issued, we will contact the relevant parties and set out how we will withhold the appropriate number of ROCs from a future ROC issue.

ROCs claimed but not issued

5.45. The Orders require us to publish information on the number of ROCs claimed but not issued[101]. ROCs may be claimed but not issued for a number of reasons including where data has been queried.

5.46. We will publish on our website a total of all ROCs claimed but not issued in an obligation period. These statistics will not include ROCs that we have taken a decision not to issue. This information is also available via our public reports and published in the Renewables Obligation Annual Report.

Information on ROCs

5.47. Information on ROCs issued or revoked, their current holders etc is contained in our public reports available through the Register home page: https://www.renewablesandchp.ofgem.gov.uk/.

5.48. Please note that the reports are updated over night and therefore do not contain live information. Additionally only ROCs with a status that is not 'pending' are contained in the reports.

[101] Article 57(1)(e) of the ROO and ROS and 49(1)(d) of the NIRO.

Appendices

Index

Appendix 1 – Guidance on how we consider the boundary of a generating station for the purpose of the RO

Appendix summary

There is no definition of a generating station in the Orders although there is a definition of a hydro generating station (see below). In the absence of a legislative definition, this appendix provides details of what components we would typically consider to comprise a generating station and how these components might interact. It also provides information on the typical loads that would be regarded as input electricity for the purposes of determining net renewable output of the generating station.

Definition of a hydro generating station

1.1. The Orders define a hydro generating station as a generating station driven by water (other than a generating station driven by tidal flows, waves, ocean currents or geothermal sources) and includes all turbines supplied by the same civil works, except any turbine driven by a compensation flow supplied by those civil works in a natural water course where there is a statutory obligation to maintain that compensation flow in that water course (in which case that turbine and associated infrastructure is to be regarded as a separate hydro generating station[102]).

1.2. We interpret the term 'turbines' to also include Archimedes' Screws.

1.3. This means that where a hydro generating station consists of more than one turbine supplied by the same civil works, we will need to be satisfied that a particular turbine is driven by a statutory compensation flow, for us to consider that turbine to be a separate hydro generating station for the purposes of the RO.

Compensation Flow Hydro Generating Stations

1.4. Where a hydro generating station consists of more than one turbine supplied by the same civil works, we will generally consider a particular turbine to be driven by a statutory compensation flow, where we are satisfied that:

- there is a statutory obligation for the generator of the hydro generating station to maintain a compensation flow in the particular natural water course, and
- the turbine is driven wholly by the statutory compensation flow, and by no other water.

[102] Defined in Schedule 2 of the Orders.

1.5. The Orders do not include a definition of "compensation flow". In determining the volume of compensation flow water in any particular circumstances, we will consider the statutory instrument which imposes the relevant obligation to maintain a compensation flow in the natural watercourse.

Evidence required

1.6. The generator of a hydro generating station which consists of more than one turbine supplied by the same civil works may nominate one or more of the turbines as a turbine which is driven by a statutory compensation flow. For the turbine to be accredited as a separate hydro generating station, the operator of the generating station will generally be required to provide us with evidence of the statutory obligation to maintain a compensation flow in the particular water course. This should include:

- details of the statutory instrument which imposes the obligation on the operator of the generating station to maintain a compensation flow in the particular watercourse
- details (including a certified copy) of any relevant agreements, licence conditions or other documents which impose the obligation on the operator of the generating station to maintain a compensation flow in the particular watercourse, and
- details of the particular statutory obligation (including the compensation flow expressed as a volume of water over a period of time).

1.7. Where the relevant statutory obligation refers to the compensation flow as a minimum flow rate (or volume of water over a time period), we will generally consider this minimum requirement to be the entirety of the statutory compensation flow.

Definition of a generating station (other than hydro)

1.8. In the absence of a definition in the relevant legislation, the term generating station will generally have its natural or ordinary meaning unless it is used in a technical context, in which case it will have its technical meaning (if there is one).

1.9. The ordinary meaning of a generating station is defined in the Shorter Oxford English Dictionary as a "building and site for generating electrical current" and in the Oxford English Dictionary as a "power station for the generation of electricity"

Components of a generating station

Components for generating electricity

1.10. A generating station can include several sets of equipment for generating electricity eg boilers, turbines, engines, photovoltaic panels.

1.11. We will generally consider any equipment which contributes to generating electricity as part of the generating station, even if that equipment has another purpose as well as contributing to electricity generation (eg incinerators, combustors, flare stacks etc). Any reference to sets of equipment for generating electricity used throughout the rest of this appendix should be taken as a reference to sets of equipment for generating or producing electricity and sets of equipment contributing to generating electricity.

1.12. If a generating station comprises several sets of equipment for generating electricity which are grouped together in a way which would ordinarily be seen as one generating station, then the generator of this generating station will need to point to something particular to justify these sets of equipment for generating electricity being seen as more than one generating station.

1.13. We will presume (although this presumption may be rebutted) that sets of equipment for generating electricity are ordinarily one generating station if they are on the same premises and where they are owned and or operated by the same or connected or associated or related persons where:

- "connected" – 50 per cent or more of the ordinary share capital of one is owned directly or indirectly by the other or 50 per cent or more of the ordinary share capital of each is owned directly or indirectly by a third body corporate
- "associated" – one is a subsidiary of the other or both are subsidiaries of the same holding company
- "related" – one is a 75 per cent subsidiary of the other or both are 75 per cent subsidiaries of a third body corporate, and
- these terms "holding company" and "subsidiary" shall have the same meaning as in or be construed in accordance with Section 1159 of the Companies Act 2006 and Section 1122 of the Corporation Tax Act 2010 as appropriate.

1.14. If sets of equipment for generating electricity are operated by contractors, we will view the generators of two (or more) such sets on the same premises as sufficiently closely linked to trigger this presumption if one is acting as the other's contractor or if both are acting as the contractor for the same third party.

1.15. We will take into account the following factors when determining what sets of equipment for generating electricity taken together constitute a generating station:

- what constitutes the premises eg this might be a house or building with its grounds or other appurtenances, or might be a parcel of Crown Estate if the generating station is an offshore wind farm. In the case of NFFO, SRO or NI NFFO generating stations, Ofgem will also have regard to the location described in the relevant contract
- whether there is a shared electrical or mechanical connection between any or all of the sets of equipment for generating electricity or any other equipment or apparatus or plant. In particular if they are operated as a collective whole or where one supports the other or where the respective inputs and outputs are determined collectively in ways in which separately located generating stations would not be
- whether there is common steam linkage
- whether the same fuel (or fuels in the case of co-firing) is used by any or all of the sets of equipment for generating electricity and they are related functionally
- for non-fuelled stations, whether the electricity is generated from the same renewable source or if there is more than one way of generating electricity at the site in question e.g. a mix of solar PV and onshore wind
- whether the same driver is used by any or all of the sets of equipment for generating electricity and they are related functionally
- whether there is a single NFFO, SRO or NI NFFO contract governing the sets of equipment for generating electricity

- whether there is the same planning permission and / or Section 36 consent governing the sets of equipment for generating electricity
- whether there is one connection to the transmission or distribution network
- whether there is the same or linked metering for the sets of equipment for generating electricity. We will require there to be separate metering for separate generating stations, in other words, separate metering is a prerequisite for separate generating stations but it is not sufficient in itself for the sets of equipment for generating electricity to be treated as separate generating stations
- how the metering is registered under the Balancing and Settlement code
- in a scenario where a previously accredited generating station is or was located on the same site which is subject of an application for accreditation, we would consider whether the subject of the new application constitutes the same generating station as that which is or was previously accredited.
- for stations claiming the CHP uplift, whether electricity is being generated by equipment that is within the CHPQA scheme boundary.

Equipment for handling and preparing fuel

1.16. A generating station can include several sets of equipment for handling and preparing fuel. For example, in the case of a sewage gas generating station any pumps or fans used to transport sewage gas to the sets of equipment for generating electricity would be considered part of the generating station. Similarly, so would the use of conveyor belts to deliver a biomass fuel to the sets of equipment for generating electricity in the case of a biomass incineration generating station.

