**CCL Only - Fuel Measurement and Sampling Procedures Questionnaire**

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| **Fuel Measurement and Sampling (FMS) Questionnaire Guidance** | |
| **Overview:** | The submission and approval of this questionnaire document forms part of the Climate Change Levy (CCL) accreditation process for generating stations required to undertake FMS procedures each month. These procedures are required in order to substantiate the figures submitted as part of monthly Levy Exemption Certificate (LEC) claims.  Before completing this document you may find it useful to refer to chapter three of Ofgem’s ‘Renewables Obligation: Fuel measurement and sampling guidance’ document. This document has been designed for stations applying under the Renewables Obligation, but the same principles still apply for the CCL scheme. It can be downloaded from the fuelled generator page of the Ofgem website, [here](http://www.ofgem.gov.uk/Sustainability/Environment/RenewablObl/FuelledStations/Pages/FS.aspx). Information relating to procedures already developed and utilised by other stations is also available in the appendices of this document. In some cases FMS procedures are not required, further explanation regarding when this may be applicable is also included in chapter three. Ofgem is happy to discuss initial pre-application queries regarding FMS requirements by telephone.  After the first submission of your questionnaire, Ofgem will work with you in order to develop the procedures outlined in your initial proposal further and ensure they are capable of providing accurate and reliable results to support your monthly LEC claim on the Renewables and CHP register (R&CHP register).  Although supplementary documents may be submitted to provide additional information regarding your proposed FMS procedures, it is essential we have a concise record of your FMS procedures and as such this questionnaire document must be completed fully[[1]](#footnote-1) and approved by Ofgem as part of the CCL application process. |
| **Questionnaire Completion:** | Each questionnaire sheet should be completed in relation to a specific fuel or set of fuels which will be subject to the same measurement and sampling procedures as outlined in the questionnaire. If multiple fuels will be measured and sampled differently a questionnaire document should be completed for each one. For example if two fuels are used at a generating station, one a liquid biomass and one a solid biomass, then a questionnaire document must be submitted for each.  Please provide a suitable level of detail when answering questions in order to clearly outline your procedures. This will aid Ofgem in the review of your proposal and reduce unnecessary delays in the approval process. The size of the text box available for response should indicate the length of reply expected. If additional space is required in order to answer a question however, this is available in section G.  Some questions are compulsory for all generating stations. Compulsory questions must be answered and are marked with a **🏱** symbol.Others questions however, are only applicable in some cases and will not be relevant to all generating stations. In these cases you are welcome to state ‘not applicable (N/A)’ in the answer field or leave the answer blank where appropriate.  Some questions within this document are free text and a written answer is expected. Others are restricted however and you should select a set option either from a drop down list, option button or provide confirmation through checking a tick box. The drop down menus embedded within this questionnaire will not function in Word 2003 and any previous versions of the software. If you do not have access to Word 2007 please contact Ofgem for an alternative version of the questionnaire. Copy and pasting can be undertaken using the Ctrl+C (copy) and Ctrl+V (paste) keys (you cannot right click in text boxes to copy and paste).  When making reference to any industry standards please include the name, issuing body and reference number of the standard. |
| **Questionnaire Submission:** | If you intend to submit one FMS questionnaire, this can be uploaded alongside your application via the R&CHP Register, should you have more than one questionnaire document for submission these can be sent via e-mail to: renewable@ofgem.gov.uk.  Ofgem will review your initial proposal and then make contact with you directly with a set of comments to be addressed. From this point forward updated versions can be submitted directly to the member of Ofgem’s staff dealing with your FMS procedures until no further comments are raised and an agreement is confirmed.  Please ensure the title of the FMS questionnaire document includes the generating station name (as appears on the R&CHP register application) and the version number e.g. revision (rev) 1. |
| **Contacting Ofgem:** | For general questions relating to FMS, the contact details for our fuelling team are as follows:   * E-mail: renewable@ofgem.gov.uk / Telephone: 020 7901 7310.   Once you have submitted the FMS questionnaire correspondence should take place directly with the member of staff handling your FMS procedures. |

**Section A. Application Information:**

Please provide the following general information regarding the generating station and fuels to which these procedures relate to.

