



**LOW CARBON  
CONTRACTS COMPANY**

**POWERING NET ZERO**

# Private Network Agreement - Generator Guidance

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May 2023

Version 1



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### Disclaimer

*This guidance does not and is not intended to supersede or replace the provisions of the CfD. This guidance does not constitute legal or investment advice and should not be relied upon as such. Generators should consult their professional advisors where they require advice, whether legal or otherwise. LCCC further reserves the right to amend this guidance and any associated guidance.*

*This guidance should not be viewed as in any way restricting LCCC in the nature, type and/or amount of evidence, information and documentation it will require to satisfy itself of the Generator's fulfilment of the contractual milestones, nor as to the nature, level and timing of our consideration or reconsideration of the evidence that is provided. LCCC reserves the right at any time to request further or additional evidence, and to review or reconsider the evidence already provided.*

## Useful Acronyms

CfD	Contract for Difference
LCCC	Low Carbon Contracts Company
BEIS	Department for Business, Energy and Industrial Strategy
BSC	Balancing and Settlement Code
BMRP	Baseload Market Reference Price
DESNZ	Department for Energy Security and Net Zero
EA	Environment Agency
IMRP	Intermittent Market Reference Price
LLF	Line Loss Factor
NGESO	National Grid Electricity System Operator
PPA	Power Purchase Agreement
TLM	Transmission Loss Multiplier
UK	United Kingdom



## 2. Introduction

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- 2.1 Supplying electricity solely to, or partially to, a Private Network often improves the business case and/or overcomes issues relating to decarbonisation of end uses where ordinarily fossil fuel generation might be the alternative choice. It may also have alternative uses for other sources of demand.
- 2.2 The Contracts for Difference (CfD) scheme aims to support low-carbon generation, having regard to the net zero commitment, energy security and the likely cost to consumers of electricity. Generators that are not connected to the Total System, or are only partially connected to the Total System, may apply for a CfD (subject to the allocation round's specific eligibility requirements).
- 2.3 Given that there are a number of contract types available depending on the type of Generator and characteristics thereof, it is important in the first instance that a Generator chooses the correct contractual route when embarking on a CfD project.
- 2.4 The Low Carbon Contracts Company (LCCC) also recognises that, over the period of a contract, a Generator may look to amend or change the way that a site is set up electrically, for example, to facilitate additional connections or remove connections to a Private Network, an Onsite Consumer, the Total System or a combination of these. Such changes may have a material impact on ongoing CfD eligibility, CfD payments and a Generator's CfD contract.
- 2.5 This document provides Generators with background to the types of connection and contract available in relation to Private Networks, as well as guidance on the information and documentation that the LCCC considers when looking at possible modifications to the Generating Facility and its electricity connections.



### 3. Definitions

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**“BSC”** means the Balancing and Settlement Code that is provided for in Standard Condition C3 (Balancing and Settlement Code (BSC)) of the Transmission Licence;

**“Difference Amount”** means: (A) the Baseload Difference Amount, as such term is defined in Part 5A (Payment calculations: Baseload Technologies) (provided that this paragraph (A) shall apply only if Part 5A (Payment calculations: Baseload Technologies) is expressed to apply to the Contract for Difference in the CfD Agreement); or (B) the Intermittent Difference Amount, as such term is defined in Part 5B (Payment calculations: Intermittent Technologies) (provided that this paragraph (B) shall apply only if Part 5B (Payment calculations: Intermittent Technologies) is expressed to apply to the Contract for Difference in the CfD Agreement);

**“Distribution System”** has the meaning given to that term in section 4(4) of the EA 1989;

**“Facility”** has the meaning given to it in the Private Network and Generic CfD Standard Terms and Conditions as applicable.

