



Department
of Energy &
Climate Change

Electricity Market Reform:

CfD for Private Network Generators Policy Overview

June 2014

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Linked to this overview document are the following:

- Draft Private Network CfD Agreement;
- Draft Private Network Metering Operational Framework;
- Draft Private Network Technical System Requirements.

These documents are available at: <https://www.gov.uk/government/publications/electricity-market-reform-contracts-for-difference>

Introduction

Background

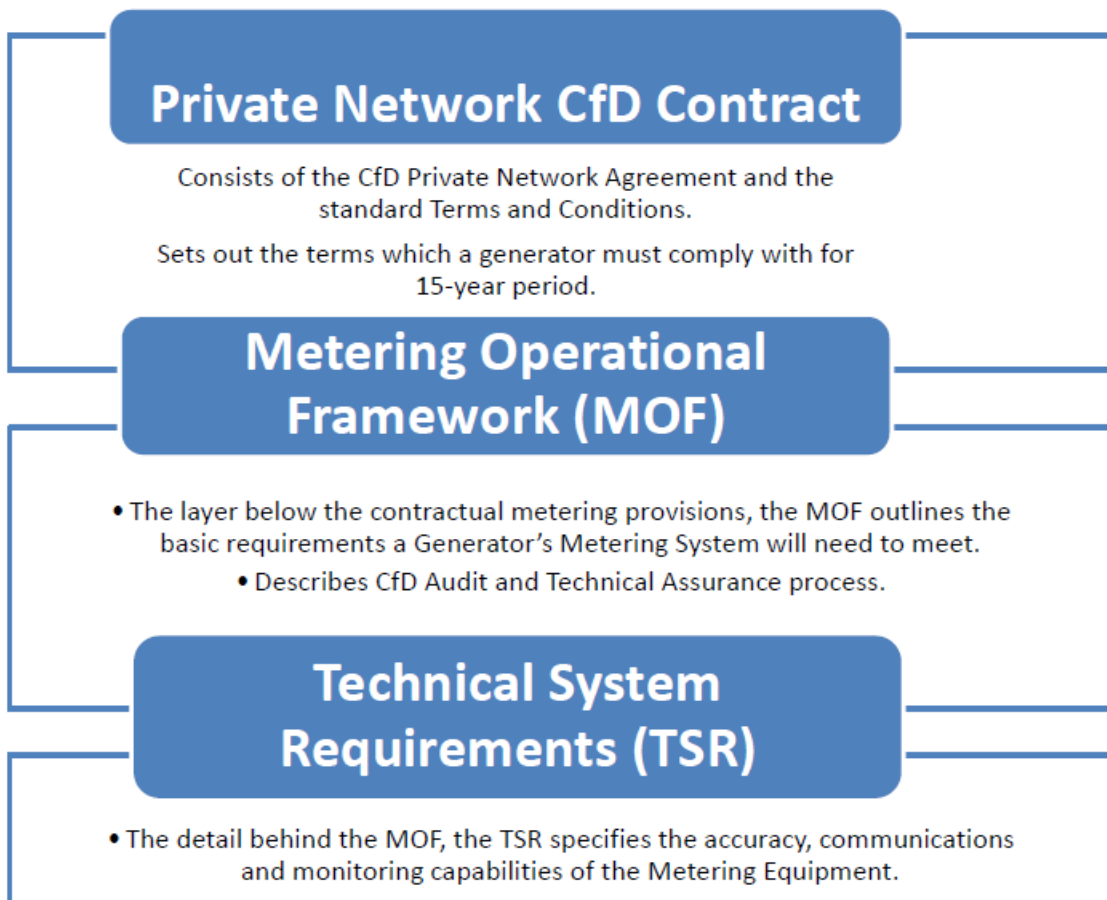
1. The Government is reforming the electricity market in response to the challenges facing the electricity sector:
 - The UK faces very rapid closure of existing capacity: A fifth of 2011 capacity will close by the end of the decade;
 - We need to transform our generation mix to respond to the challenge of climate change and meet our legally-binding carbon and renewable targets;
 - We expect that electricity demand will continue to grow over the coming decades as we increasingly turn to electricity for heat and transport.
2. These reforms will enable the UK to develop a clean, diverse and competitive mix of electricity generation, which will deliver security of supply, and in a cost effective way.
3. The introduction of Contracts for Difference (CfD)¹ is a key part of the Government's Electricity Market Reform (EMR) programme. The CfD is a private law contract between a low-carbon electricity generator and the Low Carbon Contracts Company (LCCC), a Government-owned company.
4. The CfD pays the difference between the 'strike price' – a price for electricity reflecting the cost of investing in a particular low carbon technology – and the 'reference price' – a measure of the average market price for electricity in the GB market. It gives greater certainty and stability of revenues to generators by reducing their exposure to volatile wholesale prices, whilst protecting consumers from paying for support when electricity prices are high. In this way, CfDs provide efficient long term support for all forms of low-carbon generation – including nuclear, renewables and Carbon Capture & Storage (CCS).
5. The Government is committed to supporting all forms of low-carbon electricity generation through the CfD mechanism; this includes supporting eligible low-carbon electricity generation operating on a 'private wire' network (Private Network).
6. Through its support for Private Network generation under the CfD, the Government is delivering on its commitment to a competitive market which supports a diverse range of generation.