1.17. Any sets of equipment which are used for handling or preparing a material or substance before it is converted into the final fuel used in the station would not be considered part of the generating station. This would include, for example, in the case of an AD generating station, any digesters used to treat the feedstocks and produce the biogas that fuels station. This would also be true in the case of gasification plant in respect of sets of equipment used for handling or preparing feedstocks before these are converted into syngas.

Equipment for pumping water

1.18. A hydro generating station can include several sets of equipment for pumping water. For example, pumps pumping water to reservoirs would be considered part of the generating station.

Fuelling of a generating station

What substance is regarded to fuel a generating station

1.19. We will treat fuel used by a generating station to generate electricity as that material or substance which is input into the sets of equipment for generating electricity, not the feedstocks used to create this fuel. For example, for an AD station the fuel is biogas rather than the feedstocks that were used to create the biogas.

What fossil fuel use needs to be accounted for in monthly calculations

1.20. When determining the net renewable output of a generating station in addition to the gross output of the station and input electricity we must also have regard to the fuels that are used to generate electricity. Where fossil fuel use results in electricity generation, the contribution this makes to the output of the station needs to be accounted for when determining the number and type of ROCs that should be issued.

1.21. When the generating station is not generating electricity, fossil fuel used by the sets of equipment (as described in sections 1.10, 1.11, 1.16 and 1.17 above), does not need to be included in the monthly calculations (as this does not contribute to electricity generation).

1.22. In other words fossil fuel used by those sets of equipment, up to the point where generation of electricity was initiated, does not have to be taken into account. This fossil fuel use will also not be considered when determining the banding the station should receive in that month as we do not consider that it is fuelling the generating station.

1.23. When the generating station is generating electricity, fossil fuel used by the sets of equipment (as described in sections 1.10 and 1.11), does need to be included in the monthly calculations and so will be deducted for the issue of ROCs.

1.24. Any fossil fuel contamination of otherwise renewable fuels does need to be accounted for and will be taken into account when determining the type of ROCs to be issued.

1.25. Further information on the use of fossil fuel and or waste can be found in our FMS guidance.

Loads regarded as input electricity

1.26. Under the Orders, ROCs can only be issued on net renewable output which is determined by deducting all input electricity from the gross generation of the generating station (See chapter 4 for more information regarding how 'net renewable output' is calculated).

1.27. The RO also refers to "input electricity[103]" defining it as meaning:

- "the total amount of electricity used by that station for purposes directly related to its operation (including for fuel handling, fuel preparation, maintenance and the pumping of water) whether or not that electricity is generated by the station or used while the station is generating electricity, and
- where the station generates electricity wholly or partly from hydrogen (other than hydrogen that constitutes fossil fuel), any electricity—
- in respect of which ROCs are or have been issued,
- which was not generated from renewable sources, or

[103] Article 24(6) ROO.

- in respect of which articles provide that ROCs may not be issued, and
- which is used in the production of that hydrogen (regardless of where or by whom the hydrogen is produced)."

1.28. Any electricity used by the sets of equipment described in sections 1.10, 1.11, 1.16 and 1.18 inclusive above and any used for maintenance must be deducted in the monthly calculations as input electricity. This is also true of any electricity generated by a stand by generator and supplied to loads that consume power that meets the definition of input electricity.

Appendix 2 - Approved meters

Appendix summary

Information on approved meters under the RO Orders including compliance with the Balancing and Settlement code, how to verify if a meter is MID approved and the metering details required as part of an RO application for accreditation.

2.1. The RO Orders[104] state that the electricity in respect of which a ROC is to be issued must be measured using a meter which, if the meter was used to measure the electricity supplied to a customer by an authorised supplier, would be approved for the purposes of Paragraph 2 of Schedule 7 of the Act[105] (for ROCs or SROCs) or Paragraph 3 of Schedule 7 of the Order[106] (for NIROCs)[107].

2.2. These paragraphs require a meter to be:

- certified and of an approved pattern or construction; and
- installed in an approved manner.

2.3. This requirement applies to any electricity generated for which ROCs are to be issued whether it is supplied to a customer by a licensed supplier, exported to a third party through a licence exempt distribution network or used in a permitted way[108]. It also applies to any input electricity.

Export metering

2.4. Meters measuring a generating station's export should be compliant with the relevant codes of practice under the Balancing and Settlement Code. Non-half hourly metering can be used for exports up to 16 amps per phase and Code of Practice 9 under the Balancing and Settlement Code will apply.

Input electricity

2.5. Any input electricity whether this be electricity that is imported from the transmission or distribution network or electricity generated by the generating station and subsequently used as input electricity will also need to be measured using an approved meter.

[104] Article 36 (2)(b) of the ROO, article 36(2)(b) of the ROS and article 34(2(b) of the NIRO.
[105] The Electricity Act 1989.
[106] Electricity (Northern Ireland) Order 1992.
[107] These paragraphs have been modified by the Measuring Instruments (EC Requirements)(Electrical Energy Meters) Regulations 1995 and the Measuring Instruments (Active Electrical Energy Meters) Regulations 2006.
[108] Section 32B and 32C of the Act and articles 54 and 54A of the Energy (Northern Ireland) Order 2003.

Approval of meters

2.6. We previously carried out approval of meter types but from 1 April 2009 our responsibilities for legal metrology covering electricity meters were transferred to the National Measurement Office (NMO), acting on behalf of the Secretary of State.

2.7. The manufacturers of an approved meter will be issued with an approval certificate and the meter will be listed in Schedule 4 of Statutory Instrument 1566 (The Meters (Certification) Regulations 1998), which is a statutory register of all pattern approved Electricity Meters suitable for billing purposes in the UK. This list is available from the NMO Schedule 4 webpage[109].

European Measuring Instruments Directive

2.8. Since the European Measuring Instruments Directive (MID) was fully implemented on 30 October 2006, 'approved' may also refer to an electricity meter type approved by a notified body under the European Measuring Instruments Directive (MID 2004/22/EC). Such meters are also "deemed" to be certified where required. MID meters therefore meet the requirements of the Electricity Act 1989.

2.9. To verify if a meter is MID approved, the operator should contact the manufacturer/importer of the meter, who should be able to provide confirmation and a copy of the MID conformity certificate.

2.10. Meters approved under UK national legislation prior to October 2006, and that are in-service prior to October 2016, can continue in-service for as long as they meet the requirements under the Electricity Act 1989 but any meters newly installed after October 2016 must be MID approved.

In-Service Testing

2.11. There are no prescribed certification lives for MID approved electricity meters so NMO, in consultation with the Industry, has developed In-Service Testing (IST) procedures for monitoring the performance of gas and electricity meters approved under the MID. These procedures will enable suppliers and asset owners to demonstrate they are fulfilling their statutory obligation to keep their meter populations in proper order for correctly registering the quantities of gas and electricity consumed.

Margins of error

2.12. The permitted margins of error shall be an error not exceeding tolerances of plus 2.5 per cent or minus 3.5 per cent at any load at which the meter is designed to operate as specified in regulation 7(2) of The Meters (Certification) Regulations 1998.

[109] http://www.bis.gov.uk/nmo/gas-and-electricity-meters/electricity-meters-introduction/UK-Nationally-approved-electricity-meters/Schedule-4

2.13. An appropriate class of meter approved under the MID Regulations will meet the tolerances above, but meter installers will need to decide on the correct class to use for a particular situation because of the effect of temperature on tolerance.

Metering Requirements and Accreditation Application for the Renewables Obligation

2.14. We assess the installed metering at a generating station as part of the accreditation process. When applying for accreditation, it is essential that the operator includes the meter details (manufacturer/type/serial number) on the accreditation application and clearly marks and identifies the meters and their positions on the schematic diagram.

2.15. This allows us to determine whether the metering configuration is appropriate to measure the eligible renewable output and to establish whether the meters are approved. If the meters installed at a generating station are not on Schedule 4 of Statutory Instrument 1566 (The Meters (Certification) Regulations 1998), the operator will have to provide confirmation that the meter is MID approved, by submitting the MID conformity certificate.

2.16. To ensure the accreditation application can be reviewed in an orderly manner, we would recommend that the operator emails the confirmation that the meter is MID approved and any relevant evidence to renewable@ofgem.gov.uk. This email should clearly state the name of the generating station.

