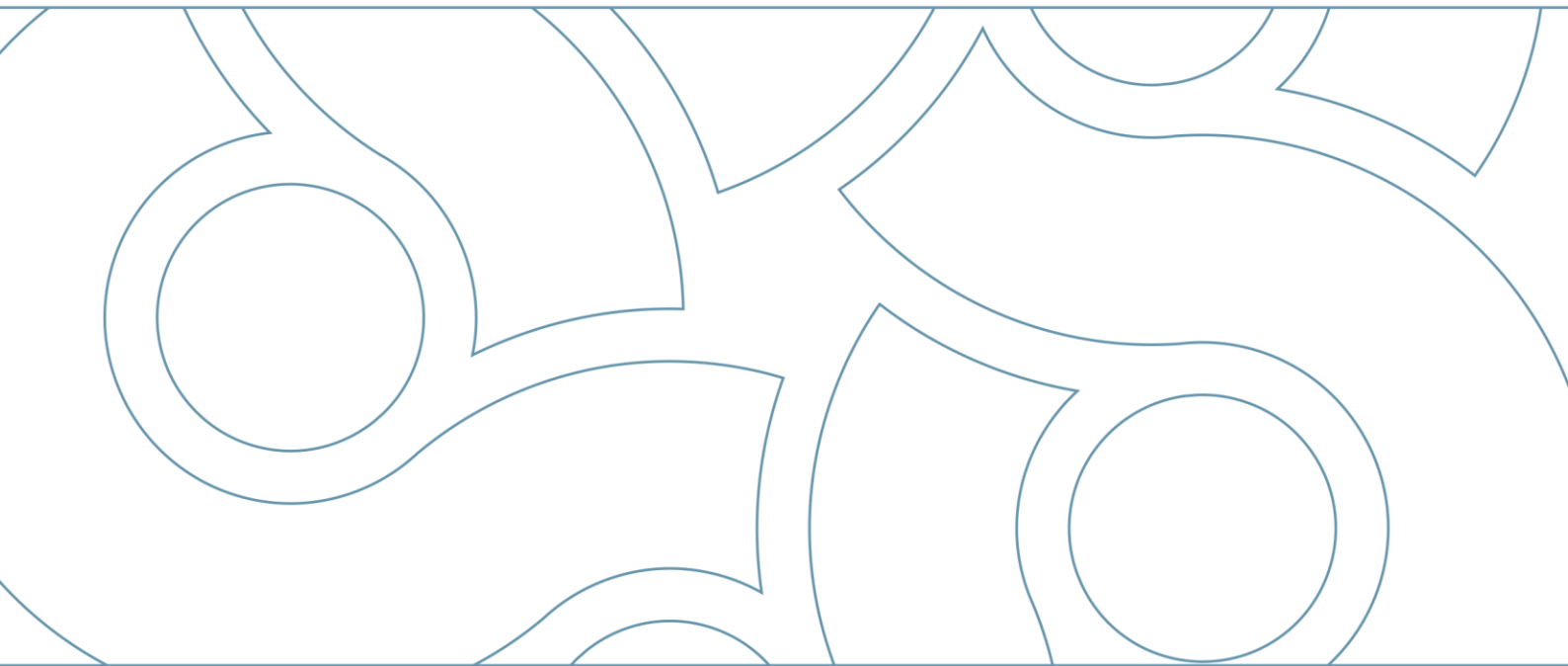


The I-REC Code Subsidiary Document 04

# Issuing I-RECs



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### Document Control

Version	Originator	Approval	Date
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1.8	J Braslawsky	I-REC Services	14.04.2020

### Change History

Version	Description
1.0	Initial issue version
1.1	Clarification of relationship with carbon offsets.
1.2	Establishing issuing during the Initial Period. (CP2015-02)
1.3	Application of Residual Mix Deadline Date (CP2016-02) Clarification of file uploading (CP2016-04) Removal of reference to 'Initial Period'.
1.4	Clarification of how the Residual Mix Deadline Date is applied.
1.5	Introduction of aggregation in Production Groups (CP2017-04) Introduction of co-firing and Fuel Consumption Statements (CP2017-06)
1.6	Housekeeping changes for registry software upgrade (CP 2019-03)
1.7	Introduction of self-consumption I-RECs (CP 2019-02)
1.8	Removal of the option to reserve the right of an offset (CP2020-02)

## 1. Introduction

### 1.1 The I-REC Service

The I-REC Service is a global electricity environmental attribute tracking system. It is designed to facilitate reliable Scope 2 carbon accounting consistent with various international accounting standards. I-RECs allow all electricity users to make a conscious and evidence-based choice for renewable electricity, in any country around the world.

