TIGR℠ Registry
Procedures
August 2018

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1 Introduction

The TIGR Registry℠ (the **Registry**) collects and tracks information regarding renewable energy generation originating within supported countries. The Registry supports tracking of RECs associated with Virtual and Physical Power Purchase Agreements, onsite generation and RECs unbundled form the power. The Registry is designed to provide a policy-neutral, market-driven, electronic system for participants in renewable energy markets. By creating a reliable process to evidence verification, issuance and Retirement of RECs – Tradable Instruments for Global Renewables – the Registry brings increased levels of integrity and trust to purchasers, sellers and regulators in the market.

The Administrator will issue one electronic Renewable Energy Certificate (REC) for each MWh of renewable energy that is generated by registered Projects. The Registry will track and display the attributes, certifications and program eligibilities associated with each REC, as established by documentation and/or third-party verification during the Project registration process. Projects can be registered in the Registry based on ownership of the Project or, if authorized, based on acting as the Responsible Party for the Project.

Any party, such as projects, traders, utilities, marketers, non-profits or retail aggregators, wishing to have RECs issued, held, transferred, or Retired must establish an Account in the Registry to do so. All Account Holders must agree to follow the rules and operating standard described in this document and in the Registry Terms of Use.

All Registry Accounts use two types of Sub-accounts to manage RECs: Active Sub-accounts and Retirement Sub-accounts. Active Sub-accounts are used for holding and transferring RECs. Retirement Sub-accounts are used for Retiring RECs for sustainability claims, compliance mandates or other uses of the RECs. Once Retired, RECs can no longer be transferred between Account Holders or within an Account.

RECs are initially deposited into an Active Sub-account associated with a Project. Account Holders can then transfer RECs to other Sub-accounts and to the Accounts of other Account Holders.

Each REC issued will indicate if it is eligible for any compliance and/or voluntary programs. Additional eligibilities may be added from time-to-time. Country-specific appendices will also be added from time-to-time as the Registry is introduced in different markets.

The Registry will provide Account Holders and the public with reports on activity within the system. The public reports are accessible to anyone via the public page on the Registry website. These public reports are designed to ensure Registry transparency as to RECs issued and Retired as well as providing visibility to the details of registered projects and program eligibilities.

2   User Registration

2.1   Establishing an Account

Participation in the Registry is voluntary. Any person or entity wanting to participate in the Registry must first establish an Account. Registrants will provide basic Account registration information, such as Account Holder name, address and contact information, to the Administrator through a secure web-page on the Registry website tigrs.apx.com and agree to the Terms of Use.. The Administrator will review the Account application and may request more information before, <u>in its sole discretion</u>, approving or rejecting the application. An Account will remain active until terminated. Termination can be initiated by the Account Holder by notifying the Administrator. Accounts can also be terminated if an Account Holder fails to pay the Registry fees or is otherwise in default under the Terms of Use. <u>The Terms of Use describe these issues, as well as additional important terms, and should be read and understood by anyone applying to be an Account Holder</u>.

2.2   Account Password Reset

If an Account Holder forgets or loses the password for their Account, the Account Holder will click on "Forgot Password" and will be prompted to enter their login name and additional verifying information. Account Holders will then be prompted to answer the security question they created during their Account registration. Once submitted, a new password will be sent to the Account Manager's email address.

3   Account Types

The Registry Account types are structured around the activities that will be performed in the Registry. There are seven types of Accounts in the Registry and the following table outlines the key functionality associated with each type.

- Project Owner Account
- General Account
- Retail Aggregator Account
- Retirement Account
- Qualified Reporting Entity/Third Party Verifier
- Program Administrator Account
- Registry Administrator Account

Account Types

Registry Activities	Project Owner	General	Retail Aggregator	Retirement	Qualified Reporting Entity	Program Administrator
Register Projects	Yes	Yes	Yes	Yes	No	No
Transfer RECs	Yes	Yes	No	No	No	No
Accept Incoming Transfers	No	Yes	Yes	Yes (into a Retirement Sub-account)	No	No
Hold Active RECs	Yes	Yes	Yes	No	No	No
Hold Active RECs on behalf of others	No	Only if approved under the Aggregator Exception	Yes	No	No	No
Retire RECs on own behalf	Yes	Yes	Yes	Yes	No	No
Retire RECs on behalf of others	No	Only if approved under the Aggregator Exception	Yes	No	No	No
Upload Production Data	No, unless qualified under Sec. 7.1.8	No, unless qualified under Sec. 7.1.8	No, unless qualified under Sec. 7.1.8	No, unless qualified under Sec. 7.1.8	Yes	No
Certify Projects to Voluntary /Compliance	No	No	No	No	No	Yes

3.1   Project Owner Account

This type of Account can register Renewable Energy Projects and have RECs issued to it for power produced by such Renewable Energy Projects. A Project

Owner Account can hold, transfer (only outgoing transfers), withdraw and Retire RECs. A Project Owner Account cannot receive transfers from other parties.

3.2   General Account

This Account type allows the Account Holder to register Renewable Energy Projects, have REC issued to its Account, transfer RECs to counterparties, receive transfers of RECs from counterparties and Retire RECs on its own behalf. If approved under the Aggregator Exception, a General Account Holder can also Retire RECs on behalf of Beneficial Owners. This Account type is recommended for organizations that buy and sell RECs and organizations that develop projects and buy RECs.

3.3   Retail Aggregator Account

This Account type allows the Account Holder to receive transfers of RECs from counterparties and Retire these on behalf of third parties. They can also register and maintain Renewable Energy Projects and have RECs issued in their Account. In order to open this Account type, the applicant must be approved for the Aggregator Exception. Any RECs transferred to the Account have to be Retired within a certain period after delivery to the Account, the maximum hold period being established by the Administrator. If the Account Holder does not Retire RECs within the prescribed timeline, the Administrator will do so. A Retail Aggregator Account Holder **cannot** transfer RECs to counterparties.

3.4   Retirement Account

This Account type allows the Account Holder to receive transfers of RECs from counterparties for immediate Retirement only. **Retirements can only be on behalf of the Account Holder**. A Retirement Account Holder **cannot** transfer RECs to counterparties or hold Active RECs in its Account. Retirement Accounts may be approved to register Projects for REC issuance and immediate retirement. This Account type is recommended for organizations that buy RECs for their own sustainability goals such as utilizing 100% renewable energy or to offset their Scope 2 emissions per the Greenhouse Gas Protocol.

3.5   Program Administrator Account

This type of Account is provided to administrators of compliance and voluntary programs that utilize the Registry and/or have eligibilities noted for certain RECs. It will allow Program Administrators to review eligibilities and compliance reports. Project details will only be displayed in a Program Administrator Account if the Account Holder registering that Project has listed it as eligible according to the specific program/certification.

3.6   Qualified Reporting Entity Account

An Account Holder with a QRE Account is assigned to a Renewable Energy Project and is responsible for verifying generation information from that Renewable Energy Project. The Registry tracks the specific types of Renewable

Energy Projects for which QREs are approved to provide services, ensuring that they are suitably qualified and accredited. The QRE Account cannot hold RECs.

3.7   Registry Administrator Account

This type of Account is provided to the Administrator and allows full access to all Registry functionalities.