¹ This document refers to the 'Feed-in Tariff with Contracts for Difference' as the Contract for Difference, or CfD.

Purpose

7. This document sets out how generators operating on a Private Network (PNGs) are able to participate in the CfD regime.
8. Linked to this policy overview document are drafts of:
 - The CfD for Private Networks Agreement (PN CfD), which includes modifications made to ensure the PN CfD is fit for purpose;
 - Private Network Metering Operational Framework; and,
 - Private Network Technical System Requirements.
9. Together, these documents provide the contractual and operational framework for PNGs awarded a CfD and have been developed in partnership with industry and DECC’s CfD for Private Network Generators Working Group. Figure 1 provides a visible representation of these arrangements.

Figure 1. Summary of how the Private Network documents work together.



10. The Government's intention is to publish final versions of the annexed documents in the summer, ahead of the commencement of the first CfD allocation process.
11. Stakeholders are invited to provide comments on the policy overview and its linked documents. We would welcome, in particular, comments on whether these arrangements are proportionate to the scale of Private Network generation. Comments should be sent to emrcfdesign@decc.gsi.gov.uk by midnight on Friday, 4 July.
12. Readers may wish to refer to the following documents when reading this policy overview:
 - CfD Metering Policy – Generators on Private Wire Networks²;
 - CfD Contract Terms and Conditions (April 2014)³;
 - CfD Agreement (April 2014)⁴;
 - Contract for Difference: Draft Allocation Framework (and addendum) (10 April 2014)⁵.

Approach

13. Government has continued to develop the CfD since it was originally consulted on in December 2010. In particular, we set out proposals for the structure of the CfD in the Draft Operational Framework⁶, published in May 2012. Reflecting the comments received, we then set out the Final Operational Framework in November 2012⁷, which was accompanied by a 'Heads of Terms' for the CfD.
14. The Final Operational Framework stated that eligible low-carbon electricity generation operating on a 'private wire' network (PNGs) could participate within the CfD regime.
15. PNGs, like their licenced counterparts, are diverse in terms of generation technology and size. Moreover, PNGs are diverse in that while they also generally export power to the licensed distribution system, they typically generate electricity for the purposes (sometimes exclusively) of dedicated onsite consumption, e.g. for hospitals, ports and housing developments.
16. The majority of PNGs are licence-exempt and are therefore not bound by the requirements enforced through electricity generation licences, standards and codes, including the Balancing and Settlement Code (BSC). As a result of their licence status, PNGs do not provide metered data volumes to the BSC Company; and as such, the existing contractual arrangements within the generic CfD specifically related to metering

² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/267867/CfD_Metering_Private_Wire_Generation_Final_-_Published_LC.pdf

³ <https://www.gov.uk/government/publications/electricity-market-reform-contracts-for-difference>

⁴ Ibid.

