The Certification Mark for Onsite Sustainable Energy Technologies

Microgeneration Certification Scheme: MCS 010

Product Certification Scheme Requirements: Generic Factory Production Control and Product Quality Requirements ~~Factory Production Control Requirements~~

Issue ~~1.5~~ 2.0

This standard has been approved by the Standards Management Group ~~Steering Group~~ of the Microgeneration Certification Scheme.

REVISION OF MICROGENERATION CERTIFICATION STANDARDS

Microgeneration Standards will be revised by issue of revised editions or amendments. Details will be posted on the website at www.microgenerationcertification.org

Technical or other changes which affect the requirements for the approval or certification of the product or service will result in a new issue. Minor or administrative changes (e.g. corrections of spelling and typographical errors, changes to address and copyright details, the addition of notes for clarification etc.) may be made as amendments.

The issue number will be given in decimal format with the integer part giving the issue number and the fractional part giving the number of amendments (e.g. Issue 3.2 indicates that the document is at Issue 3 with 2 amendments).

Users of this Standard should ensure that they possess the latest issue and all amendments.

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FOREWORD

The following document MCS 010 Issue 2.0 is a major update to Issue 1.5. It is available for reference from the date of publication 23/11/2018. MCS Product Certificate Holders of microgeneration products certificated in accordance with any of the MCS product standards may commence working in accordance with this update from 23/11/2018. All MCS Product Certificate Holders of microgeneration products certificated in accordance with any of the MCS product standards shall comply with this update from 23/02/2019.

1. INTRODUCTION

~~This document contains the requirements for~~ Factory Production Control (FPC) ~~systems which are assessed as part of the product certification process for the Microgeneration Certification Scheme (the Scheme). FPC~~ is used to ensure that MCS Certificated Products meet and continue to meet the appropriate standards. ~~Proposals and scheme documents may contain additional requirements for FPC but as a minimum the requirements as detailed in Table 1 of this document shall be in place and operating at each manufacturing site.~~ This document applies to the MCS Product Certificate Holder.

2. SCOPE

This document defines the requirements for FPC systems which are assessed as part of the product certification process for the Microgeneration Certification Scheme (the Scheme).

3. DEFINITIONS

Certification Body	A Body that is accredited in accordance with ISO / IEC 17065 conformity assessment by UKAS or an equivalent (i.e. a member of the International Accreditation Forum (IAF) Multilateral Recognition Arrangement (MLA) and undertakes the assessment of microgeneration products against the requirements of this Scheme.

Applicant	The legal entity applying to the Certification Body for the MCS certification of microgeneration product(s).
MCS Product Certificate Holder	This definition also applies to applicants who wish to have products certified under MCS. The legal entity named or to be included in the MCS product certificate that has responsibility for certification and its maintenance.
MCS Certificated Product(s)	A product in relation to which the MCS Approval process with a licensed MCS Certification Body has been completed successfully.
Manufacturing Contact	The named individual at each manufacturing site with responsibilities and authority that includes ensuring that processes needed for the quality management system are established, implemented and maintained.
Nominee	A named individual of the MCS Product Certificate Holder who is the primary contact between the MCS Product Certificate Holder and the Certification Body.

3.1 Responsibilities of the MCS Product Certificate Holder

MCS Product Certificate Holders are responsible for ensuring that all the requirements for the certification are met. Ultimate responsibility for compliance lies with the MCS Certificate Holder although they may need to involve various parties in the MCS certification process. The MCS scheme does not prescribe the type of organisation which may hold an MCS Product Certificate. Possibilities include but are not limited to: product manufacturer, product designers, product branders.

4. THE ASSESSMENT PROCESS

4.1 Initial Assessment

All assessments shall ~~and surveillances~~ start with an opening meeting to review the assessment requirements, to identify any Health and Safety issues and to establish any equipment that will be required. Assessors check all aspects of the FPC process as required. Any items which are found to be non-conforming with the requirements shall

~~will~~ result in a non-conformity report being raised. Non-conformity reports, together with details of the proposed ~~completed~~ corrective actions (and where necessary objective evidence), shall be returned for review within 45 days of the visit date.

MCS requirements for each technology type may contain additional FPC requirements but as a minimum, the requirements as detailed in Table 1 of this document shall be assessed to confirm they are in place and operating at each relevant site. The relevant site(s) shall be determined by the Certification Body.

At the end of an assessment or surveillance visit, a ~~brief~~ closing meeting shall be ~~is~~ held to confirm the scope of assessment and identify any non-conformities. Following an initial assessment, the assessor makes a recommendation either that the FPC requirements have been met ~~for certification to either be granted~~ subject to addressing any non-conformities within 45 days or that ~~for~~ a full or partial re-assessment ~~to~~ be conducted.