4   REC Management

The account structure in the TIGR Registry enables complete management of the RECs for all types of users. RECs can be freely transferred between counterparties, retired for the intended purpose, and RECs never expire.

Accounts that can hold RECs (General, Project Owner and Retail Aggregator) are organized using two principal types of Sub-accounts, **Active** and **Retirement**. RECs are in an Active status when issued up until such time when they are Retired. Retirement of a REC is permanent, and a REC cannot move from Retired to Active status.

When an Account is created in the system, a single default Active Sub-account and a single default Retirement Sub-account are created automatically. Account Holders can re-name these default Sub-accounts and create as many additional Active and Retirement Sub-accounts as necessary to meet their individual needs (though Retirement Sub-accounts cannot be renamed after RECs have been retired in the sub-account). Each Account and Sub-account will have a unique identification number. Account Holders are also able to apply their own naming convention to their Sub-accounts, for example by customer or by product name.

When RECs are deposited into an Account by the Administrator, they are placed into the Active Sub-account designated at the time of Project registration. When RECs are transferred into an Account, the recipient Account Holder will identify the Active Sub-account into which they will be deposited. Each Account Holder will be able to view a listing of RECs held in each Sub-account and their attributes (e.g., documents, eligible program certifications and origination details).

With the exception of Group Retirement Sub-accounts, described in Section 4.5 below, Account Holders cannot hold RECs on behalf of any other party. An Account Holder must have full legal title of and all Beneficial Ownership Rights in the RECs held in its Accounts.

4.1   Deposits to Active Sub-Accounts

There are three ways that RECs are deposited in an Active Sub-account.

> (a) RECs are issued into the account based on verified renewable energy generation from a registered Project.

> (b) Within an Account, RECs can be transferred from one Active Sub-account to another.

    (c) An Account Holder can accept a transfer of RECs from another Account Holder.

4.2   Transfers from Active Sub-Accounts

There are two ways to withdraw or remove RECs from Active Sub-accounts:

    (a) Transfer the RECs to the Account of another Account Holder.

    (b) Transfer the RECs to another of the Account Holder's own Sub-accounts.

4.3   Retirement Sub-Accounts

A Retirement Sub-account is used as a repository for RECs that the Account Holder wants to designate as Retired. There are three ways that RECs are deposited in a Retirement Sub-account:

    (a) For Project Owner, General and Retail Aggregator Accounts, within their Account, RECs can be transferred from an Active Sub-account to a Retirement Sub-account.

    (b) For Retirement Accounts, they can accept a transfer of RECs from another Account Holder directly into a Retirement Sub-account.

    (c) For Project Owner, General and Retail Purchaser Accounts, a forward transfer can be set up by the Account Holder to automatically deposit RECs into a Retirement Sub-account.

Retirement can only be initiated by an Account Holder in respect of the RECs in its Account. The Administrator is not responsible for the Retirement of RECs by Account Holders, regardless of whether it relates to voluntary or compliance-related retirement deadlines or otherwise.

An Account Holder choosing to Retire a REC or block of RECs will use the transfer screen to identify the quantity of RECs to Retire and the reason for Retirement as well as select the Retirement Sub-account into which the RECs will be deposited. The Retirement Sub-account will show the serial numbers of the RECs Retired, the date of Retirement and the reason for Retirement. In addition, there will be a mechanism to view the Project characteristics/REC fields and documents associated with the Retired RECs. *Once RECs are Retired, they cannot be moved or transferred out of the Retirement Sub-account to any other Account or Account Holder.*

The Registry's system validations ensure that RECs deposited into a Retirement Sub-account are no longer transferable to another party or another Sub-account. System reports allow Account Holders to show evidence of the Retirement to Program Administrators or the public.

4.4   Managing Errors to Retirement

An Account Holder has two methods for recourse if an error has occurred in Retirement.

1. If reported immediately to the Administrator, the Administrator may reverse the Retirement

2. If reported anytime thereafter to the Administrator, the Administrator will need to confirm with any participating certification program or Beneficial Owner (for named Retirements) that the Retirement can be undone.

4.5 Group Retirement Sub-Accounts

To provide full transparency to markets and regulators, as well as maintaining the integrity of the Registry's ownership records, as a general matter <u>Account Holders cannot hold Active RECs on behalf of any other party</u>. Holders of General and Retail Aggregator Accounts wishing to Retire RECs on behalf of others may apply for the Aggregator Retirement Exception. If approved by the Administrator, holders of such Accounts may Retire RECs on behalf of Beneficial Owners for whom they are authorized to act.[*]

There are 2 types of retirements that can be processed via a Group Retirement Sub-account: a **Corporate Retirement** and a **Retail Retirement**. The Corporate Retirement type is intended for Retirements of large volume sales to a single, large-scale Beneficial Owner. The Retail Retirement type is intended to aggregate Retirements carried out on behalf of smaller volume sales to Beneficial Owners.

The establishment and use of a Group Retirement Sub-Account are subject to the following provisions:

- All legal title to and Beneficial Ownership Rights in any REC Retired in a Group Retirement Sub-account must be held by one or more Beneficial Owners that have authorized (i) the Retirement of the REC and (ii) the disclosure to the Administrator of information relating to such Beneficial Owner(s) and such REC.

- Only RECs that are being Retired on behalf of a Beneficial Owner can be put into a Group Retirement Sub-account.

- The Administrator will audit the Group Retirement Sub-Accounts from time to time, and at a minimum, annually. Account Holder must, upon request, submit supporting documentation related to the ownership of all Retired RECs on behalf of Beneficial Owners. Supporting documentation could include contracts and outreach to Beneficial Owners.

- <u>No Account Holder holding one or more Group Retirement Sub-accounts may Retire more than 499,999 RECs on behalf of any one Beneficial Owner during a calendar year.</u> Any Beneficial Owner that is

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[*] Applicants for a Retail Aggregator Account must qualify for the Aggregator Retirement Exception at the time of Account opening.

Retiring 500,000 or more RECs during a calendar year must have their own Account.[*]

- <u>Beneficial Owners on behalf of which an Account Holder Retires or expects to Retire 1,000 or more RECs during a calendar year must be assigned their own Corporate Retirement option</u>.

- To establish a Corporate Retirement option, the Account Holder shall provide the following information with respect to that Account's Beneficial Owner:

    1) Name;

    2) DUNS, Tax ID or other identifying number;

    3) Address, including country;

    4) Web site URL;

    5) Contact Name;

    6) Contact Email; and

    7) Contact Telephone.

- For Corporate retirements, the Account Holder shall report, concurrently with each Retirement, the following information:

    1) Reporting year for the Retirement; and

    2) the reason for such Retirement of RECs.

- For Retail retirements, the Account Holder shall report, concurrently with each Retirement, the following information:

    1) Reporting year for the Retirement; and

    2) the reason for such Retirement of RECs.

4.6   Transfers Between Accounts

General and Project Owner Account Holders may transfer Active RECs to other Account Holders at any time. RECs being transferred will be specified by their serial numbers. The transferring Account Holder will select the recipient from a pull-down list of Account Holders. After the transfer has been initiated, the RECs that are pending transfer will be marked as "transfer pending" in the Account Holder's Outbox. This will have the effect of "freezing" the RECs so that they cannot be moved to another Sub-account or to another Account Holder (though the transfer can still be cancelled, as discussed in the next paragraph).