⁵ Ibid.

⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48373/5358-annex-b-feedin-tariff-with-contracts-for-differe.pdf

⁷ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/65635/7077-electricity-market-reform-annex-a.pdf

and settlement, do not work for PNGs. To address this issue appropriate arrangements, such as the provision of accurate and reliable data, have been developed to ensure CfD settlement can occur for PNGs.

17. While DECC set out its initial metering policy for PNGs in December 2013⁸, it has continued to develop the detailed arrangements necessary to give the policy effect. The proposals in this policy overview document and accompanying annexes supersede the PNG metering policy published in December 2013⁹. To ensure these arrangements are fit for purpose, DECC:

- Established a CfD for Private Networks Working Group. The Working Group consists of industry representatives who are well placed to provide advice to DECC on all technical matters relating to Private Network generation;
- An independent technical consultant was used to evaluate the PN CfD and its accompanying documents against the following criteria:
 - Deliverability;
 - Investibility;
 - Robustness;
 - Value for Money.

18. DECC welcomes comments on this policy overview and its annexes. These comments should be sent to emrcfdesign@decc.gsi.gov.uk by midnight on Friday, 4 July.

⁸ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/267867/CfD_Metering_Private_Wire_Generation_Final_-_Published_LC.pdf

⁹ Ibid.

Participating in the CfD scheme

Defining a Private Network Generator

19. For the purposes of the CfD scheme, Private Network Generation is defined as:

*A licence-exempt generating station whose electricity generation is not exclusively produced for and conveyed on a licensed distribution network or the licensed transmission system.*¹⁰

20. This definition recognises that a unique aspect of private wire generation is the existence of a dedicated onsite customer for that generation. For the purposes of the CfD scheme we recognise two forms of PW generation¹¹:

- Electricity generated for consumption by both an onsite customer and wholesale supply, e.g. through a “spill agreement”; (“hybrid generation”)
- Electricity generated for the sole purpose of an onsite customer (“islanded” generation).

21. Moreover, PNGs themselves may not own the network on which they are operating and may not therefore have a direct agreement with the Licensed Distributor, i.e. the person who is authorised pursuant to a Distribution Licence.

Eligibility

22. All generators seeking support under the CfD scheme are subject to certain eligibility criteria. The eligibility criteria are a set of upfront requirements that all applicants must satisfy in order to be eligible for a CfD. The criteria form a critical function in ensuring only credible projects are able to progress through the allocation process.

23. The CfD Delivery Body - the GB System Operator, National Grid - will determine, using the criteria and evidence provided by the generator, whether a project is eligible to apply for a CfD. Failure to meet any of these eligibility criteria and any additional information required with the application (as set out in the Allocation Regulations and Allocation Framework) will result in the Delivery Body rejecting the application. The most recent information on the Allocation Framework, including a presentation on the high-level allocation process, can be found on the DECC website.¹²

¹⁰ A licence-exempt generator is a generator exempt from section 4 of the Electricity Act 1989 by virtue of The Electricity (Class Exemptions from the Requirement for a Licence) Order 2001.

¹¹ See also Condition 1 (Definitions and Interpretation) of the draft PN CfD.