**“Facility Metering Equipment”** means the Metering Equipment measuring the flows of electricity associated with the Facility, its Metering System and, in the case of a Dual Scheme Facility, the Metering Equipment (including the Boundary Point Metering System) used to measure the Imported Input Electricity of the Generating Station;

**“Generating Station”** means an installation comprising the Facility and one (1) or more other Generating Units (other than an interconnector and even where those Generating Units are situated separately) which the CfD Counterparty considers (acting reasonably) as being managed as, or comprising, one (1) generating station or one (1) generating site;

**“Grid Connection”** means a connection between the Facility and the Total System;

**“Grid Connection Agreement”** means an offer in relation to a Grid Connection from a Licensed Distributor accepted and duly executed by the Generator or, where the Generator is not the owner of the Private Network associated with the Facility, duly executed by the Private Network Operator;

**“Grid Connection Application”** means (i) an application by a Generator to a Licensed Distributor for a Grid Connection; or (ii) an application by a Generator to a Private Network Operator to access a Grid Connection by way of a Private Network Use Agreement;

**“Hybrid Generator”** means a Private Network Generator which has access to a Grid Connection and has a Market Supply Agreement with an Onsite Customer;

**“Islanded Generator”** means a Private Network Generator which has a Market Supply Agreement with an Onsite Customer but which does not have access to a Grid Connection;

**“Islanded Generator Grid Connection Termination Event”** has the meaning given to that term in Condition 30.3 (as inserted into the Conditions pursuant to Clause 6.3);

**“Metered Volume”** means, in relation to a Settlement Unit, the volume of electricity generated by the Facility in that Settlement Unit as measured by the Facility Metering Equipment in accordance with the MOF and the TSRs, less: (A) if the Facility is not a Dual Scheme Facility, the volume of input electricity, comprising parasitic and site load, used by the Facility in respect of that Settlement Unit; or (B) if the Facility is a Dual Scheme Facility, the volume of input electricity comprising parasitic load used by the Facility and the Imported Electricity Allowance in respect of that Settlement Unit (as determined in accordance with Condition 13 (Baseload Dual Scheme Facilities) or Condition 19 (Intermittent Dual Scheme Facilities) (as applicable)), in each case, expressed in MWh;

**“Onsite Customer”** means a customer of which the Generator is the supplier of electricity pursuant to a Market Supply Agreement and which is located on the same Private Network as the Generator;

**“Private Network”** means a network for the distribution of electricity which is not operated by a Licensed Distributor;

**“Private Network Metering Operational Framework”** means the document entitled “Private Network Metering Operational Framework” set out in Annex 6 (Private Network Metering Operational Framework of the Private Network CfD Agreement);

**“Private Network Operator”** means, in relation to a Private Network, the owner of that Private Network;

**“Private Network Generator”** - the Generator shall be deemed to be a “Private Network Generator” if:



*(A) it is exempt from the requirement to hold a licence for the generation of electricity pursuant to the Electricity (Class Exemptions from the Requirement for a License) Order 2001;*

*(B) the Facility generates electricity solely or partly for supply to a Private Network; and*

*(C) the Facility Metering Equipment is not, and is not required to be, registered in accordance with the BSC (except, where the Facility is a Dual Scheme Facility, in respect of the Boundary Point Metering System used to measure the Imported Input Electricity).*

**“Private Network Use Agreement”** means, where the Generator is not the Private Network Operator, an agreement between the Generator and the Private Network Operator which sets out the terms on which the Generator is able to access a Private Network belonging to the Private Network Operator, and, in particular:

*(A) specifies the capacity in relation to the Private Network that the Generator is able to use;*

*(B) specifies the terms on which the Generator can use the Private Network to supply an Onsite Customer; and*

*(C) in the case of a Hybrid Generator, specifies the terms on which the Generator can use the Private Network to obtain access to a Grid Connection;*

**“Private Technical System Requirements”** means the document entitled “Private Network Technical System Requirements” set out in Annex 7 (Private Network Technical System Requirements of the Private Network CfD Agreement);

**“Route to Market”** means a Grid Connection or a Market Supply Agreement with an Onsite Customer;

**“Total System”** means the Transmission System and each Distribution System;

**“Transmission System”** means those parts of the GB Transmission System that are owned by a Transmission Licensee within the transmission area specified in its Transmission Licence.