After the transfer has been initiated, the system will send an electronic notification of the transfer request to the proposed receiving Account Holder. The transfer recipient can review the REC transfer details from the Account Holder's

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[*] Note that in such a situation, an Account Holder can designate another party to manage the Account on their behalf by submitting a Declaration of Agency to the Administrator.

Outbox and must confirm or reject the transfer within fourteen (14) calendar days of when it was requested by the transferor. If confirmed, the transfer recipient must designate the Sub-account into which the RECs are to be delivered. As soon as the recipient has confirmed or rejected the transfer, the Registry will send an electronic notification to the transferor indicating the action taken. The transferor may cancel any transfer before such transfer has been confirmed by the recipient by withdrawing the transfer from the Account Holder's Outbox in the Registry. If the transfer is withdrawn, the Registry will notify the previously intended recipient of the action.

5   Access to Accounts and Confidentiality

5.1   Account Access

An Account Manager is established as part of the Account registration process. The individual listed in the initial Account application will be considered the Account Manager and have the ability to establish and manage additional logins and login privileges for Users from his or her organization. The Account Manager will have full access to the organization's Account. Login permissions can be designated to allow view-only access to information or to allow activities such as performing transfers and submitting or updating information. Such privileges can also be further attached to specific Sub-accounts or Projects. This provides Account Holders with significant flexibility when assigning logins. Login setup can be done during the Account registration process or at any time the Account Manager wishes to add additional Users to the Account. The Account Manager will supply contact information for each User as well as designate the login name and password.

NOTE: The Terms of Use shall apply to any person who receives access to an Account from an Account Holder or Account Manager.

Once a login is established, the Registry will send an email with the login name to the login contact specified by the Account Manager. The Account Manager is required to separately communicate the password. Upon logging into the Registry for the first time, the new User will be prompted by the Registry to change his or her password. The new User will then be able to perform the functions or view the information per the permissions granted by the Account Manager. The Account Manager or the Administrator may at any time remove or add permissions to a login by using the Account administration screens.

The My Event Log report tracks and displays all actions performed within the Account by login name and timestamp. Account Managers will have access to the My Event Log report for their Account(s).

5.2   Levels of Account Access

When an Account Manager creates an additional User, the Account Manager assigns one of two levels of access-specific rights:

5.2.1 Account Holder – Supervisor

The User will be able to register Projects, manage RECs and create additional users, if necessary, as allowed by the Account type. The Account Manager can also give the User a subset of these privileges if needed.

5.2.2 Account Holder – View Only

This provides the User with limited view rights, with no ability to make changes to the Account. The Account Manager identifies the specific Sub-accounts and RECs that the User will be able to access and view.

5.3 Confidentiality

As stated in the Privacy Policy and the Terms of Use, certain Account information will be held confidential. Account information will only be used and released in aggregate through the public reporting process.

6 Project Registration

Within the Registry and all related Registry documents, the term "Project" is used to refer to (1) a Renewable Energy Project and (2) an Aggregated Project. A Project is registered by an Account Holder by entering Static Data into the Registry describing the attributes of the Project, subject to the review and approval by the Administrator. Projects that are jointly owned must have a single party, privately appointed among the owners, to act as the Account Holder. Once a Project is approved, dynamic data is independently reported to identify monthly renewable energy generation for which RECs are to be issued, with exception to projects under 1 MW, which can self-report data.

Note that registration with the Registry does not necessarily imply or confer acceptance into or eligibility for any voluntary certification program or any compliance program.

Any Project not approved within the Registry within a year from the time such Project is listed therein shall be deactivated in the Registry, unless a grace period of up to three (3) months is requested by Account Holder and is granted by Administrator. Deactivation does not preclude Account Holder from registering the Project with the Registry at a later date, but until such time as the Project is registered, the Project will no longer be viewable in the Registry.

6.1 Registering a Renewable Energy Project

To ensure that double-counting does not occur, Renewable Energy Projects being registered in the Registry must have 100% of their output tracked by the Registry. If the Renewable Energy Project or the Generating Unit underlying the Renewable Energy Project was registered in another tracking system at any time, the Administrator should be notified of this during the registration process and the Account Holder should be prepared to provide documentation to prove removal from the previous tracking system. Projects seeking to convert carbon

instruments to RECs or pursue Parallel registration with a carbon program may be exempt to this requirement. Details on this process are contained in Section 8.

To register a Renewable Energy Project and its underlying Generating Units, the owner or the Responsible Party[*] must:

- Have an approved Account; [†]

- Submit a completed on-line registration form containing information related to the characteristics of each Generating Unit;

- Submit proof of title and/or additional documentation proving the Account Holder is either the owner of the Generating Unit(s) or has the owner's permission to act as the Responsible Party and register the Generating Unit(s) in the Registry in order to receive RECs; and

- Pay any applicable registration fee.

The Administrator will review the submitted documentation and may require additional documentation to be submitted before a Generating Unit is accepted as a Project. The Administrator will provide country specific registration checklists to prove the project meets the validation checks.

6.2   Multi-Fuel Projects

A "Multi-Fuel Project" is one that is capable of producing energy using more than one Fuel Type, or where there is a requirement to track if power is settled onsite and exported. If fuels are used for start-up and it exceeds 1% of the fuel used monthly on a total heat input basis this must be reported as a separate fuel. Such facilities must register with the Registry as a Multi-Fuel Project. <u>If the relative quantities of electricity production from each fuel cannot be measured or calculated, and verified, the project is not eligible to register in the Registry.</u>

For Multi-Fuel Projects, the owner or Responsible Party is required to indicate the percentage of electricity output coming from each Fuel Type for each period of generation reported. The Registry system will use total electricity output and this percentage to issue fuel-specific RECs for the electricity output associated with renewable generation. Account Holders with Multi-Fuel Projects may be asked by the Administrator to produce documentation supporting the indicated electricity output by Fuel Type. Supporting documentation could include third-party verification reports.

6.3   Small Project Reporting & Aggregation

A group of small Generating Units that are not metered together and do not share the same location but that are located within the same geographic region and otherwise share the same Essential Generating Characteristics can be

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[*] The Responsible Party is an entity to whom the owner of a proposed Renewable Energy Project has given Registration Rights, as described in detail in Section 6.10.

[†] As previously noted in Section 3, Project, General, Retirement and Retail Aggregator Accounts can register Renewable Energy Projects.

registered as an Aggregated Project in the Registry under the following conditions:

- The nameplate capacity of each Generating Unit is less than 250KW;

- The total nameplate capacity of the Aggregated Project cannot exceed 5 MW.

- The Generating Units being aggregated are located in the same geographic region (as determined by the Administrator);

- The Generating Units being aggregated utilize the same Technology/Fuel Type.

If the Generating Units being aggregated became operational in different years, the Aggregated Project will be assigned the oldest operational year.

When registering several Generating Units into one Project (Aggregated Project flag set to "yes"), the Administrator will:

(a) Collect project-level information that is shared across all Generating Units; and

(b) Collect Generating Unit-level registration information for each Generating Unit aggregated in the Aggregated Project

6.4 Additional Requirements for Projects Moving from other Registries

Based on the standard controls APX has in place to ensure against double-counting and our rigorous review for projects, the Administrator will require the following process for projects moving from a different registry applying for approval on the Registry to issue RECs. This applies to all registry tracking systems.