2.17. We will require any non-approved meters used for certificate claims to be replaced with approved meters. This applies to both new and amended accreditation applications. Generators will not be able to claim ROCs on output unless it has been measured by an approved meter, and we may withhold accreditation until this has been done.

2.18. Operators should ensure that they retain any relevant metering documentation such as meter calibration certificates as this is likely to be required for audit purposes.

Estimates

2.19. The above does not apply where the operator agreed with us to use estimates rather measurements using an approved meter. Chapter 4 provides further information on estimates.

Appendix 3 – Supply to customers in the UK

Appendix summary

Information on the declarations and contractual evidence that may be required from generators in order to provide evidence that ROCs are being issued on electricity that is supplied to customers in the UK.

3.1. In order to receive ROCs under the RO, electricity on which ROCs are to be issued must be supplied to customers in the UK or used in a way permitted by legislation. These requirements are usually covered through two declarations - 'export only' and 'permitted ways'. In certain circumstances we will also require evidence of supply to customers in the UK before we can issue ROCs.

3.2. Generators are required to make the relevant declaration (either export only or permitted ways) via the Register when they submit an application for accreditation and then on an annual basis for the duration of their support under the RO.

Export only declaration

3.3. This declaration covers circumstances where all of the electricity on which ROCs are being claimed has been / will be exported to the grid. It also covers any relationship between the generator and parties to a NFFO contract if there is such a contract in place in respect of the generating station.

Permitted ways declaration

3.4. This declaration covers circumstances where the electricity on which ROCs are being claimed has been / will be used in a 'permitted way'. This covers scenarios where ROCs are claimed on eligible on site use and / or export to a third party through a private wire. It can also include some spill of electricity to the grid in addition to the onsite use and / or third party export[110].

3.5. The RO however specifies circumstances under which electricity supplied to a third party through a private wire is not to be regarded as supplied in a permitted way[111]. This is where:

- the generating station from which the electricity is conveyed has a declared net capacity in excess of 10 megawatts, and
- at some point before the electricity is supplied to customers through the private wire network it is conveyed through a transmission or distribution system operated under a licence granted under section 6 of the Act

[110] Section 32B of the Electricity Act 1989.
[111] Article 16 of the ROO.

3.6. In those circumstances the generator would not be able to sign a permitted ways declaration.

3.7. Where either the supply of electricity is not covered under the permitted ways or export only declaration (such as the exemption above) or in certain specific circumstances, we will require evidence that the electricity was supplied to customers in the UK before we can issue ROCs. These circumstances and the evidence required are set out below.

Export through a licence exempt distribution network

3.8. Export through a private wire network is one of the permitted ways of using electricity. A private wire network exemption is provided for by section 32 (11) of the Electricity Act 1989 and this applies where the generator is exempt from holding a supply licence. However, under article 16(2) of the RO, electricity is not used in a permitted way in circumstances set out in section 3.5 of this appendix.

3.9. Operators of generating stations that fall within both of the provisions in article 16(2) of the RO cannot sign a permitted ways declaration. Instead they must have the relevant contractual arrangements in place to prove the electricity is being supplied to customers in Great Britain and/or Northern Ireland and have provided us with a copy before we can issue ROCs.

3.10. If the relevant contractual arrangements are still being finalised once the generating station has been accredited, the generator of that generating station should still submit data to us. We will issue ROCs on this once an appropriate contract has been provided and we are satisfied that the data is accurate and reliable.

3.11. Operators of generating stations must inform us if the relevant contract is terminated or expires. The onus is on operators of generating stations to do so before ROCs are issued for the relevant month. A changeover meter reading should be taken where the contract expires.

3.12. ROCs will only be issued, subject to the relevant contract being in place, for the metered quantity.

Contractual arrangements for export to a third party through a licence exempt distribution network

3.13. We will require a copy of the sale contract in place with a licensed supplier to be provided to demonstrate that the electricity is being supplied by a licensed supplier to customers in the UK. Such contract terms must include:

- details of the generating station which generated the eligible output including the name, address and RO accreditation number of the generating station (the RO number may be added after the generating station has been accredited)
- the sale of a specified amount of eligible renewable electricity to a licensed electricity supplier
- to where and to whom the electricity is being supplied, e.g. for the heating and lighting of local businesses, and

- reference to the meter used to measure the export to the third party by the generator i.e. the specific meter number
- signatures from all three parties i.e. the operator of the generating station, the licensed supplier and the third party to whom the export is being supplied

Export to a private wire network where the electricity is supplied via the licensed distribution or transmission network.

3.14. The ROO places capacity restrictions on supply to a private wire network where the electricity is supplied to the licensed distribution or transmission network before entering the licensed exempt network.

Other circumstances where contractual evidence is required

3.15. An example of other circumstances where we will require contractual evidence of supply to customers in the UK is where electricity is generated in NI but supplied in GB and vice versa – see below.

3.16. For the operator of a generating station which is:

- located either on land or not on land in Northern Ireland and supplying electricity to customers in Great Britain, or
- located either on land or not on land in Great Britain and supplying electricity to customers in Northern Ireland

the required evidence to be provided on a monthly basis (unless otherwise stated) is:

- Metered volumes: These will need to be aggregated from half-hourly data and correlate to periods during which the electricity flowed on a continuous basis as well as being aggregated to monthly output.
- Contract for use of transmission and distribution network.
- Contract for interconnector capacity, ie contract between the generating station and interconnector generator.
- Where the generating station sells the electricity to an interconnector user the following would need to be provided:
    - the contract between the generating station and the interconnector user, and
    - the contract between the interconnector user and an interconnector generator.
- Scheduled volumes on and off the interconnector for each relevant period the electricity was delivered to GB or Northern Ireland. This would be based on the Final Physical Notifications (FPNs).
- Half-hourly, aggregated to monthly, physical dispatched confirmations from the interconnector generator to demonstrate that the electricity flowed across the interconnector from NI to GB or GB to NI during each relevant period. This could be in the form of a statement from the interconnector generator.
- A monthly aggregated statement from the interconnector generator confirming that (which will need to reflect the relevant period):

  - no electricity flowed, or
  - was claimed by a user of the interconnector or
  - the interconnector generator to have flowed,
  - across the direction

- Statement from the interconnector generator that the interconnector was operating for that month under no constraints (reflecting the relevant periods). It should also show that the electricity dispatched at the same time under all capacity contracts did not exceed the total capacity.

3.17. For generating stations either:

- not located on land in Northern Ireland and supplying electricity to customers in Northern Ireland, or
- not located on land in Great Britain and supplying electricity to customers in Great Britain

the following evidence is required:

- Schematic diagram of the generating station to show that the generating station is directly and exclusively connected to a transmission and distribution network in Northern Ireland or in Great Britain (and to no other network). This would be provided on a one off basis with the application for accreditation.
- Contract for use of transmission and distribution network in NI or Great Britain. Again, this would be provided on a one off basis with the application for accreditation.
- The quantity, date and period of time the electricity was generated by the generating station. This would be provided on a monthly basis.