## 4. Contract Templates

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4.1 Most Contract for Difference (CfD) contracts comprise two components:

- The specific front-end CfD Agreement
- The Standard Terms and Conditions

4.2 The CfD Agreement forms the front section of the CfD contract and contains project-specific information that tailors the application of the Standard Terms and Conditions. Ordinarily, CfD applicants would select the generic CfD Agreement, however in some cases other variations are required – such as the Private Network CfD Agreement.

### Private Network CfD Agreement

4.3 A variant of the CfD Agreement is in place to support Generators that are not necessarily connected to the Total System.

4.4 The 'Private Network Agreement' is intended for Generators whose output will either partially or wholly supply a Private Network (a network that is not part of the Total System). These Generators must be exempt from the requirement to hold a Generation Licence (as outlined in the Electricity (Class Exemptions from the Requirement for a Licence) Order 2001<sup>1</sup>) in order to apply for and to hold a Private Network CfD Agreement. Where they are not licence-exempt, the generic or other forms of Agreement must be used.

4.5 This type of Agreement *is not* available for a Generator that supplies exclusively to a network operated by a Licensed Distribution or Transmission Operator.

4.6 A Private Network Use Agreement is expected to be in place where the Generator is not the operator of the Private Network.

4.7 Other variants of the CfD agreement are:

- Generic CfD Agreement
- Single or Apportioned Phased CfD Agreement
- Unincorporated Joint Ventures

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<sup>1</sup> [The Electricity \(Class Exemptions from the Requirement for a Licence\) Order 2001 \(legislation.gov.uk\)](https://www.legislation.gov.uk)



## 5. Connection Types

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- 5.1 When applying for a CfD to the Delivery Body (NGESO) in an allocation round, an applicant must specify the type of connection that will apply to the CfD Facility, which will in part determine whether the Private Network Agreement or one of the other Agreement variants will apply to the CfD Contract.
- 5.2 The three types of connections are a 'Direct' connection, a 'Private Network' connection, and a 'Partial' connection, all of which are described in more detail below.
- 5.3 Applicants must choose the correct connection type as different templates are used. Currently, there is no right or established process to switch after applying for or signing a CfD. LCCC may agree bilaterally to change the type of Agreement, but our under no obligation to do so.

### Direct Connection

- 5.4 A "direct connection" is defined within the General qualification requirements of the Contracts for Difference (Allocation) Regulations 2014<sup>2</sup> as:

#### 'Connection agreements

25. — (6) In this regulation—  
"direct connection" means a connection to—  
(a) the national transmission system for Great Britain; or  
(b) the distribution system,  
which applies to all the electricity generated by the relevant CFD unit;'

- 5.5 The arrangement of this type of connection means that a Generator supplies electricity (directly) to either the Transmission System or Distribution System with all power generated from the CfD Unit being exported to that system.
- 5.6 A fundamental feature of Direct Connected Generators is that Balancing and Settlement Code (BSC) metered systems are exclusively used to measure all imports and exports of electricity to and from the Facility. This means that a

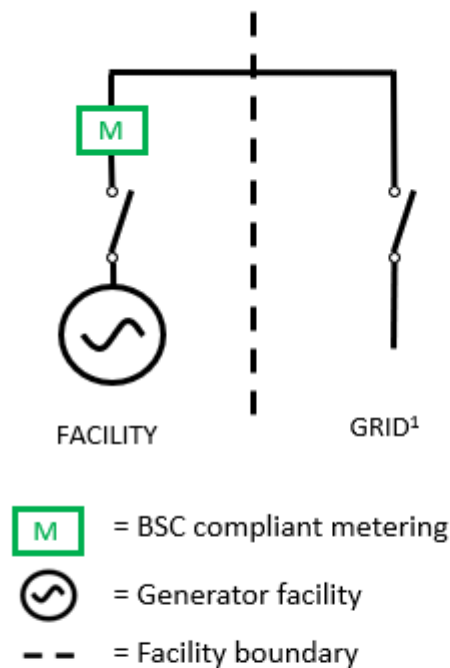
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<sup>2</sup> Clause 25 (6), of Chapter 3 - General qualifications requirement: [The Contracts for Difference \(Allocation\) Regulations 2014 \(legislation.gov.uk\)](https://www.legislation.gov.uk)

Direct Connected Generator is required to have BSC compliant metering for the purposes of CfD payments.