A Project must be delisted from a previous registry before the Administrator can complete the validation process resulting in a Project. Projects seeking to convert carbon instruments to RECs or pursue Parallel registration with a carbon program may be exempt to this requirement. Details on this process are contained in Section 8.

The information that must be provided in order to commence the validation process will include:

a) The name of the registry where Project has been previously registered;

b) Project ID from the previous registry;

c) Date removed/delisted from the previous registry;

d) Evidence of all vintages issued on the previous registry (Upload Registry Report);[*] and

e) Previously generated validation, monitoring and verification reports issued within the last two years that provide documentation suitable to pass the Project validation approval by the Administrator.

The Administrator will confirm all data submitted with any publicly available information. If all details cannot be confirmed publicly, the Administrator will require a letter from the administrator of the prior registry for proper verification of all details before approving the registration in the Registry.

In all cases, the Administrator will communicate with the administrator of the prior registry providing awareness of the proposed move to the Registry with a last date of issuance.

No Project being transferred can be subject to any agreement requiring the sale or transfer of Environmental Attributes by delivery of any instrument representing such Environmental Attributes other than a REC.

RECs can be issued for vintages not more than 24 months prior to the date of Project registration and only if the vintages have not led to issuance of renewable energy credit, carbon offset or similar instruments in the previous registry. All new vintages are issued through the standard REC issuance process.

6.5 Verification of Static Data Submitted During Project Registration

Upon completion of the Project registration process, the Administrator will review attestations, contracts, grid connection forms and other data sources as required for each country to verify the information provided to the Registry by the Account Holder.

In the event data submitted is found to be incorrect or if there is a discrepancy between the information submitted during the on-line registration process and the materials provided to verify the information, the Administrator will notify the Account Holder that the information could not be positively verified. The Account Holder will then be able to revise and resubmit the information. No Project will be accepted unless and until the Administrator is satisfied that the information provided meets the Registry's standards for accuracy.

In some cases, the Administrator may require the Account Holder to contract with a third-party verifier to perform a site visit to further verify information as needed, with the cost borne by the Account Holder.

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[*] If only part of the Verification report was issued under a different registry, the Administrator will accept a letter from the administrator of the prior registry acknowledging the vintages issued and those that will not be issued thereon.

6.6   Updating Static Data

After the initial Project registration in the Registry, Account Holders shall notify the Administrator of any of the following events, each of which have the effect of changing Static Data tracked by the system:

(a) A change in Fuel Type for a Generating Unit, and the date on which the change occurred, within thirty (30) calendar days from when the change is implemented.

(b) A change in Project ownership, and the date on which the change occurred, within thirty (30) calendar days after the change occurs. A change in ownership must be confirmed in a writing signed by both the prior and new owners of the Project and provided to the Administrator. Neither the Registry nor the Administrator will be liable for the issuance of RECs into an Account that no longer represents a Project if the incorrect deposit occurs as a result of a lack of notification by the prior and new owners of the Project.

(c) A change to Project-eligibility for any programs or certification tracked by the Registry. This must be communicated by the Account Holder before any RECs affected by the change are issued or within thirty (30) calendar days after the change occurs.

(d) A change to any of the Essential Generating Characteristics of the Project.

(e) Withdrawal of the Project from the Registry.

(f) Registration in another registry for the purpose of issuing environmental instruments.

6.7   Misrepresentation of Static Information:

Account Holders can be removed from the Registry for cause, which includes without limitation willful misrepresentation of Static Data. The Registry reserves the right to withhold issuing RECs, to freeze an Account associated with a particular Project, or to withhold participation in the Registry for Projects that have misrepresented Static Data.

6.8   Terminating a Project's Participation

If a Project's owner or Responsible Party wants to remove a Project from the Registry, they can do so by notifying the Administrator and specifying the following:

(a) The date the Project should be/will be removed from the Registry;[*]

(b) The Sub-account to which RECs have been deposited (if the usual Account for deposit is being closed as well).

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[*] This is the same as the final date of generation for which RECs are to be issued.

The Registry will issue RECs for a Project up to the date of Project termination as instructed by the Project's owner or Responsible Party. No RECs will be issued for adjustments that occur after the termination date.

If the Administrator has cause to suspend a Project's participation in the Registry, no RECs will be created while such Project is under suspension.

6.9   Changing the Account with Which a Project is Associated

The owner or Responsible Party of a Project can change the Account with which it is associated by notifying the Administrator and providing the information requested, including, but not limited to:

(a) The new Account number with which the Project will be associated;

(b) The date the change will be effective; and

(c) Any documentation required for legal purposes or to meet certification requirements.

RECs from the Project that were created up to the day the Account change takes effect will remain in, or be deposited into, the Account that the Project was associated with at the time the generation occurred. For example, if a Project's owner changes the Account with which the Project is associated from Account A to Account B, and the change is effective on March 1, then the RECs relating to generation that occurred prior to March 1 will be deposited into Account A (even though the date of deposit will likely be after March 1, given the expected time delay between actual generation and REC issuance).

When changing the Account with which a Project is associated, there cannot be any time where the Project is not associated with an Account. If there is such a lapse, this will be treated as a de-listing and re-registration of the Project instead of a change of Account, and the relevant fees will be assessed.

6.10   Responsible Party Designation; Registration Rights

A Project's owner may assign a Responsible Party to an Account Holder for the purposes of allowing that party, the "Responsible Party", the ability to control and manage the disposition of any RECs resulting from the operation of the Project. This assignment will give the designated Account Holder *full and sole* management and authority over the transactions and activities related to the Project within the Registry. For the purposes of the Registry, this Account Holder will be considered the Responsible Party for that Project.

The Registry will require both parties to confirm an assignment of Registration Rights, the date the assignment will be effective and the date the assignment will be terminated, if there is one.

6.10.1 Termination of Registration Rights

Registration Rights may be terminated by either the Project's owner or Responsible Party. Termination of Registration Rights has the effect of

deregistering the Project from the Registry. If the Registration Rights assignment has been terminated, no new RECs will be issued from that Project until it is registered again.

7   Dynamic Data

7.1   Generation Data Requirements for Generating Units

RECs are issued for any renewable energy production that otherwise would have been served by a non-renewable resource if not for the project. The Registry will not create RECs for generation supplying station service (also known as parasitic load) or projects not connected to the grid. Note, projects that supply non-parasitic load connected to the grid are considered grid connected. Data used to issue RECs must be derived from a Revenue-Quality Meter and communicated to the Administrator by a Qualified Reporting Entity unless the generation qualifies to be self-reported under requirements in Section 7.1.8.

7.1.1   Revenue Metering Standards

All Generating Units participating in the Registry must use a Revenue-Quality Meter. For Generating Units that are interconnected to a utility or Control Area Operator, a "Revenue-Quality Meter" is any meter used by the reporting Control Area Operator for settlements/invoicing. The data must be electronically collected by a meter data acquisition system, such as an MV-90 system, or pulse accumulator readings collected by the Control Area's energy management system, and verified through a Control Area checkout/energy accounting or settlements process. The preferred source for the data is a meter data acquisition system. If the Control Area does not have an electronic source for collecting revenue meter data, then manual meter reads will be accepted. Manual meter reads must be performed by a QRE.