### 1.2 The I-REC Code

The I-REC Code is a statement of principles and a description of how the I-REC Service operates at high level. Detailed descriptions of procedures are contained in Code Subsidiary Documents such as this document.

### 1.3 This Document

This document sets out the process for Issuing I-RECs into an Account on the I-REC Registry.

## 2. Definitions

Unless specified in the table below, all capitalised terms shall have the meaning ascribed to them in the I-REC Code.

In all cases, the derivatives of the following terms shall be construed accordingly.

Term	Definition
Conversion Request	A request for Issuing I-RECs using indirect evidence from an Approved Tracking Scheme.
Fuel Consumption Statement	A document in a standard format which identifies the quantity of each energy input source consumed by a Production Device during a production period stated on an Issue Request for that Production Device.
Production Auxiliaries	Devices that consume some of the energy produced by a Production Device as part of the process of operating that Production Device.

## 3. Process description

### 3.1 Context

An I-REC can only exist within an Account on the I-REC Registry. An I-REC can only be Issued against the provision of evidence of a production event which has occurred. That evidence can be of direct form, through measurement data relating to a Production Device registered on the I-REC Registry, or it can be indirect through the transfer of information from an Approved Tracking Scheme. An Issuer will review the evidence and will Issue I-RECs in accordance with the I-REC Code and this Code Subsidiary Document.

Once Issued into an Account, an I-REC becomes the property of the I-REC Participant who holds the Account.

### 3.2 The Procedure

Before a valid Issue Request can be submitted, the Production Device or Production Group to which it relates must be registered on the I-REC Registry, the Account for receiving the I-RECs must also exist on I-REC Registry, and the Registrant must have a current service agreement with an Issuer for that Production Device or Production Group.

The direct evidence procedure begins with the Registrant obtaining the evidence and submitting an Issue Request. The indirect evidence procedure begins with a notification of cancellation from the Approved Tracking Scheme being received by the Issuer. In both cases, the Issuer will review the evidence provided and, if the evidence is accepted, Issue I-RECs into the Account indicated. The process ends with the Issuer confirming the Issue of I-RECs to the Registrant and to the I-REC Participant into whose Account the I-RECs have been Issued.

## 4. Direct Evidence

### 4.1 Collecting the Evidence

Measurement evidence for the output of a Production Device or Production Group for a production period must be gathered and validated by an independent person. A production period can be any duration, but is not normally less than 1 calendar month or greater than 12 calendar months.

### 4.2 Form of Evidence

The I-REC Code observes a hierarchy of evidence:

- a. For a Production Device or Production Group which is connected to a national electricity network, the evidence should be electricity market settlements metering data.
- b. Where such electricity market settlement data is not available, appropriate metering data which has not been through settlement validation may be accepted.
- c. Where metering data is not available, measured volume documentation for the periodic commercial/legal energy transfer from the generator to another person may be accepted.
- d. If none of (a), (b), or (c) is feasible, a system of measurement approved by I-REC Services can be used.

The Registrant must give the reason for using evidence that is in any category above, except (a), unless prior approval has been granted by I-REC Services.

Approval of methods under (c) or (d) above will be granted by I-REC Services if the following criteria are satisfied:

- i. The measured volume is agreed by the purchaser of the energy or an independent auditor.
- ii. The measured volume cannot be claimed by another person.
- iii. The measurement process is a reasonable representation of the volume produced by the Production Device or Production Group during the production period identified.

The measured volume should be given to the nearest whole kWh.

The measured volume is determined as the active energy which is available for use by consumers which are not Production Auxiliaries. Where metering exists and energy inflows from a network to a Production Device and its Production Auxiliaries are measured independently from energy outflows to the network from that Production Device, only the outflow measurement is used to evaluate the measured volume.

A period of net electricity inflow can be counted as zero metered volume for the purposes of I-REC, but this must apply to the entire production period if the site is metered on net power flows.

#### **4.3 Verifying the Evidence**

Verification of measured volume takes place within the electricity settlement process where such a process is available. In this case, the Production Auditor is deemed to be the relevant settlements authority and no Production Auditor signature is required on the Issue Request.

Where settlement validated data is not available, a Production Auditor will make an independent verification of the measurement data such that the Issuer can be confident that the generation event has occurred as described by the volume data and that no evidence of data tampering exists.

#### **4.4 Production Groups**

Aggregation of measurement data for a Production Group must be done using an I-REC template which can be found in Appendix 2 – Production Group Template or downloaded from the I-REC website and/or an Issuer’s website.