5.7 It is expected that a Generator will have a wholesale supply agreement, such as a Power Purchase Agreement (PPA), for any exported (and imported) electricity in place with an electricity supplier.

5.8 An example of a Direct Connected Generator is outlined below:



1. Could be the licenced transmission or distribution network.

*Figure 1 - Example of a "Direct Connected" Generator*

### Private Network Connection

5.9 The CfD scheme aims to support low-carbon generation and does not exclude generators that are not connected to the public network. Therefore, there is a variant of the CfD agreement for these projects.

- 5.10 For the purposes of the CfD scheme, “Private Network Generation” is defined in the Department for Energy & Climate Change (DECC)’s ‘Electricity Market Reform: CfD for Private Network Generators - Policy Overview’<sup>3</sup> as:

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

- 5.11 In Allocation Round 5, a “Private Network Generator” is defined in the Private Network CfD Agreement<sup>4</sup> as the following the following:

- 1.3 *The Generator shall be deemed to be a “Private Network Generator” if:*

*(A) it is exempt from the requirement to hold a licence for the generation of electricity pursuant to the Electricity (Class Exemptions from the Requirement for a License) Order 2001;*

*(B) the Facility generates electricity solely or partly for supply to a Private Network; and*

*(C) the Facility Metering Equipment is not, and is not required to be, registered in accordance with the BSC (except, where the Facility is a Dual Scheme Facility, in respect of the Boundary Point Metering System used to measure the Imported Input Electricity).*

- 5.12 The arrangement of this type of connection means that a Generator supplies power to a Private Network (which is a network for the distribution of electricity which is not operated by the Total System).
- 5.13 The key differences of the Private Network Agreement to other variants of the CfD agreement are around metering equipment.
- 5.14 Private Network Connections must use metering that adheres to the Private Network Metering Operational Framework and Private Technical Systems Requirements. To be eligible, CfD Facility Metering Equipment must be separate from any other input and output of electrical loads on the Private Network. There are limited changes to other sections of the agreement.

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<sup>3</sup>Under ‘Defining a Private Network Generator’, par 19:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/404292/CfD\\_for\\_Private\\_Network\\_Generation\\_policy\\_overview\\_June\\_2014.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/404292/CfD_for_Private_Network_Generation_policy_overview_June_2014.pdf)

<sup>4</sup> Under Definition of a Private Network Generator, clause 1.3 of the Private Network CfD Agreement: [AR5 CfD Private network agreement \(publishing.service.gov.uk\)](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/404292/AR5_CfD_Private_network_agreement.pdf)

- 5.15 Whilst metering within a Private Network Agreement is not ordinarily BSC compliant for the purposes of CfD payments, the metering obligations are designed to give a similar level of assurance as BSC registered meters.
- 5.16 To be able to participate in the Electricity Market Reform (EMR) Contracts for Difference (CFD) all CFD Generators must have a Metering System installed that is compliant with the CFD Agreement Terms and Conditions. For more specific information on Metering and the CfD, technical guidance has been produced by EMRS ([G8 – Contracts for Difference Metering](#)).
- 5.17 There are two subsets of Private Network Generators, both of which fall under the Private Network Agreement template:
- a) Islanded Generator
  - b) Partial Connected Generator
- 5.18 A ‘Partial Connected’ or ‘Islanded’ CFD Generator would both use a Private Network Agreement CfD template.
- 5.19 Any CfD Difference Amounts payable are calculated in broadly the same way whether under the Private Network CFD Agreement or the generic agreement. Under the Private Network CFD Agreement the Loss Adjusted Metered Output is calculated by applying a Line Loss Factor (LLF) and Transmission Loss Multiplier (TLM) for the relevant distribution area and voltage.