For projects that do not go through a Control Area settlements process and that are not Customer-Sited Distributed Generation, the data must be from a Revenue-Quality Meter adjusted to reflect the energy delivered into the transmission grid at the high side of the transformer and communicated to the Administrator by a QRE if the Nameplate Capacity is 1 MW or more. For Customer-Sited Distributed Generation, the original data source for reporting total energy production must be from Revenue-Quality Metering at the AC output of an inverter, adjusted, if applicable, to reflect the energy delivered into either the transmission or distribution grid at the high side of the transformer. In the absence of a meter measuring production as described above (i.e., if there is no meter at the inverter), the original data source for reporting total energy production must be from Revenue-Quality Metering placed to measure only the positive generation flowing to the distribution system on at least an hourly basis, adjusted, if applicable, to reflect the energy delivered into either the transmission or distribution grid at the high side of the transformer. If the Customer-Sited Distributed Generation uses all of the energy produced on site, then no adjustment for transformer losses is needed.

7.1.2 Measurement of Generation and Adjustments

The output from each Project registered in the Registry will be measured at the point of interconnection to the transmission or distribution company's project, or adjusted to reflect the energy delivered into either the transmission or distribution grid at the high side of the transformer. Losses occurring on the bulk transmission or distribution systems after the metering point are not reflected in the RECs created. The Registry will not create RECs for that portion of the generation that is used to supply station service (parasitic load). Generation data must be netted of station service supplied from the project's side of the point of interconnection.

If adjustments are needed, due to metering, reporting, error or any other reason, the Qualified Reporting Entity must report the adjustment as soon as possible to the Administrator. If RECs have not yet been created for the original generation amount to which the adjustment applies, the credit or debit will be posted to the Generation Activity Log, and will be reflected in the number of RECs created that month. If RECs have been created, the adjustment will be treated as a prior period adjustment described in Section 7.1.4 below.

7.1.3 Onsite Generation versus Grid delivered Generation

For wholesale projects also serving onsite loads, the Registry can create RECs for both the onsite load and grid-delivered generation output. Projects who can provide clearly distinguished meter data for both will utilize the Multi-Fuel Type to have RECs distinctly issued for both and marked as an attribute of the RECs.

7.1.4 Prior Period Adjustments

Prior period adjustments can be made by an Account Holder after the data is reported and used to issue RECs in the Registry. The Account Holder will access the Project Output Data Review screens to submit an adjustment to the Administrator. If accepted by the Administrator, the credit or debit to the generation volume reported in the current month will post to the Generation Activity Log. Consequently, the adjustment will be realized when RECs are next issued. If new RECs are created, the vintage of the RECs shall reflect the actual generation period. The Administrator will not accept adjustments for generation reported more than two years prior.

7.1.5 Notification of Adjustments

The Account Holder will be informed of all credit or debit adjustments as soon as the adjustment has been posted to the Generation Activity Log. Once the Registry informs the Account Holder of a need for adjustment, the Account Holder has ninety (90) calendar days to dispute or accept the adjustment. If after ninety (90) days the Account Holder has failed to respond, the Administrator will automatically accept the adjustment.

7.1.6   Data Transmittal

Data files are to be electronically transmitted to the Registry using a secured protocol and a standard format specified by the Administrator. The data shall reflect, at a minimum, the month and year of the generation, monthly accumulated MWhs for each meter ID and the associated meter ID(s) for each resource. The owner of the Project, as the owner of the metered data, or the Responsible Party, has the responsibility to direct the Control Area Operator or utility to release generation data to the Registry.

The data must be transmitted by a single entity, which must be either (1) a QRE or (2) a Self-Reporting Project (See requirements in 7.1.8).

7.1.7   Requirements of Data Reporting Entities

The Registry will accept generation data from QREs and Self-Reporting Projects. The *TIGR Registry Requirements for Qualified Reporting Entities* document describes the terms and conditions under which the QRE agrees to exchange information and conduct business with the Registry. This document identifies the protocols for collection of information such as meter IDs, data format, communication protocols and timing, and security requirements for data collection. The document also outlines the necessary requirement to qualify as a QRE.

7.1.8   Special Requirements for Self-Reporting Projects Only

To qualify for self-reporting, the Project must be under 1 MW nameplate capacity or receive approval due to special circumstances within a supported country. In such a case, a specific protocol for providing material such as metering records and certifications will be developed. A Self-Reporting Project must enter actual cumulative meter readings measured in kWh or MWh and the date of the meter reading via the Self-Reporting Interface. Actual cumulative meter readings must be entered no less frequently than annually. Self-Reporting Projects that do not enter meter readings via the Self-Reporting Interface as required will receive a reminder notice from the Administrator at least annually. A Self-Reporting Project must submit metering records to substantiate generation reporting.

7.1.9   Multi-Fuel Projects

For Multi-Fuel Projects, RECs will be created for the renewable Fuel Type(s) only.[*] Each REC issued for a Multi-Fuel Project will reflect only one fuel source, with the total number of RECs issued for a Fuel Type being proportional to the overall output for that reporting period.

The Project or its associated Account Holder must submit supporting documentation related to the derivation of the proportion of electric output per Fuel Type for each period for which the Project or Account Holder is issued RECs. The Administrator will require copies of such calculations, and supporting

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[*] For example, a coal-fired project that uses 1% of biomass co-firing can be considered a Multi-Fuel Project and have biomass RECs issued in respect of that biomass-fired generation.

documentation may be subject to audit by the Administrator, state regulators, QREs, certification organizations or their agents.

For purposes of creating RECs reflecting the fuel source mix of Multi-Fuel Project, the proportion of RECs attributable to each Fuel Type shall be determined consistent with the following rules:

(a) <u>For biomass co-fired with fossil fuels or using fossil fuels for startup or supplemental firing</u>: In each month, the RECs for each Fuel Type in such Multi-Fuel Project will be created in proportion to the ratio of the net heat content of each fuel consumed to the net heat content of all fuel consumed in that month, adjusted to reflect differential heat rates for different fuels, if applicable.

(b) <u>Other</u>: Multi-Fuel Projects not fitting the descriptions provided by certification organizations should request from the certification organization a decision on allocating output for each Fuel Type for their situation. Such a decision will set a precedent for similarly situated Projects. Any new methodology must be approved by the certification organization and presented to the Administrator prior to RECs being issued for that Project.

In addition, upon registration, all Multi-Fuel Projects must submit to the Administrator a report prepared by an independent professional engineer containing documentation for measuring and verifying the quantities of each Fuel Type, the net heat content of each fuel source, and the heat rate, if applicable.

7.2   Generation Activity Log

Each Project Owner, Retirement, General and Retail Aggregator Account registered in the Registry will have a Generation Activity Log associated with it. The Generation Activity Log is an electronic ledger where generation data is posted prior to REC issuance. Each time data is received by the Registry for a particular Project, the date and quantity of MWhs is posted to the Generation Activity Log. Adjustments received will likewise be posted. The status of each entry in the Generation Activity Log will be noted:

- **System Accepted**: Used for all data that has been reported to the Registry, has passed the Registry's data validity test and has been logged to the Generation Activity Log, but has not yet been accepted or disputed by the Account Holder.