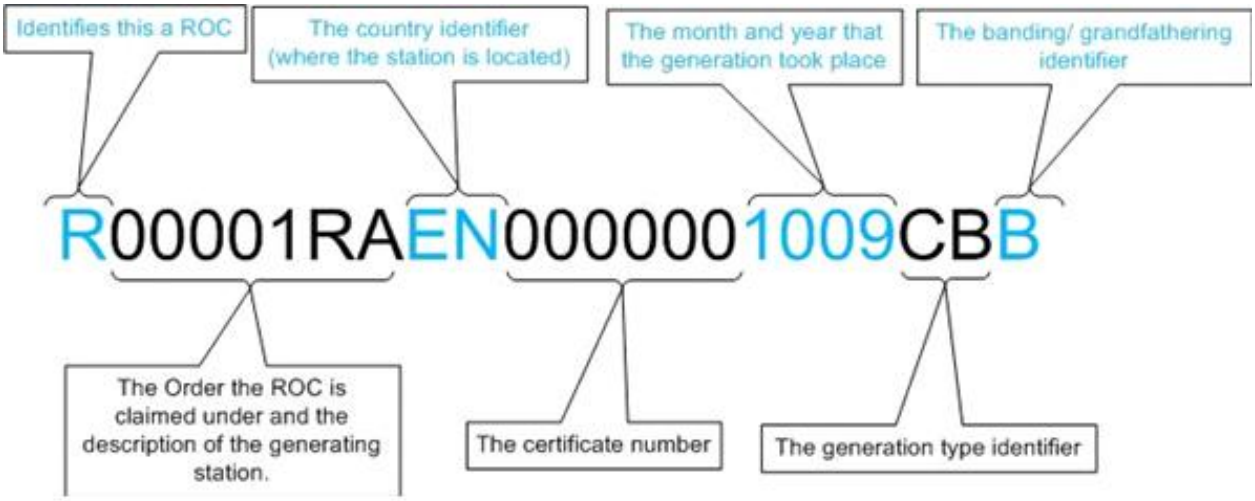
If the information for any half-hourly period does not fulfil or comply with any of the above requirements, the output during that period will not qualify for ROCs.

Appendix 4 – ROC Codes

Appendix summary

Explanation of ROC codes including how a ROC certificate is made up and the various codes used to identify the technology, country, generation type and banding of a generating station.

4.1. A ROC certificate is made up as follows:



4.2. As can be derived from the tables that follow, this is the first ROC in a sequence for generation that took place in October 2009. The ROC has been issued to fuelled station 000001 located in England claiming under the England and Wales RO Order. The ROC is issued for the co-firing of biomass, which is banded at the 2009 level and so this ROC represents 0.5MWh of eligible output.

The technology type identifier

4.3. The table below sets out the technology codes that will identify the type of generating station and under which Order a ROC is issued under:

Technology	RO Code	ROS Code	NIRO Code
Fuelled	RA	SA	NA
Micro-hydro	RD	SD	ND
Hydro with a DNC of ≤20MW	RE	SE	NE
Hydro with a DNC >20MW	RF	SF	NF
Geothermal	RG	SG	NW
Tidal power (lagoon)	RH	SH	NH
Tidal power (barrage)	RI	SI	NI

<1GW			
Landfill gas	RJ	SJ	NJ
Geopressure	RM	SM	NM
Off-shore wind	RP	SP	NP
Offshore wind – demonstration turbines	-	DT	-
Offshore wind – floating turbines	-	FT	-
On-shore wind	RQ	SQ	NQ
Sewage gas	RR	SR	NR
Tidal stream	RS	SS	NS
Wave power	RT	ST	NT
Enhanced wave power	-	SV	-
Enhanced tidal stream	-	SO	-
Photovoltaic (PV)	RU	SU	NU
PV with a DNC ≤50kW	RW	SW	NG
fuelled with a DNC ≤50kW	RX	SX	NX
Hydro with a DNC ≤50kW	RY	SY	NY
Wind with a DNC ≤50kW	RZ	SZ	NZ

The country identifier

4.4. Below is a table identifying which country the generation station is situated in:

Country	Code
England	EN
Wales	WA
Scotland	SC
Northern Ireland	NI

The generation type identifier

4.5. Below is a table identifying which generation type (and band when subject to banding and is not a microgenerator) the ROC has been issued against:

Generation types	CODE
Advanced gasification	GA
Advanced pyrolysis	PA
Anaerobic digestion	AD
Building mounted solar PV	BM
Co-firing of biomass	CB
Co-firing of biomass with CHP	CH
Co-firing of energy crops	CE
Co-firing of energy crops with CHP	EH
Co-firing of regular bioliquid	CQ
Co-firing of regular bioliquid with CHP	QC
Dedicated biomass	DB
Dedicated biomass – BL	DQ
Dedicated biomass with CHP	BC
Dedicated biomass with CHP - BL	QD
Dedicated energy crops	DE
Dedicated energy crops with CHP	EC
Electricity generated from landfill gas	LG
Electricity generated from sewage gas	SG
Energy from waste with CHP	WH
Enhanced tidal stream (Scotland only)	TS
Enhanced wave (Scotland only)	WV
Geopressure	GP

Generation types	CODE
Geothermal	GT
Ground mounted solar PV	GM
High-range co-firing	HR
High-range co-firing with CHP	HC
Hydro-electric	HE
Landfill gas – closed landfill	CL
Landfill gas – heat recovery	LH
Low range co-firing of relevant energy crop	RE
Low range co-firing of relevant energy crop with CHP	RC
Low-range co-firing	LR
Low-range co-firing with CHP	LC
Mid-range co-firing	MR
Mid-range co-firing with CHP	MC
Offshore wind	OW
Offshore wind – demonstration turbines	DT
Offshore wind – floating turbines	FT
Onshore wind	NW
Other	OT
Solar photovoltaic	PV
Standard gasification	GS
Standard pyrolysis	PS
Station conversion	SC
Station conversion – BL	SQ
Station conversion with CHP	CS
Station conversion with CHP - BL	QS

Generation types	CODE
Tidal impoundment – tidal barrage	TB
Tidal impoundment – tidal lagoon	TL
Tidal-stream	TS
Unit conversion	UC
Unit conversion – BL	UQ
Unit conversion with CHP	CU
Unit conversion with CHP - BL	QU
Wave	WV
Existing certificates issued on data from before April 09	XX

The banding identifier

4.6. Below is a table identifying whether the ROC has been issued as banded ROC or is not subject to banding, either as it has not surrendered a statutory grant or is subject to grandfathering. This identifier also allows clarification as to whether a ROC has been produced by a station that is under a NFFO contract and is additional output (AMO) or has been supplied by a station situated in Northern Ireland but supplying England & Wales or Scotland (E/W/S). It also identifies whether a ROC has been issued in respect of a CHP station with TIC <1MW.

	Grandfathered	2009 banding	2010 and 2011 banding	13/14 capacity		14/15 capacity		15/16 capacity		Post-16 capacity	
				CHP Stations v 1MW TIC	other stations	CHP Stations v 1MW TIC	other stations	CHP Stations v 1MW TIC	other stations	CHP Stations v 1MW TIC	other stations
General	A	C	E	M	G	M	V	O	I	Q	K
AMO	B	D	F	N	H	N	W	P	J	Z	L
NI Stations supplying England or Wales	N	P	R	R	R	R	R	R	R	R	R
NI AMO for an NI station supplying England or Wales	O	Q	T	T	T	T	T	T	T	T	T
NI Stations supplying Scotland			S	S	S	S	S	S	S	S	S
NI AMO for an NI station supplying Scotland			U	U	U	U	U	U	U	U	U
Existing certificates issued on date from before April 2009	X										

Appendix 5 – Types of generating capacity

Appendix summary

There are six types of generating capacity that affect the level of support a station or additional capacity may be eligible for. The definitions are set out below and can be found in article 2 of the Orders.

"Pre–2013 capacity" means

(a) in relation to a generating station accredited on or before 31st March 2013 (30th April for generating stations under the NIRO), the capacity of the station as accredited, together with any additional capacity, which in the Authority's view, forms part of the station from a date no later than 31st March 2013 (30th April 2013 for generating stations under the NIRO);

(b) in relation to a generating station which is registered under article 58ZA (article 50A under the NIRO) as a grace period generating station, the capacity of the station as accredited.

"2013/14 capacity" means

(a) in relation to a generating station accredited on or before 31st March 2013 (30th April for generating stations under the NIRO), any capacity which—

(i) in the Authority's view, forms part of the station from a date no earlier than 1st April 2013 (1st May 2013 for generating stations under the NIRO) and no later than 31st March 2014, and

(ii) does not form part of the capacity of the station as accredited;

(b) in relation to a generating station which is registered under article 58ZA (article 50A under the NIRO) as a grace period generating station, any capacity which—

(i) in the Authority's view, forms part of the station from a date no later than 31st March 2014, and

(ii) does not form part of the capacity of the station as accredited;

(c) in relation to a generating station which—

(i) was not accredited on or before 31st March 2013 (30th April 2013 for generating stations under the NIRO),

(ii) was accredited on or before 31st March 2014, and

(iii) is not registered under article 58ZA (article 50A under the NIRO) as a grace period generating station,

the capacity of the station as accredited, together with any additional capacity which, in the Authority's view, forms part of the station from a date no later than 31st March 2014.