#### Islanded Generator

- 5.20 As per the Private Network CfD Agreement<sup>5</sup> an “Islanded Generator” means a Private Network Generator which has a Market Supply Agreement with an Onsite Customer but which does not have access to a Grid Connection.
- 5.21 The arrangement of this type of connection means that a Generator supplies power (directly) to the Private Network, with no access to either the Transmission System or Distribution System.
- 5.22 In being connected to an Onsite Customer, metering will normally be sufficiently robust to ensure billing can be carried out, however metering in relation to the Facility must also be separate from any other input and output of electrical loads on the Private Network.
- 5.23 The Metered Output is calculated in line with the Loss Adjusted Metered Output as per the generic CfD Agreement using the Metered Volume data

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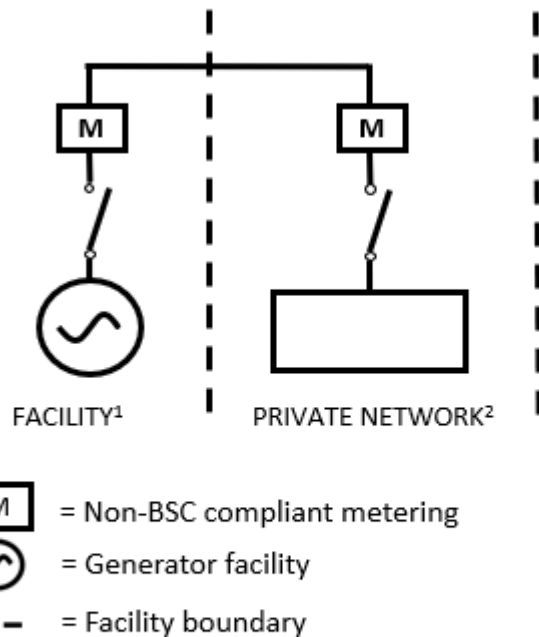
<sup>5</sup> Private Network CfD Agreement from Allocation Round 5 can be found on DESNZ webpage: [AR5 CfD Private network agreement \(publishing.service.gov.uk\)](#)

provided by the Generator. This can include, where appropriate, a TLM or similar multiplier in the Settlement Unit in calculating the Metered Output.

- 5.24 Alongside the appropriate metering, the Licence Exemption requirements mentioned above must be adhered to.
- 5.25 It is expected that a Generator will have a Market Supply Agreement, such as a PPA, for any electricity supplied via a Private Network to any Onsite Customers.
- 5.26 It is also important that an Islanded Generator maintains this route to market and must notify the CfD Counterparty immediately if it ceases to have a Route to Market.
- 5.27 Within a period of 18 months<sup>6</sup> of a loss of Route to Market, a Generator must remedy the loss (and evidence as much) by either:
- a) Entering into a new Market Supply Agreement with an Onsite Customer or;
  - b) Entering into a Grid Connection Agreement with the Transmission or Distribution System Operator.
- 5.28 If a Generator fails to remedy the loss of Route to Market and subsequently inform the CfD Counterparty within the given time frame, then a termination event will be deemed to have occurred.
- 5.29 It should also be noted that in accordance with Condition 30.1 of the (Private Network) Conditions, an Islanded Generator shall not make a Grid Connection Application, or otherwise obtain access to a Grid Connection (including by way of a Private Network Use Agreement) other than where it has ceased to have a Route to Market. A termination event will also be deemed to have occurred where a Generator breaches this obligation.
- 5.30 An example of an Islanded Private Network Connected Generator is outlined below:

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<sup>6</sup> In the case of the AR5 Private Network CfD Agreement (see provision 6.3): [AR5 CfD Private network agreement \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/674242/AR5_CfD_Private_network_agreement.pdf)



1. Must be exempt from generation licence requirement
2. Must be exempt from distribution licence requirement
3. Could be the licenced transmission or distribution network

