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# Ontario Clean Energy Credit Registry Program

## User Guide

June, 2024

Issue Number: Aligned with M-RETS Operating Procedure February 2024 version posted on the [M-RETS Registry Documents website](#)

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# 1. Overview

The following topics are covered:

- Overview of M-RETS
- Overview of the Ontario Clean Energy Credit Registry Program
- Eligible Participants
- Organization Registration
- Overview of Multifactor Authentication (MFA)
- Fee Structure
- Generator Registration
- Generation Data
- Participating in the Ontario Program
- Credit Management
- Active Accounts
- Retirement Accounts
- Credit Transactions

## 2. Overview of M-RETS

M-RETS Inc. is a 501c4 non-profit that created and operates the M-RETS Tracking Platform, an industry-leading renewable resource tracking system that tracks and manages the activity of a diverse variety of environmental attributes and other energy commodities. M-RETS has been in operation since 2007 and tracks Renewable Energy Credits (REC), Clean Energy Credits (CEC), Alternative Energy Credits (AEC), and Renewable Thermal Credits (RTC) for any eligible generator located in North America. The M-RETS Renewable Energy Tracking Platform issues Clean Energy Credits (CECs) for the Ontario Clean Energy Credit Program for every MWh of clean energy generation.

M-RETS is committed to developing innovative data solutions for our stakeholders. Our data tracking tools help to accurately measure emissions reductions across the energy economy and facilitate renewable energy claims for Compliance and Voluntary markets. Our innovations have been developed in collaboration with key stakeholders and industry leaders across the world. We have implemented the ability to track beyond Environmental attributes through Alternative Energy Credits; beyond the monthly generation with the implementation of hourly Granular Credits; and beyond electric generation with the implementation of the Renewable Thermal Credit Tracking System. M-RETS is excited to partner with the IESO in the development of the Ontario Clean Energy Credit Registry Program to track Environmental Attributes associated with the generation and consumption of clean electricity within the province of Ontario!

The M-RETS Tracking Platform covers many programs across North America including Canada. Some innovations and features available in the M-RETS Platform will not be applicable to all users. Refer to Appendix E: Ontario Program Rules for guidance on the features available to Ontario Participants. Some of the Recent Innovations M-RETS has made available to our users include:

### 2.1 Innovation: Alternative Energy Credits

M-RETS has expanded to track Alternative Energy Credits for resources like Nuclear. Alternative Energy Credits allow fuel sources that are not considered renewable to be tracked and certified if they have environmental attributes the market or specific regulatory programs need to meet market demand or legal requirements. Ontario includes Nuclear as eligible for the Program. All Nuclear generation will issue Alternative Energy Credits which can be used for compliance with the Ontario program.

### 2.2 Innovation: Hourly Granular Credits

M-RETS has been actively implementing Hourly Data Tracking, Data Analytics, and Granular Credit tracking in multiple phases. The first phases involved completing the necessary steps to track hourly data, enabling Organizations to submit hourly claims with monthly vintage retirements, and providing data analytics with visualizations on data curves and on-peak vs off-peak data. All of these features are available in the M-RETS Tracking System prior to the launch of the Ontario Clean Energy Credit Registry.

By integrating hourly data, M-RETS is helping users ensure that each hour of their operations matches the actual renewable energy produced at that time. This level of accuracy is crucial when accounting for renewable energy use, making hourly generation data more reliable than traditional methods.

As consumers expand their carbon-free energy initiatives, greater access to data will allow organizations to make more informed decisions to lower their carbon emissions.

## 2.3 Innovation: Renewable Thermal Credit

The M-RETS Renewable Thermal Tracking System issues one Renewable Thermal Credit (RTC) for every dekatherm (Dth) of Renewable Thermal generation that represents environmental attributes associated with the production of that thermal energy sources such as Renewable Natural Gas, Green Hydrogen, ground source heat pumps, sewer/wastewater heat recovery, combined heat and power used for industrial processes and many more existing and developing renewable thermal technologies. An RTC can also include optional verified carbon intensity data and track full or partial carbon lifecycles.

RTCs are not associated with electric generation and are not tied to requirements under the Ontario Clean Energy Program. The RTC system tracks thermal and alternative fuel generation using a stand-alone subscription where projects can be registered and RTCs can be managed. Contact the M-RETS Administrator if your organization would like to explore alternative ways to decarbonize your portfolio through your renewable fuel and thermal generation production.