4.2 Maintenance of Certification / Surveillance

MCS certification is~~ Product certificates are~~ maintained and held in force through surveillance ~~/ maintenance~~ assessment visits and satisfactory completion of agreed product audit testing or product assessment where necessary. Surveillance assessments are conducted as for 5.1 (above) to confirm that the FPC system for the MCS certificated product ~~operated by the Company~~ continues to meet the requirements~~,~~.

- ~~however, w~~Where ~~any~~ non-conformities are raised, evidence to close these shall be provided ~~they must be returned~~ within 30 days.
- Where a major non-conformity is raised a ~~re-visit~~ re-assessment ~~will~~ shall be conducted (outside of the normal frequency of ~~visits~~ assessments) within 12 weeks to check the corrective action. ~~In extreme circumstances or w~~
- Where a major non-conformity is not adequately rectified ~~discharged~~, the associated certification may be suspended ~~immediately~~ by the relevant Certification Body.

~~Suspension is for a defined period and can only be lifted following a successful re-visit within a specified period. If the suspension cannot be lifted, the certificate(s) and authority to use the Microgeneration Certification Scheme mark are withdrawn along with any product listing(s). Voluntarily withdrawal from the Scheme, must be advised in writing.~~

The surveillance assessment for each relevant site shall be conducted at regular intervals (usually annual). This should take place during a time period that is between 3 months prior to and 3 months beyond the assessment due date i.e. on the anniversary date of the certification. Under certain circumstances, at the discretion of the Certification Body, additional assessments may be conducted outside of the normal frequency of assessments.

5. REVISION OF MICROGENERATION CERTIFICATION SCHEME (MCS) REQUIREMENTS

Microgeneration Certification Scheme (MCS) scheme requirements will be revised by issue of revised editions or amendments. Details will be posted on our website at www.microgenerationcertification.org

Technical or other changes which affect the requirements for the approval or certification of the product or service will result in a new issue. Minor or administrative changes (e.g. corrections of spelling and typographical errors, changes to address and copyright details, the addition of notes for clarification etc.) may be made as amendments.

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APPENDIX A- TABLE 1

Clause	Activity	Requirements
1.	Review of ~~Company~~ details of contacts, locations and ~~/~~ ~~R~~responsibility	~~During assessment and surveillance visits, the assessor will check the details from the application form or certificate(s) to ensure that all details are correct. The company is asked to specify a named individual "Nominee" and their nominated deputy, whose responsibility shall be the control and overall supervision of all production activities, which fall within the scope of the certification scheme. This Nominee shall be the primary contact between the company and the certification body.~~ At each manufacturing location there shall be a person or persons (Manufacturing Contact) with authority over and responsibility for: a) ensuring that the quality management system conforms to the requirements of this MCS document; b) ensuring that the processes are delivering their intended outputs; c) reporting on the performance of the quality management system and on opportunities for improvement, in particular, to top management; d) ensuring that the integrity of the quality management system is maintained when changes to the quality management system are planned an implemented. ~~This person or persons are referred to hereinafter as the Factory Contact~~. There shall be two identified contact persons (Nominees) for the MCS Product Certificate Holder. ~~Hereafter, these are referred to as the Nominee.~~ A Manufacturing Contact may also be a Nominee. The Nominee shall facilitate contact between the Certification Body and the Manufacturing Contact at each manufacturing location.

2.	Review of Quality Management System / Quality Plan	~~During the assessment the status of the company's~~ There shall be an appropriate Quality Management System in place which includes a ~~or~~ Quality Plan for the MCS Certificated Product ~~will be reviewed as appropriate~~.
3.	~~Action taken to resolve previous~~ Resolutions of non-conformities	~~At the time of assessment, the assessor shall review any previous~~ nNon-conformities identified during previous FPC assessments shall have been resolved within the time frames specified within this MCS document.~~to ensure that the appropriate corrective and preventative actions have been taken and have been satisfactorily completed and implemented.~~
4	Internal Review	There ~~Nominee~~ shall ~~hold~~be regular (at least quarterly) meetings ~~with other staff members~~ to review the effect of each of the FPC procedures and deal with any problems in the system. There shall be r~~R~~ecords of these meetings, ~~and~~ corrective actions and their implementation. ~~shall be kept by the company and will be reviewed by assessors.~~