¹² <https://www.gov.uk/government/publications/electricity-market-reform-contracts-for-difference>

24. PNGs will need to meet the same eligibility criteria as non-PN generators, with some modifications around the grid connection criteria, owing to the unique aspects of PN generation. These specific requirements are as follows:

- For projects connecting directly to the transmission or distribution system, i.e. where the generator owns the Private Network, a Grid Connection Offer signed by both the generator and relevant licensed network operator is required;
- For projects connecting indirectly to the distribution system, i.e. where the generator does not own the Private Network, an agreement between the applicant and the relevant Private Network operator, in addition to the signed Grid Connection Offer between the Private Network operator and the relevant licensed network operator is required;
- For projects not connecting to the transmission or distribution system, i.e. “islanded” generation, a declaration is required in the form of a Director’s Certificate stating that the generator does not have a Grid Connection Offer to supply output to the Grid.

CfD Allocation

25. PNGs are subject to the same allocation process as other generators. Information on the Allocation Process is available on the DECC website.¹³

¹³ <https://www.gov.uk/government/publications/electricity-market-reform-contracts-for-difference>

Metering Private Network Generation

Background

26. Private Network Generators are unique in that they are not bound by the provisions of the Balancing and Settlement Code (BSC), meaning that their metering equipment is not required to comply with the same accuracy, operability and safety standards as a generator trading directly (or indirectly through a licensed off-taker) on the licensed transmission system and/or distribution systems.
27. In order to preserve the distinction between PNGs and their publically trading counterparts, DECC has developed a bespoke Metering Operational Framework (MOF) and Technical System Requirements (TSR). Together these ensure that a CfD-accredited PNG's metering equipment achieves an appropriate level of technical compliance over the full CfD contract Term. The MOF has been developed by drawing on only the relevant elements of the BSC in order to facilitate efficient installation, operation and maintenance of metering equipment, so that only high quality metered data volumes are processed through CfD Settlement. The TSR provides an additional layer of technical detail below the MOF and outlines the specifications for meter and metering system design, ensuring that the equipment operates effectively and accurately at all times.
28. In the event the Low Carbon Contracts Company (LCCC) elects to make changes to the MOF, the PNG will need to comply with these changes. Changes made to the TSR by the LCCC will only apply to new PNGs and existing CfD-holders who choose to make a material change to their Metering System. Any updates to the aforementioned documents will be undertaken by the LCCC pursuant to the Change Control Procedure contained in the Conditions.

Metering Operational Framework

29. The MOF is comprised of three individual sections:
- Section A: Metering General;
 - Section B: Technical Assurance;
 - Section C: Meter Operations.

Section A

30. Section A provides a high level overview of the basic requirements that a PNG's metering equipment will need to meet. This section stipulates that a generator's metering equipment complies with the MOF Code of Practice documentation TRS (detailed below), and details the process preceding the two CfD Audit functions. Further details on the CfD Audit are included below.

Section B

31. Section B (Technical Assurance) of the MOF provides comprehensive details regarding what both audit processes will entail. For example, Section B specifies the type of faults which the LCCC will look to identify, such as discrepancies in meter accuracy and the quality of the installation of the metering equipment.¹⁴

Section C

32. Section C (Meter Operations) focuses on the processes that a generator must follow in order to ensure the appropriate data for settlement is sent to the LCCC in a timely manner. The majority of Section C details how the practices of installation, replacement and reporting of faults should be conducted, as well as outlining the timescales in which the generator should notify the LCCC.

33. The remainder of Section C places an obligation upon generators to calibrate and commission the metering equipment prior to the commencement of CfD payments. This requirement will also be a Further Condition Precedent to the Private Wire CfD contract.

Technical Systems Requirements

34. The Technical Systems Requirements (TSR) specifies the basic criteria metering equipment should meet, and outlines how processes such as commissioning and proving should be undertaken.¹⁵

Other issues

Private Network Generator CfD Audit

35. The LCCC will ensure that a PNG is compliant with the provisions of its contract through undertaking an auditing process. The PNG CfD Audit consists of two separate functions¹⁶:

- The Routine CfD Audit;
- The Non-Routine CfD Audit.