- **Pending**: The Administrator is waiting for the resolution of a situation before RECs can be issued. For example, if the Administrator is waiting to receive a Fuel Type allocation from a Multi-Fuel Project or some other update from an Account Holder.

- **Account Holder Accepted**: The Account Holder has accepted the posted generation, but the RECs have not yet been issued.

- **Admin Accepted**: The Administrator has accepted the posted generation, but the RECs have not yet been issued.

- **Account Holder Disputed**: The Account Holder has disputed the posted amount of generation.

- **Admin Disputed**: The Administrator has disputed the posted amount of generation.

- **RECs Issued**: RECs have been created.

The status of each entry in the Generation Activity Log will be changed consistent with the information received by the Administrator. RECs will be issued based on the total whole number of MWhs on the Generation Activity Log that are marked "Account Holder Accepted" or "Admin Accepted." Any fractional MWhs will be rolled forward until sufficient generation is accumulated for the creation of a REC. Each time an item is posted to the Generation Activity Log, the Account Holder will be notified electronically.

The Generation Activity Log will include the following entries:

(a) Account Holder's Name;

(b) Activity Date;

(c) Registry Project ID for associated data posted;

(d) Activity description identifying Data Submitted, fractional Data remaining, RECs created, etc.;

(e) Reporting Period start;

(f) Reporting Period end;

(g) MWh of generation reported to the Registry during the current month;

(h) Fuel Type;

(i) Status; and

(j) Note (displaying serial numbers or data upload file names).

8   Creation of RECs

8.1   REC Creation

The Registry will issue one REC representing all of the Environmental Attributes for each MWh of renewable energy that is generated by a Project. REC are issued based on the number of whole MWhs listed in the Generation Activity Log for a given reporting period and, once created, no changes can be made to them. Each REC shall have a unique serial number containing embedded codes. The table below identifies the serial number format used in the Registry.

Registry Serial Number Identifiers

Identifier	Display Order	Range of Codes	Comments
Originating Registry	1	TIGR	Used to identify originating registry.
Unit type	2	TIGR = represents 1MWh from a Renewable Generating Unit.	Used to identify instrument type
Project ID	3	1-999999	Unique ID assigned to each Project record in the Registry.
Country	4	2-Letter Country Code	Abbreviation identifying the country in which the renewable energy generation occurred.
Subdivision	5	2-3-Letter Subdivision Code	Abbreviation identifying the more specific political subdivision, if any, in which the renewable energy generation occurred.
Vintage Month	5	01-12	The month in which the renewable energy generation occurred.
Vintage Year	6	2015 as an example	The year in which the renewable energy generation occurred.
Batch Number	7	Numeric value assigned to each batch of RECs created, 1 to 99,999 per originating project per vintage.	
Serial Block Start	8	Numeric values assigned by the Registry from 1 - 999,999,999.	A number to identify the first certificate in a block of RECs.
Serial Block End	9	Numeric values assigned by the Registry from 1 - 999,999,999.	A number to identify the last certificate in a block of RECs.

8.2   Process and Timeline for REC Issuance

Historical generation data can be submitted for Projects for vintages up to two years prior to when the Project was first registered in the Registry in accordance with the online date. Reporting of generation data for vintages after the date when the Project was registered in the Registry has to be completed within two years of when the generation took place.

Once generation data is received by the Administrator and a data validity check is performed by the Registry, it will post in the Account Holder's Generation Activity Log and the Registry will notify the Account Holder via email. The posting will be marked "System Accepted" on the Generation Activity Log. Once the data is accepted by the Account Holder, the generation posting will be marked "Account Holder Accepted." and RECs will be issued immediately. If the Account Holder takes no action, data in "System Accepted" status will result in REC issuance 14 days after the data was reported. The exception to this schedule is if

the generation data is in 'REC Pending' status due to it failing data validation (see Section 9.1 below) or if Multi-Fuel allocations are required.

The Account Holder must notify the Administrator if it believes the generation recorded on the Generation Activity Log is inaccurate for any reason. The Account Holder may register a dispute any time after the generation is posted and will have 14 calendar days to do so. While the generation posting dispute is being resolved, the generation posting will be marked "Account Holder Disputed." If the Account Holder does not register a dispute with the Administrator, the RECs will be created in 14 days.

For Multi-Fuel Projects, RECs will not issue until the Account Holder both accepts the generation data and supplies supporting fuel allocation data. The Account Holder must submit to the Registry the proportion of energy output to be allocated to each Fuel Type. The Account Holder provides the Fuel Type allocation via the Generation Data Review screen located in the Account Holder's Project Management Module. The fuel allocation information will remain available in the Registry for audit purposes. Account Holders must retain for audit the work papers demonstrating how they determined the fuel allocation for each reporting period.

8.3   REC Issuance based on Retirements of Other Environmental Instruments

An Account Holder may request issuance of RECs for a vintage for which other environmental instruments were issued if the following requirements are met:

a) The Project has been registered and approved in the Registry;

b) Evidence that the issued instruments have been retired with the reason "Retired to Issue REC in the TIGR Registry;"

c) Verification report and other supporting documentation for the specific vintage is submitted to the Administrator; and

d) Any instruments previously created as carbon offsets must utilize the verification report's emission factor to convert back the reported verified MWhs of production to the quantity of RECs for issuance, rounding down in all instances.

8.4   REC Issuance for Parallel Registration

Parallel issuance may be allowed under certain tight restrictions. Parallel issuance is defined as a Project being kept Active on another registry but for which the Account Holder requests an original issuance for RECs for a specific vintage which will never be issued in the other registry.[*]

No dual issuance for the same vintage period reported by the third-party verifier will be permitted. A vintage period is defined within the verification report developed for the Project, where there can be one or more vintages within a

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[*] This process is currently only available to projects listed on the APX VCS Registry.

given verification period. For Projects originating in a carbon standard, the verification reports will have a final assessment with a final calculated avoided emissions total for the vintage period(s) contained in the report. These vintage periods can be for a full year, six months or by month. For example, if the verification report spans a year and only has a yearly total of production (i.e., annual vintage), the entire period must be issued on a single registry. For projects utilizing a third party with monthly reporting (i.e., monthly vintage), each month is considered a vintage. Again, only entire vintages can be issued in one registry or another.

8.5   REC Data Fields

Each REC carries a list of data fields. These fields include those listed below and additional fields may be added in the future:

DATA FIELD	COMMENTS
Registry ID	Unique ID assigned to each Project in the Registry.
Project Type	Used to identify if the issuance is based on a Generating Unit.
Project Name	Name of Project.
Primary Project Name	Name of project.
REC Vintage	Vintage of Generation.
REC Serial Numbers	See details above in Section 8.1.
Quantity of RECs	Total RECs.
Meter Data From:	Begin Date of metering period.
Meter Data To:	End Date of metering period.
REC Creation Date:	Date certificates were issued in the Registry.
Project Documents/Attestations: View	Any associated documents (e.g., metering records). These would be made available to any owners of associated RECs issued from the Project.