Measurement data for each Installation within a Production Group must extend to at least the whole of the production period to which the Issue Request relates. Where the measurement data is not produced at or below a single day, the measured volume for an Installation must be adjusted down to the start and end dates of the production period for each day by the daily average volume over the period for which the measured volume evidence is provided for that Issue Request.

#### **4.5 Fuel Consumption Statements**

Where a Production Device is Co-firing, a completed Fuel Consumption Statement must be submitted with each Issue Request. A template for a Fuel Consumption Statement can be found in Appendix 3 - Fuel Consumption Statement and can be downloaded from the Issuer’s website.

#### **4.6 Presenting the Evidence**

The Registrant must submit a completed Issue Request and, if required, a Fuel Consumption Statement or a Production Group template to the Issuer with whom he has a service agreement via the registry. A sample of the Issue Request form can be found in Appendix 1 – Issuing Request Form. It must be completed in English and appropriate supporting evidence provided where requested by uploading files, including an image file of the signed form from Appendix 1, attached to the Issue Request. It is the Registrant’s responsibility to provide the evidence to the Issuer in a timely manner.

#### **4.7 Pre-Issuing Checks**

On receipt of an Issue Request that is complete and duly authorised. The Issuer will check, to the extent possible, that the measured volume has not been presented to any other system for the purposes of carbon attribute tracking. Any queries will be passed back to the Registrant.

In the case of requests made prior to the first Residual Mix Deadline Date, the production period stated in the Issue Request must start no earlier than thirteen (13) calendar months from the date of Issue of the relevant I-RECs. In the case of requests made on or after the Residual Mix Deadline Date, the production period must not contain any part of the preceding calendar year.

Any residual kWh of measured volume remaining after Issuing for the period immediately preceding (ie. no gap) that of the current Issue Request can be added to the measurement volume of the

current Issue Request. The number of I-RECs to be Issued will be the number of whole MWh in this summation.

I-RECs will not be Issued where the Registrant is in default of payment terms with the Issuer in relation to the I-REC Service.

#### 4.8 Co-firing

The Issuer will calculate the volume of I-RECs to be Issued based on the data provided in the Fuel Consumption Statement and using the following formula:

$$L = \frac{\sum_i^j M^i x C^i}{\sum_i^n M^i x C^i}$$

Where:

L is the renewable energy output fraction

M is the mass of a fuel input i

C is the calorific value of a fuel input i

i to j are renewable fuel inputs

j+1 to n are fossil fuel inputs

The corresponding volume of I-RECs to be issued is L\*MWh.

#### 4.9 Issuing I-RECs

When the Issuer is satisfied that I-RECs Issued in respect of the evidence provided will be a unique representation of the environmental attributes of the measured volume, he will create a record on the I-REC Registry signifying that the appropriate number of I-RECs have been Issued.

If the Registrant has retained the right to obtain carbon offsets or emissions reduction certificates for the same MWh, this will be identified on the record on the I-REC Registry.

#### 4.10 Self-Consumption I-RECs

Where a Registrant is requesting the Issue of an I-REC for consumption within his own business group, he should identify the receiving Account on the Issue Request as an Account held by the Issuer for Redemptions. The Issued I-REC must carry a marker identifying it as a self-consumption I-REC. An I-REC marked for self-consumption cannot enter any trading Account held by a Participant. Volume evidence for the consumption site must also be submitted with the Issuing Request.

The Issuer and I-REC Services must be satisfied that the following criteria have been met:

- The consumer and the Production Device must each be at least 51% equity owned by a common holding company.
- The consumer site and the location of the Production Device must be in the same country.
- The metering data evidence for the consumer has been independently verified to at least the standard of the production volume evidence.
- The volume of I-RECs requested does not exceed the volume of consumption.

#### 4.11 Service Timing

The Issuer will normally Issue I-RECs within 5 business days of receiving a complete Issue Request with appropriate supporting evidence. The Registrant should notify I-REC Services if an Issuer has failed to meet this service level.

#### **4.12 Document Retention**

The Issuer will store all documentation in relation to the Issued I-RECs in the designated area of the I-REC Registry.

### **5. Indirect Evidence**

Indirect evidence is provided by an Approved Tracking Scheme (ATS). The precise detail of the transfer will depend on the ATS and its exit procedures. However there are general principles which must be followed.

#### **5.1 Conversion Request**

A Conversion Request must be submitted to the Issuer managing the interface with the relevant ATS. This request may be automated and will be defined in the Approved Tracking Scheme Interface Protocol for that ATS.