36. The Routine CfD Audit will comprise of an inspection of the Facility Metering Equipment, technical and informational systems and, where necessary, the generating station's fuelling facilities. The purpose of the Routine Audit is to monitor whether the generator is continuing to comply with the provisions of its CfD contract, and that any issues

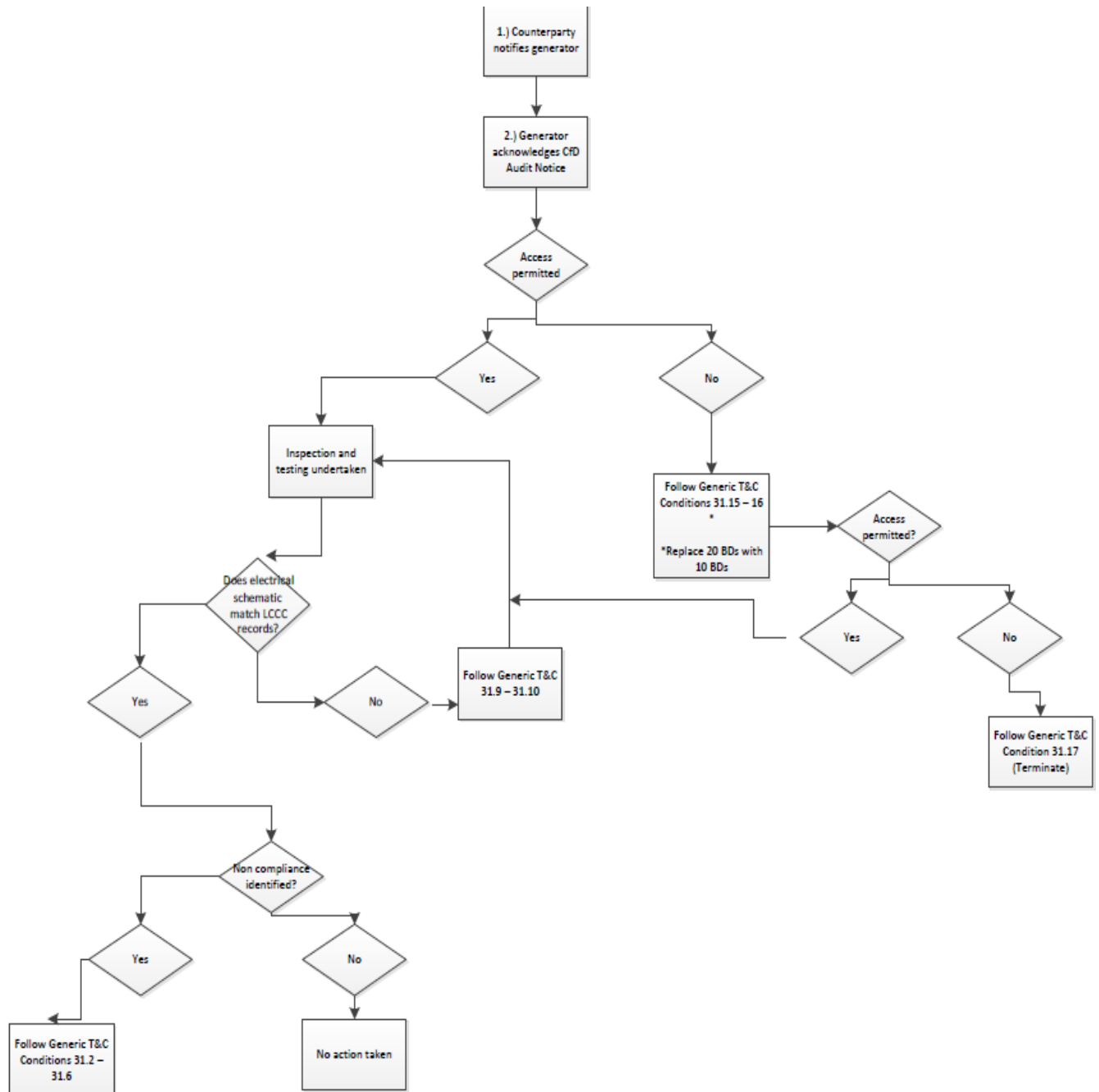
¹⁴ See Condition 3 (CfD Audit) of Section B of the draft MOF for further information.