STATIC PROJECT DATA:	COMMENTS
Country	Country project is located in
Subdivision	Political subdivision (if any) project is located in
Power Grid Interconnection	Listed Power Grid to which site interconnected
Utility to which Project is interconnected	Utility Interconnect
Commenced Operation Date	Date the project commenced operation
Fuel Type/Energy Source	Fuel Type abbreviation
Nameplate Capacity	Nameplate Capacity of project
Reporting Entity Type	QRE or Self-reporting
Reporting Entity Contact Company or Organization name	Name of QRE, if applicable
Repowered Indicator (Y/N)	Denotes whether project is Repowered
Repowered Amount:	Denotes the portion, if applicable, of unit that is repowered
Repower date (required if Repowered Indicator = Y)	Date of repowering

9   Generation Data Errors and Correction

9.1   Generation Data Validity Check

All generation data received by the Registry will undergo an automatic data validity check to ensure that erroneous and technically infeasible data is not entered into the Registry. The data validity check will compare reported electricity production to an engineering estimate of maximum potential production, calculated as a function of technology type, associated maximum capacity factor, Nameplate Capacity, fuel (if relevant) and time period since the previous cumulative meter reading entered. If data entered exceeds an estimate of technically feasible generation, the Administrator will be notified and the generation will be posted to the "Generation Activity Log" report. The Administrator will contact the Account Holder if the generation data entered is infeasible.

9.2   Generation Data Errors Discovered After REC Issuance

Once a REC is created, no changes can be made to that REC. In the event that an error is discovered after RECs have been issued, the Administrator will take measures to rectify the problem depending on the nature and the egregiousness of the error. If the error is related to the number of RECs issued, the Registry Administrator will first attempt to rectify this by making an adjustment to the Generation Activity Log associated with the Project. If the error is found in one of the fields on the REC, the Administrator will handle each situation on a case-by-case basis. Examples of actions that could be taken include, but are not limited to, notifying purchasers of the erroneous RECs, freezing the Account of the offending party, levying an administrative fine or banning participation in the Registry.

10   Reports

10.1 Public Reports

There are four public reports provided by the Registry:

- **Participating Companies:** This report contains a listing of all Account Holders.

- **Summary of REC Issuance:** This report lists the aggregate number of RECs issued in the Registry by Fuel Type, country and year.

- **Listed Projects Report:** This report contains a listing of all Projects in the Registry with eligibility information.

Public reports are accessible to anyone via the Resources page on the Registry's website. It is expected that additional public reports will be added to meet future needs of Account Holders and Program Administrators using the Registry. Public reports are carefully designed to maintain the confidentiality of Account Holder data per the Terms of Use and the Privacy Policy.

10.2 Account Holder Reports

Account Holder reports for a specific Account will only be accessible to the Account Holder, Account Holder's designated Agents and the Administrator. Account Holders can view up-to-date data in these reports at any time. Current reports include:

- **Forward Transfer:** A transfer of RECs arranged in advance to be effectuated on a specific future date.

- **My Account Holder Registration History**. This report provides a list of all the changes to the Account Holder registration data.

- **My Project Registration History**. This report provides a list of all the Projects that have been registered in the Registry and includes the date of registration, the Registry ID and a link to the Project registration screens.

- **My REC Transfers**. This report provides a comprehensive list of REC transfers between Sub-accounts and with other Account Holders in the Registry.

- **My Event Log**. This report lists all of the events that have taken place in the Account.

- **My Generation Activity Log**. This report provides a summary of all REC data loaded into the Registry for all of Account Holder's Projects.

- **My Generation Report**. This report provides a summary of all RECs created in the Registry. It is filtered by vintage year.

- **My Sub-Accounts**. This provides a list of RECs held in the Account's Sub-accounts and allows the Account Holder to filter data by specific Active or Retirement Sub-accounts.

- **Projects by Status**. This report provides a comprehensive list of an Account Holder's Projects, listing the Projects by status and summarizing data such as Fuel Type. This report also provides links to the transfer screen for each block of RECs.

- **Retirement Compliance Report**. The Retirement Compliance Report provides Account Holders the ability to view all RECs Retired to each certification program and an effective date of Retirement. This report can be provided to third parties wanting to verify Retirement of RECs.

11   Data Security

The following are a minimum set of security practice requirements for the Registry to ensure data integrity and confidentiality:

(a) Secured web portal interface with password protection for Static Data collection, User access and reporting.

(b) Restricted access privileges based on participant and User roles using digital certificates.

(c) Well-defined system backup and recovery processes.

(d) Secured file transfer and data upload processes using encrypted communications for all data interfaces.

Appendix A: Fuel Types[*]

ABBREVIATION	FUEL TYPE/GENERATION TECHNOLOGY
BAM	Biogas - Agricultural Methane
BAP	Biomass Combustion - Agricultural Products
BAW	Biomass Combustion - Agricultural Waste
BCA	Biomass Combustion - Animal Waste
BGA	Biogas - Animal Waste
BGW	Biogas - Wastewater Methane
BLB	Biogas - Liquid Biofuels
BLF	Biogas - Landfill Methane
BML	Biomass Combustion - Liquid Biofuels
BA1	Biomass – Animal Waste - Swine Waste, Solid or Gas
BA2	Biomass – Animal Waste - Poultry Waste, Solid or Gas
BWP	Biomass Combustion - Wood Products
BWW	Biomass Combustion - Wood Waste
CO1	Coal (used for Multi-Fuel Projects; will not create RECs)
DI1	Diesel (used for Multi-Fuel Projects; will not create RECs)
FC1	Fuel Cells using Hydrogen derived from fossil fuels (used for Multi-Fuel Projects; will not create RECs)
GE1	Geothermal Energy
H2O	Hydroelectric Water - Dam/Impoundment
HRR	Hydroelectric - Run-of-River
HTI	Hydroelectric – Tidal
HWA	Hydroelectric - Wave power
HYD	Fuel cells using hydrogen derived from renewables
JET	Jet Fuel (used for Multi-Fuel Projects; will not create RECs)
MS1	Municipal solid waste
NG1	Natural Gas (used for Multi-Fuel Projects; will not create RECs)
OIL	Oil (used for Multi-Fuel Projects; will not create RECs)
SCP	Concentrated Solar Power
SO1	Solar Photovoltaics
SOL	Solar Serving On-Site Load
WND	Wind

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[*] Additional Fuel Types may be added in the future.

Appendix B: List of Referenced Documents

Terms of Use – http://tigrs.apx.com

Fee Schedule – http://tigrs.apx.com

Designation of Responsible Party – http://tigrs.apx.com

Requirements for Qualified Reporting Entities – http://tigrs.apx.com

Appendix C: Glossary

Account: An Account is an account in the Registry.

Account Holder: An Account Holder is a party that has registered with the Registry and has established an Account therein.

Account Manager: The administrator for an Account Holder's Account, having the ability to, among other things, setup and manage additional logins and login privileges for Users.

Active Sub-account: A Sub-account of an Account Holder's Account where Active RECs are held.

Active RECs: A REC that is held in an Active Sub-account. Such RECs may be transferred or Retired by the Account Holder of the Active Sub-account.

Administrator: The entity with the authority to administer or oversee the administration and implementation of the Registry and these Operating Standard. APX, Inc. serves as the Administrator of the Registry.

Aggregated Project: A group of small (250 kW or less) Generating Units share the same location but that share the same essential generating characteristics and that are grouped into one Project.