5.	Document Control	There shall be a defined document control system/procedure which shall include for all controlled documents: • Having on each page its unique identity, the page number and the number of pages. • Being approved by a person with the necessary authority, for issue to all locations where they are to be used. • Removal from all points of issues/use of all superseded/obsolete documents. There shall be a documented mechanism for ensuring that the appropriate, generally the most recent, issues of all relevant national and international standards are available as required. ~~The company shall have a master list or equivalent document which details all documents and data associated with the production of the product(s) including raw material and material specifications. As a minimum, the list shall contain the document reference, issue status, number of pages and approval authorisation.~~ ~~All documents and data shall have a unique identity and page number on every page, be authorised for use by representatives of the company and be available at all locations where they are to be used. Superseded/obsolete documents shall be removed from all points of issue. The company shall document procedures, which determine how the above requirements are managed.~~ *Note: Documented procedures are acceptable in electronic form.* ~~Procedures shall also identify the method for back up and retrieval of documentation and data, whether in hard copy or electronic formats.~~ ~~The company shall maintain copies of relevant national and international standards associated with the product(s) and have a documented method/mechanism for ensuring that they have access to the latest editions including any amendments.~~

6.	Customer requirements and contracts	There shall be records of tenders, orders and contracts. Furthermore, there shall be a contract review system which considers the following: • Resource • Capability • Contract requirements • Contract amendments ~~The company shall review orders, contracts or tenders to ensure that:~~ ~~- The requirements are adequately defined for each product for quantity, packaging, delivery etc.~~ ~~-The company has the resource and capability to meet the order/contract requirements. Where the time scales cannot be met, the company shall detail when the order/contract will be fulfilled.~~ ~~Records of this activity shall be maintained for all orders/contracts and tenders.~~ ~~A process shall also exist for managing amendments to contracts / orders.~~

7.	Purchasing	There shall be a documented mechanism for recording ~~The company shall identify its~~ suppliers of designs, ~~products and~~ components and materials ~~which are incorporated into the final product,~~ (including packaging). ~~A master list of suppliers shall be established to~~ The records shall include supplier; identit~~f~~y, ~~their~~ addresse~~s~~, ~~location~~, and contact details and details of ~~the~~ ~~service or products/~~ components and materials supplied. ~~The method for adding or removing suppliers and products/materials from the master list shall be established e.g. previous dealings/past history, product approval.~~ ~~Purchase orders for products shall clearly identify the part number, class, grade, species (timber), size, finish, trade name and any other details quoting (where necessary), tolerances or relevant product standards.~~ There shall be a master list of suppliers. Additionally, there shall be a documented mechanism for adding and removing suppliers from the master list including definition of any required checks on the sustainability of suppliers, e.g. financial liquidity, technical capability, etc.
8.	Review of Product Specification	~~Check that no changes have occurred that should have been notified to the certification body.~~ There shall be a documented mechanism for recording the specification of MCS Certificated Products. There shall be a documented mechanism for ensuring that all changes to this specification are communicated to the relevant MCS Certification Body in a timely manner.

9.	Production Control	~~All stages of the production process, including inspection and testing shall be conducted under controlled conditions. Where appropriate these shall include adequate descriptions of the characteristics of the product and local work instruction. Each process, part or material, which is to be used shall be identified, along with specified tolerances, methods and any other specifications that may be required by the contract.~~ ~~Where required by the contract, all products must carry a unique identification, which determines their date of production and enables traceability to the contract or batch in which they are to be used.~~ All MCS Certificated Products shall be uniquely identified such as to enable verification of their status as an MCS certificated model. This shall include means to establish the date and location of production so that the relationship to the MCS Certification of the products can be ascertained.
10.	Inspection and in process testing	~~As detailed above for Production,~~ There shall be procedures in place for carrying out inspection and in-process testing ~~is required to be carried out~~ under controlled conditions which ~~and shall~~ include: Incoming inspection - All ~~products~~ components and materials are checked to ensure that the correct ~~product~~ component /material has been supplied and the quantities are correct. Any critical measurements should be identified and inspection records exist including a statement of acceptance or rejection of ~~products~~ components/materials and the basis for this decision. In Process and Final Inspection – MCS Certificated Products shall be inspected in process and at final inspection to ensure that the requirements of the standards or specifications are met. Products subjected to testing, in accordance with MCS 011, shall have been subjected to this process. Records shall be kept of the results of incoming, in process, final inspections and in-process testing ~~relative to each batch of each product~~.