¹⁵ See Condition 7 (Commissioning, Records and Proving) of the draft TSR for further information.

¹⁶ See Condition 7 (CfD Audit Right) of the draft PN CfD for further information.

impacting on the quality, accuracy and reliability of its metered output are resolved. The Routine Audit will be conducted tri-yearly. A diagram of the Routine Audit process is in Figure 2.

Figure 2. The Routine Audit for PNGs.

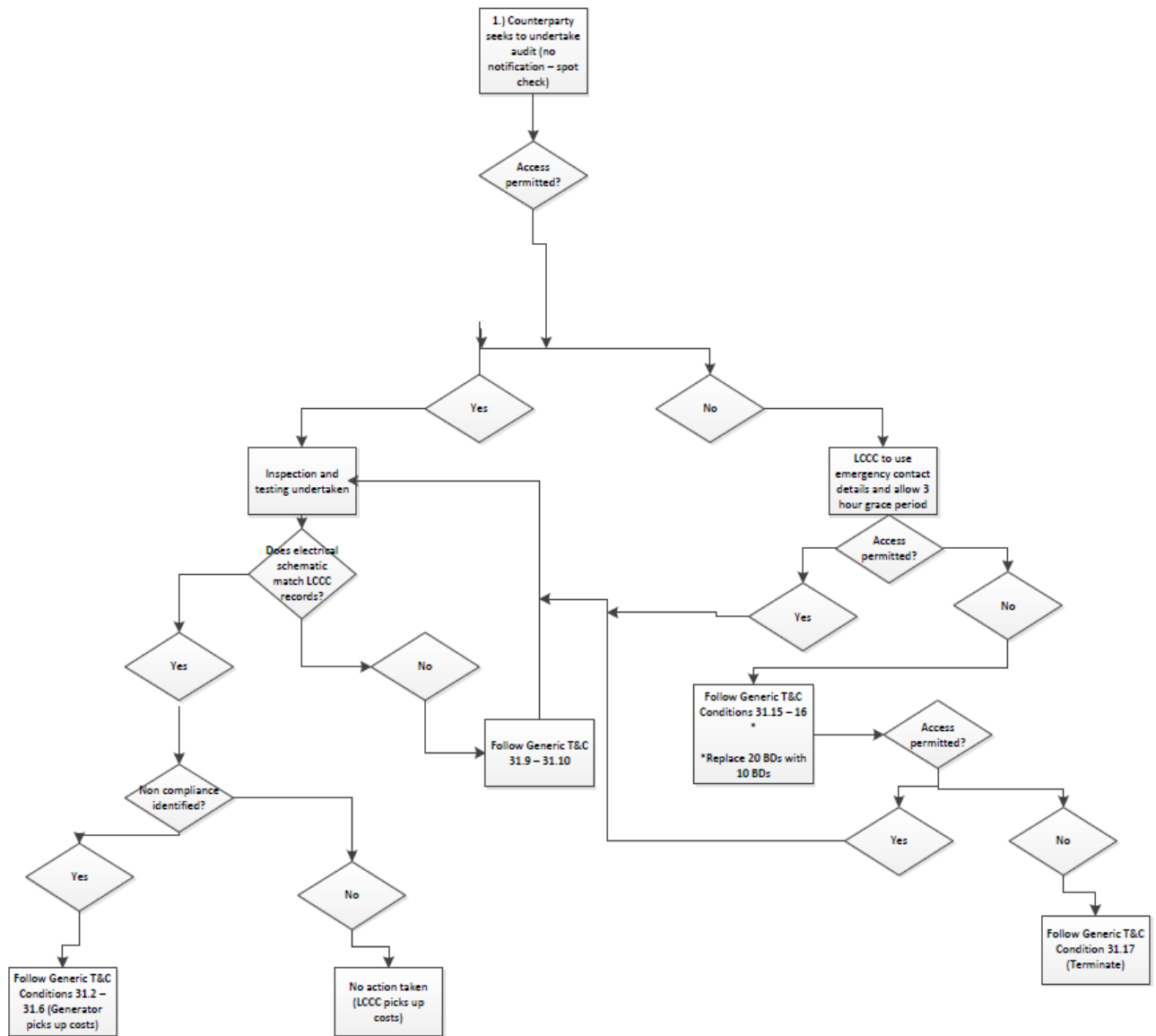


37. The Non-Routine CfD Audit provides the LCCC with the right to undertake any checks of a PNG’s Facility Metering Equipment, technical and informational systems without prior

notice. This process is broadly consistent with the spot checking process which takes place under the BSC. Any issues of non-compliance will be resolved subject to the conditions of a PNG’s contract.¹⁷ A diagram of the Non-Routine Audit process is in Figure 3.

38. The MOF obligates the Generator to provide the LCCC access to the Facility for either Audit process. If the Generator fails to provide access, the LCCC may exercise its right to terminate the PNG’s contract.¹⁸

Figure 3. The Non-Routine Audit for PNGs.



¹⁷ See Condition 31 of the published CfD Standard Terms and Conditions (Metering Compliance Obligation and Electrical Schematic Obligation). https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/305536/generic_cfd_t_and_cs.pdf

¹⁸ See Condition 7.13 of the draft PN CfD for more information.

Application of Line Loss Factors and Transmission Loss Multiplier

39. Loss adjustment (both distribution and transmission losses) will only be applicable to output that is supplied to the licensed transmission system or the licensed distribution systems and will be applied to metered data volumes recorded at the generation site (i.e. at “station gate”). The generation supplied to onsite customers of either “islanded” or standard PNGs will not therefore receive any loss adjustment uplift. No form of loss adjustment will therefore apply to “islanded” generators.¹⁹