1. Name of generating station (as appears on the R&CHP register) **🏱**:



1. Capacity of generating station (DNC[[2]](#footnote-2) kW) **🏱**: 
2. State fuel(s) to which the procedures below relate **🏱**:



1. Confirm fuel(s) state**🏱**: Choose an item.

N.B. Different FMS questionnaire documents should be used for fuels in different states.

**Section B. Version History:**

This section should only be completed for any revisions made **after the initial approval of procedures** has been given by Ofgem.

1. Please indicate the version number of these FMS procedures N.B. Rev 0 is the procedures as originally approved: Choose an item.
2. Date of latest version submission: Click here to enter a date.
3. State the purpose of this latest revision and indicate the changes made (making reference to specific question numbers e.g. D3):



**Section C. Fossil Fuel Use:**

1. Is fossil fuel to be used at the station? **🏱** 

If you have answered ‘yes’ to question C1, then questions C2-C4 should also be answered.

1. Please outline the type of fossil fuel used at the generating station:



1. Please state the purpose of fossil fuel use[[3]](#footnote-3): Choose an item.
2. If fossil fuel is being use for Regulation 47(10) purposes please state the specific purpose(s). Also clarify if the fossil fuel will lead to the generation of electricity or not; if not, how is this known:



If fossil fuel will result in generation, whether by 47(10) purposes or deliberately for generation, questions C5-6 should be answered.

1. Please indicate briefly how the mass / volume of any fossil fuel used each month is known or will be measured, including how you will demonstrate this figure to Ofgem on a monthly basis:



1. Please indicate briefly how the calorific value of any fossil fuel used each month is known or will be measured, including whether this will be NCV or GCV. Please also include how you will demonstrate this figure to Ofgem each month:



**Section D. Weight & Volume Procedures:**

1. Will more than one fuel[[4]](#footnote-4) be utilised at the generating station for electricity generation? **🏱**



If you have answered ‘yes’ to D1 then questions D2-D7 and D10 should also be answered. If you have answered ‘no’ go to D8.

1. Please select the most relevant of the following options for measuring weight or volume of the fuel(s) used in a calendar month:

Choose an item.

1. Please expand in more detail regarding the proposed approach to measure the weight or volume of the fuel(s) in question. Refer to the location at which weight or volume is measured, any equipment utilised and measures taken to ensure that the result is accurate:



1. If any fuel is carried over from one month to the next please outline how the weight or volume of this will be accounted for:



1. Please state the accuracy of any equipment utilised for weight and volume measurement (as a percentage or using units e.g. +/- X% or X kg). Also make reference to any steps taken to ensuring ongoing accuracy, such as any calibration undertaken on a periodic basis (including relevant standards this would be conducted to):



1. If a visual stock level assessment is to be utilised please outline the steps made to ensure this is as accurate as possible. For example the use of wall markers, provision of guidance for staff, ensuring the same staff undertake visual assessments for consistency, levelling of stock prior to assessment or other industry best practice.



1. Please confirm that the weight or volume figure reflects the fuel used in a month to within twelve hours either side of midnight on the last day of the month, with measurement undertaken at the same time each month:  Click on box to confirm this is the case.
2. Please indicate how biomass fuel(s) will be stored on site. In particular comment on any potential mixing between different fuel types, potential contact with fossil fuels, steps taken to ensure the fuel(s) are protected from the elements and average residence time in storage prior to combustion: **🏱**



1. Please indicate how you will measure the weight or volume any biomass fuel combusted which does not result in generation e.g. that used for start up prior to synchronisation, so that you are able to deduct this from the figure reported on R&CHP register. If this is not applicable please state why this is the case: **🏱**



1. Each month what evidence will you provide to Ofgem to substantiate the weight or volume figure for each fuel submitted on the R&CHP register[[5]](#footnote-5):



**Section E. Gross Calorific Value Procedures:**

If you answered ‘yes’ to question D1, questions E1-E8 should be answered.