"2013/15 capacity" means

(a) 201313/14 capacity, or

(b) 2014/15 capacity.

"2014/15 capacity" means

(a) in relation to a generating station accredited on or before 31st March 2014, any capacity which—

(i) in the Authority's view, forms part of the station from a date no earlier than 1st April 2014 and no later than 31st March 2015, and

(ii) does not form part of the capacity of the station as accredited;

(b) in relation to a generating station which—

(i) was not accredited on or before 31st March 2014, and

(ii) was accredited on or before 31st March 2015,

the capacity of the station as accredited, together with any additional capacity which, in the Authority's view, forms part of the station from a date no later than 31st March 2015.

"2015/16 capacity" means

(e) In relation to a generating station accredited on or before 31st March 2015, any capacity which-

(i)in the Authority's view, forms part of the station from a date no earlier than 1st April 2015 and no later than 31st March 2016, and

(ii) does not form part of the capacity of the station as accredited;

(b) in relation to a generating station which—

(i) was not accredited on or before 31st March 2015, and

(ii) was accredited on or before 31st March 2016,

the capacity of the station as accredited, together with any additional capacity which, in the Authority's view, forms part of the station from a date no later than 31st March 2016.

"Post-2016 capacity" means—

(a) in relation to a generating station accredited on or before 31st March 2016, any capacity which—

(i) in the Authority's view, forms part of the station from a date no earlier than 1st April 2016, and

(ii) does not form part of the capacity of the station as accredited;

(b) in relation to a generating station which—

(i) is accredited, and

(ii) was not accredited on or before 31st March 2016,

the capacity of the station as accredited, together with any additional capacity which, in the Authority's view, forms part of the station.

Appendix 6 – Banding and grandfathering

Appendix summary

This explains the technology and capacity dependent bands that determine the level at which ROCs are issued in a given month. It also explains the conditions that influence when these bands apply and exceptions to those rules. The section covers the period 1 April 2009 to 31 March 2017.

Banding Reviews

6.1. To ensure that the level of support remains appropriate the government has indicated that it intends to review the banding structure to make any changes at planned 4 yearly intervals. The latest of such changes came into force on 1 April 2013 (or 1 May 2013 under the NIRO).

6.2. The banding structure outlined within this chapter is intended to cover the period 2009-17.

6.3. In addition to the planned reviews the primary legislation provides for emergency reviews to be carried out in the following circumstances:

- Significant change in the cost regime for grid connection or transmission
- New renewable generating technology emerges with a potential to deploy on a large scale
- Changes to other support schemes which will have a significant impact on the generation of electricity from renewable sources
- Evidence of significant and sustained variation in net costs or reviews (for one or more technologies) changing the economic case from that assumed in the setting of banding levels
- The co-firing cap creates significant distortions in the ROC market
- Over compliance, and
- Any unforeseen event which could have a significant effect on the operation of the Renewables Obligation.

6.4. It will be for the Secretary of State or relevant Devolved Authority Ministers to determine what is significant in the context of these powers.

Banding (technology, fuelling and location dependent banding levels)

6.5. In 2010, the Feed-in Tariff scheme (FIT) was introduced in Great Britain. As a result hydro, PV, wind and AD microgenerating stations (those with DNC of 50kW or less) were excluded from being supported under the RO[112].

6.6. Since a FIT scheme was not introduced in Northern Ireland, to ensure that the development of renewables was not undermined as a result, in 2010 and 2011 the Northern Ireland administration introduced additional support under the RO for generating stations of specified capacity using certain technologies[113].

6.7. Table 6 shows the banding related to the RO (in England and Wales) and the ROS (in Scotland). Table 7 shows the banding levels under NIRO (in Northern Ireland). Some of the bands set out in Table 7 will be subject to further review from 2014/15; this applies to ≤5MW technologies among others. Further information is available on the DETI website[114]. Table 8 shows the banding level applicable for RO, ROS and NIRO stations generating electricity using regular biomass.

6.8. The tables list the banding level that applies to stations accredited and capacity added to accredited generating stations during each specific time period. For the definitions of each type of generating capacity please refer to appendix 5.

6.9. The tables reflect the current tables in Schedule 2 of the Orders but have been adapted for ease of reference. This includes presenting the level of support as a number of ROCs per MWh of eligible electricity produced rather than MWhs of electricity to be stated in each ROC. The tables also contain footnotes that point to articles of the Orders that make alterations to the banding levels set out in the tables.

6.10. For stations with more than one combustion unit that use regular biomass on or after 1 April 2013 (or 1 May 2013 under the NIRO), banding is determined on a unit by unit basis rather than a station-wide basis. See chapter 2 and the FMS guidance for further information.

6.11. Please note that there is no separate band for stations that meet the 'station conversion' band definition and that use bioliquid fuels; they are supported under the 'station conversion' band.

6.12. There are some exceptions to the RO banding levels set out in Tables 6 and 8 that will apply to certain generating stations. Please refer to the section on 'Exceptions to banding and grandfathering' on pages 91-92 for further information.

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[112] Article 17B to E of the ROO.
[113] Article 27A to D and 29 A and B of the NIRO.
[114] http://www.detini.gov.uk/existing_and_confirmed_roc_per_mwh_levels_from_1_april_2013.pdf

Table 6 RO and ROS banding (excluding regular biomass* bands)

Band	pre-13 capacity	13/14 capacity	14/15 capacity	15/16 capacity	16/17 capacity
Advanced gasification/pyrolysis	2	2	2	1.9	1.8
AD	2	2	2	1.9	1.8
Energy from waste with CHP	1	1	1	1	1
Geothermal	2	2	2	1.9	1.8
Geopressure	1	1	1	1	1
Hydro	1	0.7 (1 ROS)	0.7 (1 ROS)	0.7 (1ROS)	0.7(1ROS)
Landfill gas[115]	0.25**	0	0	0	0
Landfill gas – closed landfill gas	New band	0.2	0.2	0.2	0.2
Landfill gas heat recovery	New band	0.1	0.1	0.1	0.1
Microgeneration (<=50kW DNC)[116]	2	2	2	1.9	1.8
Onshore wind	1	0.9	0.9	0.9	0.9
Offshore wind	2***	2	2	1.9	1.8
Offshore wind – demonstration turbines (ROS)	New band	New band	2.5	2.5	2.5
Offshore wind – floating turbines (ROS)	New band	New band	3.5	3.5	3.5
Other	1	1	1	1	1
Sewage gas	0.5**	0.5	0.5	0.5	0.5
Solar PV	2				
Solar PV (building mounted)	New band	1.7	1.6	1.5	1.4
Solar PV (ground mounted)	New band	1.6	1.4	1.3	1.2
Standard gasification/pyrolysis	1	2	2	1.9	1.8
Tidal barrage (<1GW DNC)	2	2	2	1.9	1.8
Tidal lagoon (<1GW DNC)	2	2	2	1.9	1.8
Tidal stream[117]	2	2	2	2	2
Wave	2	2	2	2	2
Tidal stream - enhanced (ROS)	3	3	3	3	3
Wave - enhanced (ROS)	5	5	5	5	5

* Regular biomass is defined as biomass other than (a) sewage gas, (b) landfill gas, (c) energy crops, (d) fuel produced by means of anaerobic digestion, (e) advanced fuel.

** Some of these stations may be eligible to receive 1 ROC/MWh (article 30 and 31). See 'Exceptions to banding and grandfathering' on pages 91-92 for further information.

*** Offshore wind generating stations granted full accreditation or that have additional capacity recognised in the period 12/07/2006 to 31/03/10 are awarded 1.5 ROCs/MWh (article 30A ROO, article 30A ROS.).

[115] Article 24 of the ROO and ROS state that no ROCs are to be issued in respect of post-2013 capacity for landfill gas unless the electricity is generated using pre-2013 capacity, closed landfill gas or landfill gas heat recovery.
[116] Article 29 of the RO and ROS apply. Article 2d(a)(v) of the ROS excludes enhanced wave and tidal stream generating stations from the definition of 'microgenerator' from 1 April 2013.
[117] Under Article 30B ROO '2012/17 marine capacity' up to 30MW TIC receives 5 ROCs/MWh.