40. In the event the PNG is a hybrid generator, i.e. it has an onsite customer and exports to the Total Public System, the CfD Settlement Services Provider needs to determine the Metered Volumes supplied to a licensed network. In this circumstance the generator must provide the CfD Settlement Services Provider with half-hourly metered volumes for all onsite customers in order to ascertain how much generation was exported to a licensed network. Applicable Line Loss Factors and the Transmission Loss Multiplier will be applied to all generation that has not been consumed by a PNG’s onsite customers.

Frequency of Data Collection

41. In order to provide additional flexibility to PNGs, DECC has provided a choice of two frequencies for providing Metered Volumes for CfD settlement:
- Daily;
 - Weekly.
42. If a PNG wishes to change its frequency option, it will need to notify the LCCC at least two months in advance of the change becoming effective.²⁰ The LCCC will approve such a request at its own discretion.

Estimations of Data

43. If the PNG fails to provide Metered Volumes for CfD settlement the LCCC will continue to make CfD payments based upon data submitted in the most recent Settlement Unit. Condition 5.8 of the PN CfD outlines the process for estimating Metered Output.
44. If the Generator subsequently provides Metered Volumes, the LCCC will recalculate the Metered Output for all Settlement Units in the period where data was not submitted. Following this calculation, the LCCC will undertake a reconciliation process to correct any payments made for estimated Metered Output.
45. If a CfD Audit (Routine or Non-Routine) has taken place since the last reported output, the Generator will receive CfD Settlement based upon the meter reading taken during that audit.

¹⁹ In the event that an “islanded” generator is successful in seeking a grid connection, loss adjustments would apply to the electricity exported to the Total Public System.

²⁰ A pro forma of a Metered Volume Submission Frequency Change Notice is included in Annex 12 of the draft PN CfD.