1. Which measurement will you be using for your energy content? **🏱**



1. Outline how you will extract a representative sample of the fuel(s) in question for CV analysis. State the location from which the sample is taken and make reference to any apparatus utilised, the size of the sample extracted (e.g. in kg) and if sample extraction is in line with any recognised standards:



1. State the regularity of which individual samples are taken e.g. from every delivery, once a day, continuously etc:



1. If composites are formed from the original samples, state how are they formed, the number of composites produced per month and size of any composites samples produced (e.g. in kg). In addition please state if the production of composites is in line with any recognised standards:



1. Please outline here if you will re-sample any stock carried over from one month to the next, and if so provide further detail on how this will be undertaken. This is only relevant if not sampling immediately before combustion:



1. Please state where will the samples be analysed for CV e.g. if samples are sent to a laboratory or analysed in house. If utilising a laboratory state any accreditation(s) it holds. Also state what test will be conducted on the sample to give a CV, mentioning any relevant standards:



1. Where more than one sample / composite of the same fuel type is analysed per month please outline how the final figure will be calculated from multiple sample results (e.g. average taken):



1. Each month what evidence[[6]](#footnote-6) will you provide to Ofgem to substantiate the CV figure for each fuel submitted on the R&CHP register:



**Section F. Fossil Derived Contamination:**

1. Will the fuel(s) contain any fossil derived contamination? **🏱** 

If you have answered ‘Yes’ to question F1 complete the questions below (F2 – F5); if there is no fossil derived contamination present in your fuel(s) go to F6. However, please note Ofgem will require a fuel specification, contract or official letter from your supplier(s) to state that the fuel(s) in question are “100% biomass by energy content and do not contain any fossil derived contamination.”

1. What type(s) of fossil derived energy contamination are present in your fuel(s)?



1. How will the % fossil derived energy content in the fuel be measured? State how you will produce a sample, any laboratory based testing undertaken and make reference to relevant standards. If contamination analysis will be undertaken on a representative sample of fuel(s) produced for CV analysis based on the procedures outlined in section E, please state as such:



1. Please state where will the samples be analysed for fossil derived contamination, what test(s) will be conducted on the sample to give a contamination percentage and mention any relevant standards. If samples are sent to a laboratory please state any relevant accreditations it holds.



1. How will you evidence the contamination percentage figure submitted to Ofgem on the R&CHP register each month to Ofgem?



1. Have any sources of potential fossil derived contamination been identified e.g. shared storage or delivery vessels between fossil derived materials and biomass fuels? **🏱** 
2. If you have answered ‘yes’ to question F6, how will you manage these to limit potential contamination of the fuel(s)?



**Section G. Additional Information and Answer Space:**

1. Please state any additional information you feel is relevant to your FMS procedures here:



1. Please use the box below to expand on any of the previous answers if you require further space. Make clear reference to the question you are answering by including the question number at the start of you reply e.g. D3.



Many thanks for completing the Ofgem E-Serve Fuel Measurement and Sampling Procedures Questionnaire. Please review your answers and ensure you have answered all compulsory questions (marked with **🏱** symbol) and a suitable level of detail has been provided. A member of Ofgem’s staff will make contact with you in due course.

1. When required [↑](#footnote-ref-1)
2. Declared Net Capacity: The maximum electrical generation capacity at which a station could be operated for a sustained period without causing damage to it, less the amount of electricity that is consumed by the plant [↑](#footnote-ref-2)
3. Regulation 47 (10) purposes, as defined in the CCL REG: (i) the ignition of gases of low or variable calorific value; (ii) the heating of the combustion system to its normal operating temperature or the maintenance of that temperature; or (iii) emission control. [↑](#footnote-ref-3)
4. Fossil or Biomass [↑](#footnote-ref-4)
5. For example a stock calculation, weighbridge ticket, etc [↑](#footnote-ref-5)
6. For example a laboratory report, calculation sheet etc [↑](#footnote-ref-6)