11.	Action on Non-conforming material	There ~~company~~ shall be documented procedures for identification of ~~to ensure that any material which is deemed to be~~ non-conforming materials and components (including packaging), their removal from the production line(s) for MCS Certificated Products and their storage ~~has been adequately identified (including by physical location),~~ such that their ~~it is prevented from~~ unintended use ~~or being packaged with conforming material~~ is prevented. The procedures shall identify the actions necessary for the non-conforming material to be scrapped, re-worked or re-graded including labelling and authorisation requirements.
12.	Equipment	There ~~company~~ shall be suitable ~~equipment~~ equipment for factory production control, inspection and testing measurements. ~~ensure that suitable equipment exists for the control and measurement of the products and that it is~~ This equipment shall be suitably calibrated and labelled to indicate its calibration status. A record shall be kept of ~~all~~ this equipment. ~~which is used by the company.~~ ~~The~~ Each record shall include a description of the equipment (e.g. a manometer), a unique reference code ~~the~~ (e.g. ~~-~~serial number) ~~or number allocated by the company~~, scale and frequency of checking/calibration along with suitable objective evidence to demonstrate that the equipment is capable of the accuracy which is required for the specified measurements.
13.	Storage, handling, packaging and transportation	~~The company shall carry out under controlled conditions~~ ~~s~~Storage, handling, packaging, and transportation of the MCS Certificated Product and component parts shall be carried out under controlled conditions to prevent damage or deterioration.
14.	Certification Marks	~~The use of the Microgeneration Certification Mark and the certification body mark on product and on any stationery will be reviewed to ensure that approval has been granted by the certification body for the intended use.~~ The MCS Approved mark shall be used in accordance with the MCS Brand Guidelines. The guidelines are available on the MCS website www.microgenerationcertification.org

15.	Records	~~All production records must be examined regularly - on at least a weekly basis - by the company's Nominee, who must date and initial the records after each routine examination.~~ There shall be ~~R~~records held of ~~related to~~ production and inspection which shall be regularly examined (at least weekly) by a person of suitable authority. There shall be a mechanism for recording the date of each examination and who it was undertaken by. These records shall be maintained, subsequent to their examination, ~~kept by the company~~ for a minimum of two years or as per EU regulatory requirements whichever is longer.~~, subsequent to their examination and approval.~~ ~~Contract related records must as a minimum contain details of customer reference, dates, quantities and details of all products supplied. The company must keep these records for a minimum of five years.~~
16.	Complaints	There ~~company~~ shall be a system for manage~~e~~ing complaints ~~under controlled conditions~~ and there shall ~~keep~~ be a log /register of any complaints received and the corrective and preventative actions taken to satisfy the complaint, and where necessary the complainant. All complaints must be dealt with in a timely and effective manner.
17.	Corrective / Preventive action	There ~~company~~ shall ~~have~~ be effective procedures for corrective and preventive actions.

18.	Training and competence	All ~~staff employed~~ persons involved in the production of an MCS Certificated Product shall be appropriately ~~have received adequate~~ trained~~ing~~ for all of the relevant activities ~~in each of the areas/operations in~~ which they carry out ~~are involved~~. There ~~company must have~~ shall be a training record for each of these persons ~~employee.~~ Training records shall include details of the activities and the ~~which details methods of~~ training ~~and approved areas of operation~~. Training records shall ~~These should~~ identify the training authority and be signed by both the subject of the record ~~the employee as well as~~ and the training authority.
19.	Audit testing	~~Where required by the scheme or as detailed in the relevant MCS documents, the company~~ As directed by the Certification Body or as required by the scheme or as detailed in the relevant MCS documents, the MCS Product Certificate Holder shall provide samples of the MCS ~~c~~Certificated ~~p~~Product for audit testing. Samples shall be taken from recent or current production ~~as required by the assessor~~. All products so selected ~~by the assessor~~ shall be delivered to the ~~c~~Certification ~~b~~Body or the nominated testing laboratory. In the case of brand licence products, selection of samples for audit testing may be made in the factory.

AMENDMENTS ISSUED SINCE PUBLICATION

DOCUMENT NO.	AMENDMENT DETAILS	DATE
1.1	'UK' removed from scheme name; 'Department of Trade and Industry' MCS mark replaced by 'BERR ' MCS mark	11/01/2008
1.2	Revision details added	25/02/08
1.3	Gemserv details added as Licensee. Document reformatted to reflect brand update. References to BERR updated to DECC, MCS logo updated accordingly. Website and email addresses updated to reflect new name.	01/12/2008
1.4	Quality review	10/01/2009
1.5	MCS Mark Updated	25/02/09
2.0	Addition of Foreword, Scope and Definitions. Clarification of Responsibilities of the MCS Product Certificate Holder. Additional information on the Factory Production Control (FPC) system requirements.	23/11/2018