Dispute Resolution

46. The Standard CfD Terms and Conditions make provision for dispute resolution (Part 14 of the Standard CfD Terms and Conditions refers). This process is generally fit for purpose for disputes raised under the PN CfD. However, Trading or Metering Disputes to which a CfD generator is party are addressed via Section W (“Trading Disputes”) of the BSC. Given the licence-exempt status of the majority of PWGs, the dispute resolution (DR) process for Metering Disputes, as set out in Section W of the BSC, is not workable for PWGs and a separate, bespoke metering disputes process has been developed for Metering Disputes.
47. Condition 16 of the draft PN CfD sets out this metering disputes process. In summary, in order for a party (either the PNG or the LCCC) to bring forward a metering dispute, the party raises a dispute via a dispute notice. The dispute notice must be given by the metering dispute deadline, which is the date which is 20 months after the billing period in which the disputed settlement unit occurred.
48. The metering disputes process subsequently follows the process as set out in Part 14 of the Standard CfD Terms and Conditions, with the exception of the “Arbitration Procedure”, which does not form part of the metering disputes process for PNGs. DECC is of the view that this process is a fair and proportionate one for PNGs and similar to the disputes process found in some Market Supply Agreements and familiar therefore to PNGs.

Loss of customer and grid connection

49. One of the risks unique to PNGs, post-commissioning, is the loss of the onsite customer due to circumstances which may be outside of the customer’s control.
50. If a PNG with an existing grid connection loses its onsite customer, post-commissioning, the generator shall continue to receive CfD support for the low-carbon electricity generated; whether or not the generator chooses and is successful in seeking a replacement customer. The generator must, however, inform the LCCC of any such circumstance, e.g. losing or gaining an onsite customer.
51. In the case where an “islanded” generator, i.e. a generator with an onsite customer but no grid connection, loses its onsite customer, post-commissioning, the PNG will be given 12 months from the date of the loss of the onsite customer to find another onsite customer. Once secured, the PNG will need to provide the LCCC with evidence of the new onsite customer in the form of a Market Supply Agreement.
52. Should the “islanded” generator not secure a customer within this 12-month period, their PN CfD Contract may be terminated at the LCCC’s discretion. While generators have a strong commercial incentive to seek a replacement customer, the Government must balance the provision of flexibility for PNGs in these circumstances with its management of the Levy Control Framework (LCF), whereby the Government has a duty to consumers to ensure the LCF is allocated in a manner commensurate with ensuring Value for Money.

53. Islanded generators will also have a one-time ability over their contractual Term, to apply for a grid connection, as a means of securing a route to market. This ability is available to islanded generators with or without an onsite customer, i.e. in the event that the generator loses its onsite customer. Should the generator exercise this ability, it must immediately notify the LCCC of its intention and provide supporting evidence of its grid connection application (including payment) together with a Director's Certificate. The PNG will then have a 12 month window to obtain and execute its Grid Connection Offer. Once the Grid Connection Offer is countersigned by both PN Generator and licensed network operator (including PN Owner, if different to PN Generator), a copy should be provided to the LCCC together with a Director's Certificate.
54. Should the islanded generator obtain a signed grid connection offer in the 12 month period following the loss of its customer the generator will not be obliged to seek a replacement customer. However if the grid connection offer period reaches its long stop date without a signed offer in place, the LCCC may terminate the CfD contract.
55. See Condition 9 (Private Network Generation Route to Market) of the PN CfD for further information on loss of customer and grid connection.

Change-in-Law

56. The Change in Law approach for PNGs²¹ seeks largely to replicate that of the generic CfD. The provisions, as drafted, would not provide relief for a Change in Law that specifically targeted PNGs and so a new limb to the 'Specific Change in Law' definition has been added, via the PNG Agreement, to cater for this scenario. Otherwise, all of the Change in Law protections remain the same as those proffered by the standard Terms.

²¹ See Condition 13 (Changes in Law) of the draft PN CfD for further information.

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