Table 7 NIRO banding and DNC limits (excluding regular biomass bands)

Band		Pre-2013 capacity		13/14 capacity[118]	14/15 capacity[119]	15/16 capacity[118]	16/17 capacity[118]
		2009 banding	2010&2011 changes[120]				
Advanced gasification/pyrolysis		2	2	2	2	1.9	1.8
Anaerobic digestion[1]	<= 500kW	2	4	4	4	4	4
	>500kW-5MW	2	3	3	3	3	3
	>5MW	2	2	2	2	1.9	1.8
Energy from waste with CHP		1	1	1	1	1	1
Geothermal		2	2	2	2	1.9	1.8
Geopressure		1	1	1	1	1	1
Hydro[2]	<=20kW	1	4	4	4	4	4
	>20kW-250kW	1	3	3	3	3	3
	>250kW-1MW	1	2	2	2	2	2
	>1MW – 5MW	1	1	1	1	1	1
	>5MW	1	1	0.7	0.7	0.7	0.7
Landfill gas[121]		0.25*	1	1	1	0	0
Landfill gas – closed landfill		New band				0.2	0.2
Landfill gas heat recovery		New band				0.1	0.1
Microgeneration (<50kW DNC)[122]		2	2	2	2	1.9	1.8
Onshore wind[2]	<=250kW	1	4	4	4	4	4
	>250kW-5MW	1	1	1	1	1	1
	>5MW	1	1	0.9	0.9	0.9	0.9
Offshore wind		2**	2	2	2	1.9	1.8
Sewage gas		0.5*	0.5	0.5	0.5	0.5	0.5
Solar PV[3] BM = building mounted solar PV GM = ground mounted solar PV	<=50kW	2	4	4	4	4	4
	>50kW-250kW	2	2	2	2	2	2
	>250kW	2	2	1.7 BM	1.6 BM	1.5 BM	1.4 BM
				1.6 GM	1.4 GM	1.3 GM	1.2 GM
Standard gasification/pyrolysis		1	1	2	2	1.9	1.8
Tidal barrage (<1GW DNC)		2	2	2	2	1.9	1.8
Tidal lagoon (<1GW DNC)		2	2	2	2	1.9	1.8
Tidal stream[123]		2	2	2	2	2	2
Wave[124]		2	2	2	2	2	2

[1] Applies to generating stations that were first accredited on or after 1 April 2011. If the station, at any time after 26 April 2010, had a DNC above the specified maximum it would not qualify for the band[125] and standard banding rules apply.

[2] & [3] applies to:
a) Generating stations that were first accredited after 31 March 2010. If the station, at any time after that date, had a DNC above the stated maximum, it does not qualify for the band and standard banding rules apply; and
b) Stations that were accredited as of 31 March 2010, that add capacity after this date, can claim the enhanced level of NIROCs in respect of generation by the additional capacity only. Generation by the original capacity i.e. the capacity of the station as at 31 March 2010 will continue to realise NIROCs at the relevant band that applied when the station was accredited. If the station, at any time after 31 March 2010, had a DNC above the stated maximum, it does not qualify for the band[126].

* Some of these stations may be eligible to receive 1 ROC/MWh (article 30 and 31). See 'Exceptions to banding and grandfathering' on pages 91-92 for further information.

** Offshore wind generating stations granted full accreditation or that have additional capacity recognised in the period 12/07/2006 to 31/03/10 are awarded 1.5 ROCs/MWh (article 30A ROO, article 30A ROS).

[118] AD, hydro, PV and onshore wind <5MW based on articles 27 to 27D and 29A and B.
[119] AD, hydro, PV and onshore wind <5MW based on articles 27 to 27D and 29A and B.
[120] Article 27 to 27D and 29A and B.
[121] Article 22 of the NIRO states that no ROCs are to be issued in respect of post-2013 capacity for landfill gas unless the electricity is generated using pre-2013 capacity or 2013/15 capacity, closed landfill gas or landfill gas heat recovery.
[122] Article 27 of the NIRO applies.
[123] Under article 30B ROO 2012/17 marine capacity up to 30MW TIC receives 5 ROCs/MWh.
[124] Under article 30B ROO 2012/17 marine capacity up to 30MW TIC receives 5 ROCs/MWh.
[125] Article 27C of NIRO.
[126] Articles 27 to 27B, 29A and 29B of NIRO.

Table 8 RO, ROS and NIRO banding for stations using regular biomass* (note - for post 31 March 2013 (or post 30 April 2013 under the NIRO) generation, banding for multi unit stations is determined on a unit by unit rather than station-wide basis)

Band	pre-2013 capacity	13/14 capacity	14/15 capacity	15/16 capacity	16/17 capacity
Conversion (station or unit)	1	1	1	1	1
Conversion with CHP (station or unit)	1.5	1.5	1.5	1.5	1.5
Co-firing of biomass	No ROCs issued under this band for post 31 March 2013 generation				
Co-firing (low range) [127]	0.5	0.5	0.5	0.5	0.5
Co-firing (mid-range)	0.6	0.6	0.6	0.6	0.6
Co-firing (high-range) [128]	0.9	0.9	0.9	0.9	0.9
Co-firing (low range) with CHP [129]	1	1	1	1***	1***
Co-firing (mid-range) with CHP	1.1	1.1	1.1	1.1***	1.1***
Co-firing (high-range) with CHP [130]	1.4	1.4	1.4	1.4***	1.4***
Co-firing of biomass with CHP	No ROCs issued under this band for post 31 March 2013 generation				
Co-firing of energy crops	No ROCs issued under this band for post 31 March 2013 generation				
Co-firing of energy crops with CHP	No ROCs issued under this band for post 31 March 2013 generation				
Co-firing of regular bioliquid [131]	0.5	0.5	0.5	0.5	0.5
Co-firing of regular bioliquid with CHP [132]	1	1	1	1	1
Co-firing of relevant energy crops (low-range)[133]	See footnote				
Co-firing of relevant energy crops with CHP (low-range)[134]	See footnote				
Dedicated biomass**	1.5	1.5	1.5	1.5	1.4
Dedicated biomass with CHP**	2	2	2	1.9	1.8
Dedicated energy crops**	2	2	2	1.9	1.8

*Regular biomass is defined as biomass other than (a) sewage gas, (b) landfill gas, (c) energy crops, (d) fuel produced by means of anaerobic digestion, (e) advanced fuel.

**Generating stations meeting the definition of a relevant fossil fuel generating stations are not eligible to claim under these bands for any post 31 March 2013 (post 30 April 2013 under the NIRO) generation[135].

*** These support levels are only available in circumstances where support under the RHI is not available. See article 28 of the RO, article 28 of the ROS and article 26 of the NIRO.

[127] Under article 28C ROO 1 April 13 – 31 March 15 generation receives 0.3 ROCs/MWh.
[128] Under article 28A ROO 1 April 13 – 31 March 14 generation receives 0.7 ROCs/MWh.
[129] Under article 28C ROO 1 April 13 – 31 March 15 generation receives 0.8 ROCs/MWh.
[130] Under article 28A ROO 1 April 13 – 31 March 14 generation receives 1.2 ROCs/MWh.
[131] Under article 28B ROO 1 April 13 – 31 March 15 generation receives 0.3 ROCs/MWh.
[132] Under article 28B ROO 1 April 13 – 31 March 15 generation receives 0.8 ROCs/MWh.
[133] Under article 28D ROO 1 April 13 – 31 March 15 generation receives 0.8 ROCs/MWh and 1 April 15 – 31 March 19 generation receives 1 ROC/MWh.
[134] Under article 28E ROO 1 April 13 – 31 March 15 generation receives 1.3 ROCs/MWh and 1 April 15 – 31 March 19 receives 1.5 ROC/MWh.
[135] Refer to Schedule 2 of the ROO for the definition of the bands.

