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Feed-in Tariff: "Generating equipment" consultation

Consultation

Reference:	91/11	**Contact:**	Vicky Lay
Publication date:	29 July 2011	**Team:**	Environmental Programmes
Response deadline:	21 October 2011	**Tel:**	020 7901 7310
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Overview:

The FIT Amendment Order 2011 now regulates to address the use of refurbished or used generating equipment. This consultation sets out Ofgem's views on the term "generating equipment" and seeks views from stakeholders on our interpretation.

Appendix 1 sets out the process for submitting a response to this consultation.

Responses should be submitted to Ofgem by 21 October 2011.

Context

Since the Feed-in Tariff (FIT) scheme started in April 2010 the implementation process has highlighted areas where modifications and "housekeeping" amendments to the Feed-in Tariff (Specified Maximum Capacity and Functions) Order 2010 would help to ensure that the scheme delivers as originally envisaged.

The FIT Amendment Order 2011, enacted in May 2011, made a number of amendments to the FIT Order, which provides the basis for the operation of the FIT scheme.

A new requirement was introduced preventing the reuse of "generating equipment" which Ofgem has reason to believe has previously received accreditation under the FIT or Renewables Obligation (RO) schemes.

Associated documents

- The Feed-In Tariffs (Specified Maximum Capacity and Functions) Order 2010 (as amended)
- Schedule A of Standard Licence Condition 33
- Renewables Obligation Order 2009 (as amended)
- Feed-in Tariff Scheme: Guidance for renewable installations (July 2011)
- Feed-in Tariff Scheme: Guidance for Licensed Electricity Suppliers (Feb 2011)
- Renewables Obligation: Guidance for generators (May 2011)

Contents

1. "Generating equipment"

Chapter summary

The FIT Amendment Order 2011 now aims to guard against the use of refurbished or used generating equipment. This chapter sets out our view of the term "generating equipment" and seeks views from stakeholders on our interpretation. Appendix 1 sets out the process for submitting a response to this consultation. Responses should be provided by 21 October 2011.

Question box

Question 1: Views are invited on how the term "generating equipment" in Article 8(2) of the FIT Order (as amended) should be interpreted.

What the legislation says

1.1. An installation will not be eligible to receive FIT accreditation where there is good reason for Ofgem to believe that any generating equipment used at the installation has formed part of an installation previously accredited under the ROO or FIT[1] scheme.

1.2. The FIT scheme is intended to encourage new renewable generation and the FIT tariff bands are set on this basis. Article 8(2) aims to clarify the situations where the use of refurbished or re-used generating equipment is not permissible.

1.3. The legislation does not specifically define the term "generating equipment". We are seeking views on the interpretation of this term. Below, we set out our interpretation of the term "generating equipment".

Ofgem's interpretation of "generating equipment"

1.4. In the absence of a definition in the FITs legislation, the term "generating equipment" 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).

1.5. While "generating equipment" does not have a specific dictionary definition, 'generating station' is defined in the Shorter Oxford English Dictionary as a "building and site for generating electrical current". In the Oxford English Dictionary it is defined as a "power station for the generation of electricity". From these two terms,

1 Article 8(2) of The FIT Order

the ordinary meaning of "generating equipment" could be defined as equipment which is required to generate electrical current at an eligible installation.

1.6. In the 'Renewables Obligation: Guidance for Generators' we have published our interpretation of the term 'generating station', including reference to 'equipment for generating electricity'. We interpret this term as "equipment for generating or producing electricity (for example boilers, turbines, engines, photovoltaics etc)".

1.7. Similarly, we will consider "generating equipment" as being that equipment used for producing or generating electricity. We also consider any equipment required to convert sources of energy into alternating current (AC) to form part of the generating equipment.

Anaerobic Digestion (AD)

1.8. The FIT scheme uses the definition of AD provided by the ROO.

1.9. We interpret the "generating equipment" within an AD installation to be all equipment required to convert gas formed by the anaerobic digestion of material (which is neither sewage nor material in a landfill) into electricity.

1.10. Given this, we are minded to view engines, turbines and alternators (or any part thereof) at an eligible installation as generating equipment. Conversely, we are not minded to view any gas blowers, anaerobic digestion vessels, gas clean-up equipment and any associated pipe work as generating equipment.