*Figure 1 – Example of an Isolated Generator*

### Partial Connected Generator

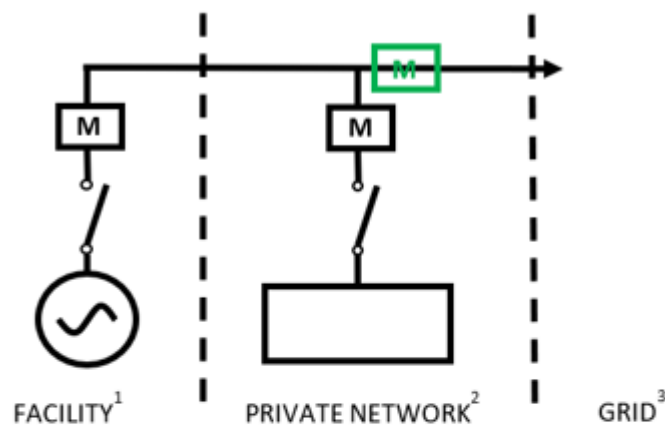
- 5.31 A “partial connection” is defined within the General qualification requirements of the Contracts for Difference (Allocation) Regulations 2014<sup>7</sup> as:


#### 'Connection agreements

25. — (6) In this regulation—  
 “partial connection” means a connection to—  
 (a) the national transmission system for Great Britain; or  
 (b) the distribution system, which applies to part only of the electricity generated by the relevant CFD unit.’

<sup>7</sup> Clause 25 (6), of Chapter 3 - General qualifications requirement: [The Contracts for Difference \(Allocation\) Regulations 2014 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukreg/2014/105/2014-10-10/25-6)

- 5.32 The arrangement of this type of connection means that a Generator supplies power (directly) to a Private Network however still retains access in some form (either directly or via the Private Network) to either the Transmission System or Distribution System. A proportion of the power generated from the CfD Unit therefore is permitted to be exported to that system. In this instance the Generator is known as a ‘Hybrid Generator’.
- 5.33 A Private Network Generator cannot have a grid connection arrangement that would require BSC registered metering equipment at the Facility.
- 5.34 As per the Islanded Generator metering requirements, the metering obligations are designed to give a similar level of assurance as BSC registered meters.
- 5.35 It is expected that a Generator will have a supply agreement, such as a PPA, for any exported (and imported) electricity in place with an electricity supplier. It remains the Generator’s responsibility to find customers for electrical output – difference payments are still based on strike price less the BMRP/IMRP reference.
- 5.36 An example of a Partial Connected Generator is outlined below:



 = Non-BSC compliant metering

 = BSC compliant metering

 = Generator facility

- - = Facility boundary

1. Must be exempt from generation licence requirement
2. Must be exempt from distribution licence requirement
3. Could be the licenced transmission or distribution network





*Figure 2 - An example of a 'Partial Connected Generator'*





## 6. Facility Connection Changes

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- 6.37 Applicants must specify if their CfD Facility is, or will be, connected to the transmission or distribution system and provide a copy of the connection agreement(s) applicable to the relevant CfD Facility which allows such connection.
- 6.38 The connection type selected in the application form must be aligned to the connection agreement and the application cannot be amended after the application closing date, as specified in regulation 16 in the Contracts for Difference (Allocation) Regulations. The application can be withdrawn and resubmitted (amended) for connection agreements during the application window.
- 6.39 Where a cessation of Route to Market occurs (this only applies to Islanded Generators) then the requirements of the contract must be followed – for more details see section 5 above and provision 6.3 of the AR5 Private Network CfD Agreement.





## References

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[www.cfdallocationround.uk/publications](http://www.cfdallocationround.uk/publications)

Contracts for Difference Generator Guide, LCCC, Feb 2019

[www.lowcarboncontracts.uk/sites/default/files/publications/Contracts%20for%20Difference%20-%20Generator%20Guide%20Feb%202019.pdf](http://www.lowcarboncontracts.uk/sites/default/files/publications/Contracts%20for%20Difference%20-%20Generator%20Guide%20Feb%202019.pdf)



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