Exceptions to banding and grandfathering

Grandfathering

6.13. Grandfathering is the policy intent of maintaining the same level of support as was available at the point of accreditation (for additional capacity when this was added to an accredited station) for the whole duration of its support under the RO. Part 6 of the Orders provides further information.

6.14. Subject to a number of exceptions the following grandfathering provisions apply:

- Landfill gas, sewage gas, offshore wind, wave and PV generating stations (TIC) accredited on or before 11 July 2006 (the date of the publication of the Energy Review Report) receive 1 ROC/MWh.
- Generating stations (TIC) accredited on or before 31 March 2009 and which, after the introduction of banding, would have been banded up, were moved to the appropriate higher band on 1 April 2009. This is with the exception of offshore wind, wave and PV stations.
- Landfill gas and sewage gas generating stations (TIC) accredited between 12 July 2006 and 31 March 2009 inclusive, receive 1 ROC/MWh.
- Landfill gas and sewage gas generating stations (TIC) which were granted preliminary accreditation on or before 31 March 2009 and which were commissioned before 1 April 2011, receive 1 ROC/MWh.
- Additional capacity added between 12 July 2006 and 31 March 2011 to landfill and sewage gas generating stations that were accredited as at 11 July 2006 receives 1 ROC/MWh.
- Additional capacity added between 12 July 2006 and 31 March 2011 to landfill and sewage gas stations which were accredited on or before 31 March 2009 receives 1 ROC/MWh.
- Landfill and sewage gas generating stations which were granted preliminary accreditation on or before 31 March 2009 and commissioned on or before 31 March 2011 and subsequently added additional capacity on or before 31 March 2011, receive 1 ROC/MWh on electricity generated using both the original accredited capacity as well as the additional capacity added on or before 31 March 2011.

Exceptions to the grandfathering rules

6.15. Government policy states that certain types of station are not accommodated by grandfathering. DECC's consultation response document on the banding review[136] contains a chapter setting out the government policy intent for grandfathering; please refer to this document for further details.

Generating stations that received a statutory grant made prior to 11 July 2006[137]

[136] http://www.decc.gov.uk/assets/decc/11/consultation/ro-banding/5936-renewables-obligation-consultation-the-government.pdf
[137] Article 32 of the RO, Article 32 of the ROS and Article 31 of the NIRO.

6.16. Stations that received such a grant that are accredited after 11 July 2006 must have surrendered or paid back the grant prior to 31 March 2011 in order to benefit from banded ROCs. If the grant was not surrendered the station receives 1ROC/MWh or the relevant banding whichever is less.

6.17. DECC are responsible for informing us of any generating stations in receipt of a grant before 11 July 2006 and also for informing us of when this grant has been repaid in full.

Registered grace period stations[138]

6.18. Stations that for reasons related to delays in grid connection or radar solution deployment were unable to commission prior to 1 April 2013 (or 1 May 2013 under the NIRO) had the option to register as a grace period generating station. Stations registered as grace period generating stations are supported at the ROC level that was available prior to 1 April 2013 (or 1 May 2013 under the NIRO).

Appendix 7 – Banding definitions

Appendix summary

Definitions of the individual technology and fuelling based bands that partially determine the number of ROCs that will be issued to a generating station in a given month. Banding is applicable to most but not all stations and is mainly conditional on the date a station was accredited or additional capacity was added.

Advanced gasification

Electricity generated from a gaseous fuel which is produced from waste or biomass by means of gasification, and has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the generating station of at least 4 megajoules per metre cubed.

Advanced pyrolysis

Electricity generated from a liquid or gaseous fuel which is produced from waste or biomass by means of pyrolysis, and (a) in the case of a gaseous fuel, has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the generating station of at least 4 megajoules per metre cubed, and (b) in the case of a liquid fuel, has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the generating station of at least 10 megajoules per kilogram.

Anaerobic Digestion

This is abbreviated to "AD" in the Order and means electricity generated from gas formed by the anaerobic digestion of material which is neither sewage or material in a landfill.

Closed landfill gas

Electricity generated from landfill gas (other than electricity generated using the heat from a turbine or engine) in any month in which the generating station generates electricity only from gas formed by the digestion of material in a landfill which no longer accepts waste for disposal.

Co-firing of regular bioliquid

Electricity generated from regular bioliquid in a month in which the generating station generates electricity partly from fossil fuel and partly from renewables sources.

Co-firing of regular bioliquid with CHP

Electricity generated from regular bioliquid in a month in which the qualifying CHP generating station generates electricity partly from fossil fuel and partly from renewable sources.

Co-firing of relevant energy crops

Electricity generated before 1 April 2019 by a generating station where declared net capacity has not been in excess of 50Kw at any time after 31 March 2009; where

electricity is generated from relevant energy crops[139] burned in a combustion unit in a month in which the energy content of the biomass burned in that unit is less than 50 per cent of the energy content of all energy sources burned in that unit in that month; and where electricity is generated partly from fossil fuel and partly from renewables sources.

Co-firing of relevant energy crops (with CHP)
Electricity generated before 1 April 2019 by a generating station where declared net capacity has not been in excess of 50Kw at any time after 31 March 2009; where electricity is generated from relevant energy crops burned by a qualifying CHP generating station in a combustion unit in a month in which the energy content of the biomass burned in that unit is less than 50 per cent of the energy content of all energy sources burned in that unit in that month; and where electricity is generated partly from fossil fuel and partly from renewables sources.

Dedicated biomass

Electricity generated from regular biomass by a generating station which is not a relevant fossil fuel generating station and which, in any month, only generates electricity from biomass.

Dedicated biomass with CHP

Electricity generated from regular biomass by a qualifying combined heat and power generating station which is not a relevant fossil fuel generating station, and which, in any month, only generates electricity from biomass.

Dedicated energy crops

Electricity generated from energy crops by a generating station which is not a relevant fossil fuel generating station, and which in any month, generates electricity only from energy crops.

Electricity generated from sewage gas

Electricity generated from gas formed by the anaerobic digestion of sewage (including sewage which has been treated or processed).

Energy from waste with CHP

Electricity generated from the combustion of waste (other than a fuel produced by means of anaerobic digestion, gasification or pyrolysis) in a qualifying combined heat and power generating station in a month in which the station generates electricity only from renewable sources and those renewable sources include waste which is not biomass.

Geothermal

Electricity generated using naturally occurring subterranean heat.

[139] 'Relevant energy crops' are energy crops supplied to the operator of a generating station in accordance with an agreement in writing before 7 September 2012 between the owner / operator of the generating station and a person who is not connected to the owner or generator of the station. See Article 28 D(4) of the Orders.

Geopressure

Electricity generated using naturally occurring subterranean pressure.

Hydro-electric

Electricity generated by a hydro generating station;

A "hydro generating station" means a generating station which is wholly or mainly driven by water (other than a generating station driven by tidal flows, waves, ocean currents, geothermal sources or using a difference in tidal levels) and the "generating station" extends to all turbines supplied by the same civil works, except that any turbine driven by a compensation flow supplied by those civil works where there is a statutory obligation to maintain such compensation flow in a natural water course shall be regarded as a separate hydro generating station.

NB The current restrictions on pre-existing hydro above 20MW in capacity will continue to apply.

High-range co-firing

Electricity generated from solid and gaseous biomass or energy crops in a month in which the generating station generates electricity partly from fossil fuel and partly from renewable sources; and where the energy content of the biomass burned in a combustion unit is at least 85 per cent (but is less than 100 per cent) of all the energy sources burned in that unit in that month.

High-range co-firing with CHP

Electricity generated from solid and gaseous biomass or energy crops in a month in which the qualifying CHP generating station generates electricity partly from fossil fuel and partly from renewable sources; and where the energy content of the biomass burned in a combustion unit is at least 85 per cent (but is less than 100 per cent) of all the energy sources burned in that unit in that month; and where the fossil fuel and biomass or energy crops have been burned in separate combustion units.

Landfill gas heat recovery

Electricity generated using the heat from a turbine or engine which is generating electricity from landfill gas.

Low-range co-firing

Electricity generated from solid and gaseous biomass or energy crops in a month in which the generating station generates electricity partly from fossil fuel and partly from renewable sources; and where the energy content of the biomass burned in a combustion unit is less than 50 per cent of all the energy sources burned in that unit in that month.