#### **5.2 Pre-Issuing Checks**

The Issuer must satisfy himself that he has adequate information to securely Issue I-RECs into the correct Account. All certificates from the ATS must have been made no longer valid for transfer within that ATS by cancellation or similar process as stated in the Approved Tracking Scheme Interface Protocol for that ATS. Where the information from the ATS identifies a consumer beneficiary, the I-RECS must be Issued into an Account that is recognisably the same organisation.

#### **5.3 Issuing I-RECs**

When the Issuer is satisfied that I-RECs Issued in respect of the evidence provided will be a unique representation of the environmental attributes of the volume, he will create a record on the I-REC Registry using data from the ATS certificates signifying that the appropriate number of I-RECs have been issued.

#### **5.4 Document Retention**

The Issuer will store all documentation in relation to the Issued I-RECs in the designated area of the I-REC Registry.

### **6. Confirmation**

On completion of the Issuing process, the Issuer will notify the receiving Account holder that the I-RECs have been Issued.

### **7. Error Management**

In the event of an error being identified subsequent to the Issue of an I-REC, but before it has been redeemed, I-REC Services will withdraw the I-REC concerned and notify the I-REC Participant in whose Account the I-REC exists. Following withdrawal, replacement I-RECS may be Issued by the originating Issuer or I-REC Services.



## Appendix 1 – Issuing Request Form

<b>Registrant and Device details</b>			
Registrant name:		Registrant Id:	
Production Device/ Production Group:		Production Device/Production Group Id:	
Labelling scheme(s):		Last registration date:	
<b>Production details</b>			
Production Period Start Date: (dd.mm.yyyy)		Total kWh Produced in this period:	
Production Period End Date: (dd.mm.yyyy)		Percentage of eligible total applied for:	
<b>Evidence details</b>			
Type a: Settlement Metering data	<input type="checkbox"/>		Attached Y/N*
Type b: Non-settlement Metering data	<input type="checkbox"/>		Attached Y/N*
Type c: Measured Volume Transfer documentation	<input type="checkbox"/>		Attached Y/N*
Type d: Other	<input type="checkbox"/>		Attached Y/N*
<b>Receiving account details</b>			
I-REC Participant name:			
Account number:			
<b>National statistics</b>			
Is the production of this electricity counted towards a national, sub-national or regulatory target ?			Yes/No*
<b>Public consumption obligation</b>			
Is any of this production subject to a public consumption obligation?			Yes/No*

\*Delete as appropriate

<b>Carbon Offsets (<i>countries where legislation permits independent offsets only</i>)</b>	
Do you retain the right to obtain emissions reduction certificates or carbon offsets for the energy nominated in this Issue Request?	Yes/No*
If no, the Registrant warrants that the energy for which I-REC certificates are being applied has not and will not be submitted for any emissions reduction certificate or carbon offset.	

In signing, the Registrant warrants that the energy for which I-REC certificates are being applied has not and will not be submitted for any other energy attribute tracking methodology.

With the specific exception of the carbon offsets, if exercised as 'yes' above, the Registrant also warrants that to the best of his knowledge, the consumption attributes contained within any I-REC certificate Issued in association with this request (including all rights to the specific electricity and/or emissions for the reporting of any indirect carbon account purposes) are not delivered to any other body either directly or in-directly without the component I-REC certificate. This includes but is not limited to electricity supply companies or the national governments.

The undersigned Production Auditor has reviewed this Issue Request and has no material reason to doubt the correctness of the evidence to support the measured volume.

<b>Production Auditor</b>		
Signature   Date		
Print organisation name and name of signatory		
<b>Registrant</b>		
Signature   Date		
Print name and role of signatory		

**Issuing I-RECs**

**Appendix 2 – Production Group Template**

	Production Group Name				Issue Request Start Date					
					Issue Request End Date					
						Opening Read		Closing Read		
Count	Installation Name	Address	Village/ Town/City	Capacity (kW)	Meter id	Value (kWh)	Date of Read	Value (kWh)	Date of Read	Volume (kWh)
1										
2										
...										

### Appendix 3 - Fuel Consumption Statement

Device details			
Production Device:		Production Device Id:	
Period details			
Production Period Start Date: (dd.mm.yyyy)		Production Period End Date: (dd.mm.yyyy)	

Energy Sources						
Fuel	Gross Calorific Value (MJ/kg)	Stock Balance at Start Date (kg)	Stock Added during Period (kg)	Stock Balance at End Date (kg)	Fuel Consumed (kg)	Energy from Source
	a	b	c	d	=b+c-d	=a*(b+c-d)
Fossil Sources						
Total fossil input energy						
Renewable Sources						
Total renewable input energy						

Production Auditor		
Signature   Date		
Print organisation name and name of signatory		