Aggregator Exception: The authorization under Section 5(b) of the Terms of Use allowing an Account Holder holding a General Account or Retail Aggregator Account to Retire RECs on behalf of a Beneficial Owner in a Group Retirement Sub-account.

Project: A Project can be a single-sited Renewable Energy Project or an Aggregated Project registered by an Account Holder in the Registry.

Project Name: The name assigned to a Project when it is registered in the Registry.

Project Owner Account: This type of Account can register Projects and have RECs issued to it for its Projects. A Project Owner Account can hold, transfer (only outgoing transfers), withdraw and Retire RECs. A Project Owner Account cannot receive REC transfers from other Accounts.

Beneficial Owner: A party having Beneficial Ownership Rights in one or more RECs held in an Account Holder's Group Retirement Sub-account.

Beneficial Ownership Rights: With respect to any REC, Beneficial Ownership Rights means (i) any contractual or other right to direct or control the sale or other disposition of, or the Retirement of, such REC or (ii) any economic interest in such REC, including without limitation any contractual or other right to receive any proceeds from the sale or other disposition of such REC.

Listed Projects Report: A public report listing all registered Projects within the Registry.

Certification Programs: Voluntary initiative that has set criteria for what qualifies for its program.

Compliance Program: A program administered by a governmental entity or other regulator that requires load serving entities to generate, purchase and/or sell a certain amount of renewable energy.

Control Area: An electric system or systems, bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other systems and contributing to frequency regulation of the interconnection. For the purposes of this document, a Control Area is defined in broad terms to include a transmission system and market and load-serving functions within a single organization.

Control Area Operator: The operator of a Control Area. May be a system operator, a transmission grid operator or other similar entity.

Corporate Retirement: A type of Group Retirement used for Retirements on behalf of a single, large-scale Beneficial Owner.

Customer-Sited Distributed Generation: Generation interconnected behind a retail customer meter and therefore not directly interconnected with either the distribution system or transmission system (including net metered facilities).

Dynamic Data: Variable information that is associated with a specific Project, such as date of generation and MWhs produced.

Environmental Attributes: Any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, arising from the perceived environmental benefits of generation from a Project and its displacement of conventional energy generation.

Fuel Type: Designates the type of fuel used to fire a Generating Unit being registered with the Registry.

Generating Unit: A project, boiler, turbine, inverter or other prime mover operated to produce electric power.

Generation Activity Log: An electronic ledger where generation is posted prior to REC creation.

General Account: This type of Account can hold, transfer (outgoing and incoming), and Retire certificates. A General Account can also register and maintain Projects and have REC issued to it for its projects. A General Account can hold a Group Retirement Sub-account or Retire RECs for any Compliance Program utilizing the Registry.

Group Retirement Sub-account: A Retirement Sub-account used to designate RECs being Retired by an Account Holder on behalf of one or more Beneficial Owners.

Inbox: Registry Module displaying incoming REC Transfers awaiting acceptance by account holder. REC transfers to an Account Holder are first posted in the Account Holder's Inbox. The Account Holders will then either accept or reject the

transfer. Upon acceptance the RECs will be deposited in the Active Sub-account designated by the Account Holder.

Load-Serving Entity (LSE): Any organization selling retail electricity to end users, such as investor owned utilities, municipal utilities, and electric coops. Sometimes referred to as an "electric service provider."

Megawatt-hour (MWh): One thousand kilowatt-hours or 1 million watt-hours.

Multi-Fuel Project: A Project capable of producing energy using more than one Fuel Type, excluding fuels used for start-up (which in any case cannot exceed 1% of the fuel used annually on a total heat input basis). See Section 6.2 above.

Nameplate Capacity: The maximum rated output of a Generating Unit under specific conditions designated by the manufacturer. Size classification is based on Nameplate Capacity.

Outbox: Registry module displaying outgoing REC Transfers that are awaiting acceptance by counterparty.

Participating Companies Report: A public report listing Account Holders registered with the Registry.

Privacy Policy: The Privacy Policy, located at http://tigrs.apx.com, providing the terms on which the Administrator will protect the privacy of information provided by Account Holders.

Program Administrators: Administrators of Compliance and Certification Programs. Program Administrators can have a Program Administrator Account.

Program Administrator Account: Account type provided to administrators of Compliance and Certification Programs that utilize the Registry and/or have eligibilities noted for certain RECs.

Retail Retirement: A type of Group Retirement used to aggregate Retirements carried out on behalf of smaller Beneficial Owners.

Qualified Reporting Entity (QRE): An entity reporting meter reading and other generation data to the Administrator. Qualified Reporting Entities may include Control Area Operators and other independent parties accepted by the Administrator, and for certain Customer-Sited Distributed Generation, the generation owner or customer. The protocol for such reporting is outlined in the Requirements for Qualified Reporting Entities document.

Qualified Reporting Entity (QRE) Account: An Account Holder with a QRE Account is assigned to a Project and is responsible for verifying generation information from that Project.

Registration Rights: The right to register a Project in the Registry. These rights are held by the owner of a Project or by an entity that has been designated as a Responsible Party for such Project.

Registry: The TIGR Registry℠**.**

Renewable Energy Project: One or more Generating Unit(s) that share one intertie with the distribution/transmission grid and are registered in the Registry.

Renewable Energy Certificate (REC): A REC issued in the TIGR Registry℠ represents all of the Environmental Attributes from one MWh of electricity generation from a Project. The Registry will create one REC per MWh of independently verified generation that occurs from a Project.

Responsible Party: An Account Holder who has been assigned the Registration Rights for a given Project.

Retail Aggregator Account: Account type for Account Holders seeking to Retire RECs on behalf of third parties.

Retire, Retirement of RECs, or **Retirement**: An action taken to remove a REC from circulation within the Registry.

Retirement Account: Account type for Account Holders used by Account Holders that are purchasing RECs solely for purposes of Retiring the RECs on their own behalf.

Retirement Sub-account: A Sub-account used as a repository for RECs that the Account Holder wants to designate as Retired and remove from circulation.

Revenue-Quality Meter: As defined in Section 7.1.1 above.

Self-Reporting Project: A Customer-Sited Distributed Generation installation with a Nameplate Capacity of less than 1 MW that elects to have Dynamic Data transmitted to the Administrator via the Self-Reporting Interface.

Self-Reporting Interface: A standard internet-based data entry portal which serves as the method for a Self-Reporting Project to communicate Dynamic Data to the Administrator pursuant to Section 7.1.8 above.

Static Data: Static data describes the attributes of a Project. Static information generally includes information related to the characteristics such as technology type, ownership or location.

Station Service: The electric supply for the ancillary equipment used to operate a generating station or substation. Also known as parasitic load.

Terms of Use: The Terms of Use, located at http://tigrs.apx.com, that are applicable to each Account Holder and that govern the relationship between Account Holders and the Administrator.

TIGR Registry℠: The Tradable Instrument for Global Renewables (TIGR) Registry is an online platform for tracking and trading RECs. The Registry enables developers to generate, verify, and sell RECs. It allows buyers to source RECs anywhere in the world while managing all projects in a single online portal.

User: Any party that has been granted access by an Account Holder to "use" its Account, which may include viewing information, performing transactions and changing personal information. The Account Holder may at any time revoke the

permissions granted to a User. The Registry will be able to track the specific activities of each User through the User's unique login and password.