Low-range co-firing with CHP

Electricity generated from solid and gaseous biomass or energy crops in a month in which the qualifying CHP generating station generates electricity partly from fossil fuel and partly from renewable sources; and where the energy content of the biomass burned in a combustion unit is less than 50 per cent of all the energy sources burned in that unit in that month; and where the fossil fuel and biomass or energy crops have been burned in separate combustion units.

Mid-range co-firing

Electricity generated from solid and gaseous biomass or energy crops in a month in which the generating station generates electricity partly from fossil fuel and partly from renewable sources; and where the energy content of the biomass burned in a combustion unit is at least 50 per cent but less than 85 per cent of all the energy sources burned in that unit in that month.

Mid-range co-firing with CHP

Electricity generated from solid and gaseous biomass or energy crops in a month in which the qualifying CHP generating station generates electricity partly from fossil fuel and partly from renewable sources; and where the energy content of the biomass burned in a combustion unit is at least 50 per cent but less than 85 per cent of all the energy sources burned in that unit in that month; and where the fossil fuel and biomass or energy crops have been burned in separate combustion units.

Offshore Wind

Electricity generated from wind by a generating station that is offshore; Offshore in relation to a generating station which generates electricity from wind, means a **generating station which has its wind turbines situated wholly in offshore waters, and** is not connected to dry land by means of a permanent structure which provides access to land above the mean low water mark.

Offshore wind – demonstration turbines

Electricity generated from wind by a generating station that is offshore, uses only eligible turbines, and is located on a particular area of seabed which is subject to a demonstration lease issued by the Crown Estate; Eligible turbine in relation to an offshore wind generating station using demonstration turbines, means a wind turbine which does not form part of the generating station from a date no earlier than 1 April 2014; Demonstration lease means a lease granted by the Crown Estate, one of whose purposes is testing, demonstrating and approving the viability of a wind turbine.
This definition applies to ROS stations only.

Offshore wind – floating turbines

Electricity generated from wind by a generating station that is offshore, uses only floating wind turbines, is granted preliminary accreditation which takes effect on or before 31 March 2017and is commissioned before 1 October 2018; Floating wind turbine in relation to an offshore generating station, means a wind turbine which is fixed or connected to the seabed by means of a chain, tension leg or other flexible mooring.
This definition applies to ROS stations only.

Onshore Wind

Electricity generated from wind by a generating station that is not offshore (see offshore definition above).

Standard gasification

Electricity generated from a gaseous fuel which is produced from waste or biomass by means of gasification, and has a gross calorific value when measured at 25 degrees

Celsius and 0.1 megapascals at the inlet to the generating station which is at least 2 megajoules per metre cubed but is less than 4 megajoules per metre cubed.

Standard pyrolysis

Electricity generated from a gaseous fuel which is produced from waste or biomass by means of pyrolysis, and has a gross calorific value when measured at 25 degrees Celsius and 0.1 megapascals at the inlet to the generating station which is at least 2 megajoules per metre cubed but is less than 4 megajoules per metre cubed.

Station conversion

Electricity generated from regular biomass or energy crops by a RFFGS (relevant fossil fuel generating station). The fuels used for electricity generating in any month must be biomass or energy crops.

Station conversion with CHP

Electricity generated from regular biomass or from energy crops by a relevant fossil fuel CHP generating station. The fuels used for electricity generating in any month must be biomass or energy crops.

Tidal Impoundment – Tidal Barrage

Electricity generated by a generating station driven by the release of water impounded behind a barrier using the difference in tidal levels where the barrier is connected to both banks of a river and the generating station has a declared net capacity of less than 1 gigawatt.

Tidal Impoundment - Tidal Lagoon

Electricity generated by a generating station driven by the release of water impounded behind a barrier using the difference in tidal levels where the barrier is not a tidal barrage and the generating station has a declared net capacity of less than 1 gigawatt.

Tidal Stream

Electricity generated from the capture of the energy created from the motion of naturally occurring tidal currents in water.

Enhanced Tidal Stream

Electricity generated from the capture of the energy created from the motion of naturally occurring tidal currents in water, where such electricity is not generated by devices built with or maintained by capital or revenue funding under a statutory grant programme operated by the Scottish Ministers or the Secretary of State; in respect of which a statutory grant was awarded on or before 19th September 2008.

Wave

Electricity generated from the capture of the energy created from the motion of naturally occurring waves on water.

Enhanced Wave

Electricity generated from the motion of naturally occurring waves on water, where such electricity is not generated by devices built with or maintained by capital or revenue

funding under a statutory grant programme operated by the Scottish Ministers or the Secretary of State in respect of which a statutory grant was awarded on or before 19th September 2008.

Solar photovoltaic

Electricity generated from the direct conversion of sunlight into electricity.

Building mounted solar photovoltaic

Electricity generated from the direct conversion of sunlight into electricity by equipment which is installed on a building by equipment not installed on the ground either:

- directly,
- or on a frame, plinth or other structure installed on the ground wholly or mainly for the purpose of supporting that equipment.

For NIRO stations only the above definition applies where the relevant generating station is not a qualifying existing solar photovoltaic station or a qualifying new solar photovoltaic station as defined in Schedule 2.

Ground mounted solar photovoltaic

Electricity generated from the direct conversion of sunlight into electricity by equipment installed on the ground either:

- directly,
- on a frame, plinth or structure installed on the ground, and wholly or mainly for the purpose of supporting that equipment.

For NIRO stations only the above definition applies where the relevant generating station is not a qualifying existing solar photovoltaic station or a qualifying new solar photovoltaic station as defined in Schedule 2.

Unit conversion

Electricity generated from regular biomass or energy crops burned in a combustion unit in any month in which that combustion unit burns only biomass or only energy crops, and the generating station generates electricity partly from fossil fuel and partly from renewable sources.

Unit conversion with CHP

Electricity generated from regular biomass or energy crops burned by a qualifying combined heat and power generating station in a combustion unit in any month in which that combustion unit burns only biomass or only energy crops, and the generating station generates electricity partly from fossil fuel and partly from renewable sources.

Appendix 8 - Glossary

A	
AD	Anaerobic digestion
AMO	Additional metered output
Act	Energy Act 2008
B	
BERR	Department of Business Enterprise and Regulatory Reform
C	
CfD	Contract for Difference
CHP	Combined heat and power
CHPQA	Combined Heat and Power Quality Assurance
D	
Defra	Department for Environment, Food and Rural Affairs
DECC	Department of Energy and Climate Change
DETI	Department of Enterprise, Trade and Investment
DNC	Declared net capacity
DTI	Department of Trade and Industry
F	
FDBLs	Fossil Derived Bioliquids
FES	Future Energy Solutions
FITs	Feed-In Tariffs
FMS	Fuel Measurement and Sampling
FPNS	Final Physical Notifications
G	
GB	Great Britain
K	
kW	Kilowatt
kWh	Kilowatt hour
M	
MID	Measuring Instruments Directive
MW	Megawatt
MWh	Megawatt hour
MPAN	Meter Point Administration Number
N	
NFFO	Non-Fossil Fuel Obligation
NFPA	Non-Fossil Fuel Purchasing Agency
NI	Northern Ireland
NIEAR	Northern Ireland Authority for Energy regulation
NIE	Northern Ireland Electricity
NI-NFFO	Northern Ireland Non-Fossil Fuel Obligation
NIRO	Northern Ireland Renewables Obligation 2009 (as amended)
NIROC	Northern Ireland Renewables Obligation Certificate
NMO	National Measurement Office

O

Ofgem	Office of Gas and Electricity Markets

Q

QPO	Qualifying Power output

R

RFFGS	Relevant Fossil Fuel Generating Station
RHI	Renewable Heat Incentive
RO	Renewables Obligation 2009 (as amended)
ROC	Renewables Obligation Certificate
ROO	Renewables Obligation Order
ROS	Renewables Obligation Scotland 2009 (as amended)

S

SRO	Scottish Renewables Obligation
SROC	Scottish Renewables Obligation Certificate

T

TIC	Total installed capacity

U

UK	United Kingdom