Hydro

1.11. The FIT Order defines 'hydro generating station' as:

"the meaning given to it in the ROO (but excluding such a station which generates electricity from water where the hydrostatic head of the water has been increased by pumping)"

1.12. The ROO defines '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 with water by or from the same civil works, except any turbine driven by a compensation flow supplied by or from 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);"

1.13. Where 'civil works' are defined as:

"civil works", in relation to a hydro generating station, are to be regarded as all man-made structures, and man-made works for holding water which are located on the inlet side of a turbine (turbine A), excluding any such structures or works which supply another turbine before water is supplied to the structures and works which supply turbine A;"

1.14. Whilst the civil works at a hydro generating station represents a significant capital cost at an eligible installation, we are minded to exclude civil works as generating equipment. Civil works are generally regarded as structures and do not specifically result in electricity generation. This approach is in line with work completed by DECC[2] and the MCS 'as new' standard[3].

1.15. In addition to this, the FITs legislation sets out a definition of 'plant'[4]. This definition suggests that structures should not be regarded as generating equipment, in that they do not constitute 'equipment, apparatus or an appliance'.

1.16. Given this, we are minded to consider the following to be "generating equipment" in the context of a hydro generating installation:

- all the turbine runners or all the turbine blades or the propeller or archimedes' screws
- all the inlet guide vanes or all the inlet guide nozzles, and
- the alternator (or any part thereof).

Micro CHP

1.17. We assume that all micro CHP applications submitted under the FIT scheme will be packaged CHP installations - ie micro CHP installations designed and supplied as complete units. This assumption is based on the fact that the maximum eligible capacity of for this technology is 2kW and is consistent with the Microgeneration Strategy[5].

2 Hydro Power Resource Assessment - October 2010
3 MCS Product Certification Scheme Requirements: 'As New Hydro Product Standard' available from www.microgenerationcertification.org
4 Schedule A of Standard Licence Condition 33
5 Microgeneration Strategy, DECC - June 2011

1.18. We are minded to include all equipment that constitutes the CHP unit to be considered "generating equipment". This would typically include[6]:

- a prime mover (either gas engine, small gas turbine, or fuel cell)
- the generator and heat recovery equipment, and
- all the associated pipe work, valves, controls etc within the unit.

Solar PV

1.19. We are minded to include all solar panels and inverters as the "generating equipment" in a solar installation. The inverters are vital for converting DC power into AC power. Given there are currently no DC meters approved to the necessary metering requirements, we consider the inclusion of inverters to be in line with the operation of the scheme more widely.

Wind

1.20. When determining "generating equipment" within a wind installation, we are minded to view turbine blades, tower, nacelle and contents thereof as generating equipment. We consider this equipment to be directly required to generate electricity.

Other items of equipment

1.21. In addition to the technology specific factors outlined above, we are seeking views on whether the following should be considered "generating equipment":

- Metering
- Wires
- Distribution boards
- Breakers and switches
- Transformers
- Relays
- Grid connections
- Parasitic equipment (eg cooling fans and dehumidifiers)
- Batteries
- Rectifiers

6 Detailed in DECC's CHP Focus resource available from DECCs website

Appendices

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Appendix 1 - Consultation Response and Questions

1.1. Ofgem would like to hear the views of interested parties in relation to any of the issues set out in this document.

1.2. We would especially welcome responses to the specific questions which we have set out at the beginning of each chapter heading and which are replicated below.

1.3. Responses should be received by 21 October 2011 and should be sent to:

- Name: Vicky Lay
- Team: Environmental Programmes
- Address: Ofgem, 9 Millbank, London SW1P 3GE
- Telephone number: 0207 901 7310
- Email: renewable@ofgem.gov.uk

1.4. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website www.ofgem.gov.uk. Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

1.5. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses.

1.6. Next steps: Having considered the responses to this consultation, Ofgem intends to publish its final decisions by the end of 2011. Any questions on this document should, in the first instance, be directed to the named contact above.

CHAPTER: One

Question1: Views are invited on how the term "generating equipment" in Article 8(2) of the FIT Order should be interpreted.

Appendix 2 - Glossary

A

AD
Anaerobic Digestion

C

CHP
Combined Heat and Power

D

DECC
Department of Energy and Climate Change

F

FIT
Feed-in Tariff

FIT Order
The Feed-in Tariffs (Specified Maximum Capacity and Functions) Order 2010 (as amended)

M

MCS
Microgeneration Certification Scheme operated by Gemserv

Micro installation
Term for an installation with a declared net capacity of 50kW or less

R

RO
Renewables Obligation

ROO
Renewables Obligation Order

S

SLC
Supplier Licence Conditions

Appendix 3 - Feedback Questionnaire

1.1. Ofgem considers that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this consultation has been conducted. In any case we would be keen to get your answers to the following questions:

1. Do you have any comments about the overall process, which was adopted for this consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand, could it have been better written?
4. To what extent did the report's conclusions provide a balanced view?
5. To what extent did the report make reasoned recommendations for improvement?
6. Please add any further comments?

1.2. Please send your comments to:

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