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## 3. Ontario Clean Energy Credit Registry Program

The IESO, acting on instructions from the Province of Ontario, established a Program within the M-RETS Tracking System for its voluntary Clean Energy Credit Registry for the generation and consumption of clean electricity within the province of Ontario pursuant to the provisions of Part II.1 of the Electricity Act. In March of 2023, Ontario participants wishing to participate in the Ontario Program must register with the M-RETS Tracking System.

All Ontario Generators registered by the Owner or assigned to a Designated Responsible Party, may be registered in an M-RETS General Account Subscription. The IESO Ontario Clean Energy Credit Registry Program Administrator will invite all Ontario Participants to participate in the "Ontario Clean Energy Credit Registry Program". All Ontario participants must retire Credits into a Retirement Account that is linked to the Ontario Clean Energy Credit Registry Program.

The following sections will cover program requirements in more detail.

### 3.1 Eligible Participants

Ontario Participants must register in M-RETS with a General Account Subscription. There are 2 types of Participants in the Ontario program:

- Ontario Generator owners or their Designated Responsible Parties registered in M-RETS to sell the CECs to organizations with Ontario Load. This type of user is referred to as an Ontario Transferor
- Ontario participants who purchase or acquire Clean Energy Credits from the generator owners. This type of user is referred to as an Ontario Transferee.

All Participants must register an M-RETS General Account Subscription for their Organization and disclose in the registration that they are an Ontario program participant and whether they are retiring credits towards their load.

The M-RETS System Administrator will provide the IESO Program Administrator with the contact information for all Ontario Participants. Each Ontario Participant can expect to receive an invitation to participate in the "Ontario Clean Energy Credit Registry Program" within their M-RETS Dashboard after the Organization Registration is approved.

## 3.2 Organization Registration

Ontario Program Participants are required to register a General Account subscription.

General Account Subscription

This type of organization can

- o Register and maintain generators
- o Manage credits, which means they can hold, transfer, and retire credits
- o Participate in the Ontario Program
- o The General Subscription is charged an annual fee

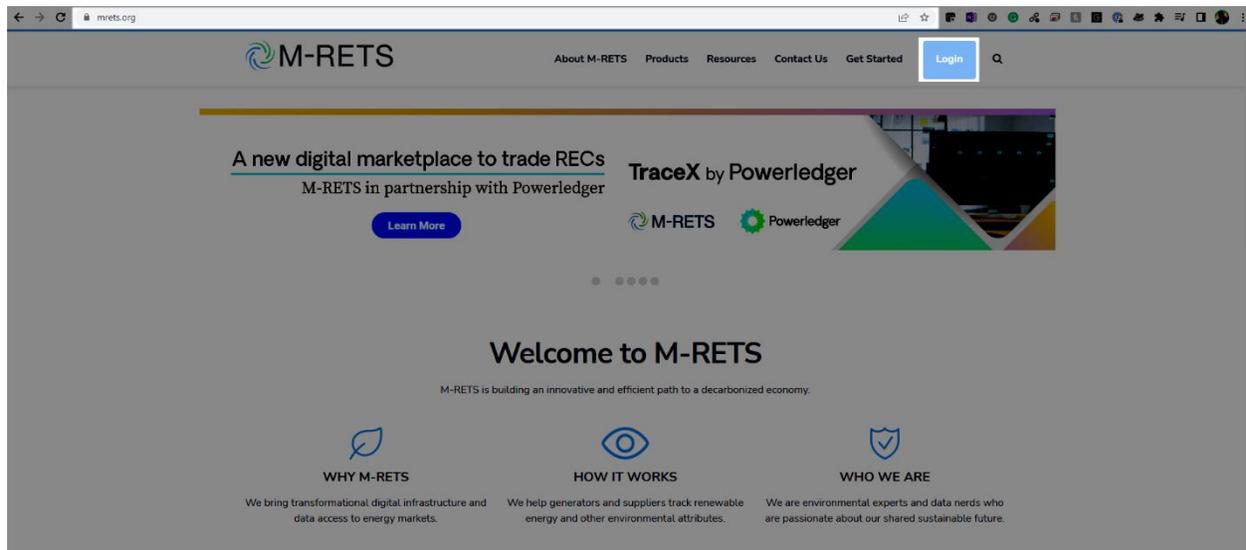
## 3.3 Registration Process

The M-RETS Organization Registration process can be completed in several straightforward steps:

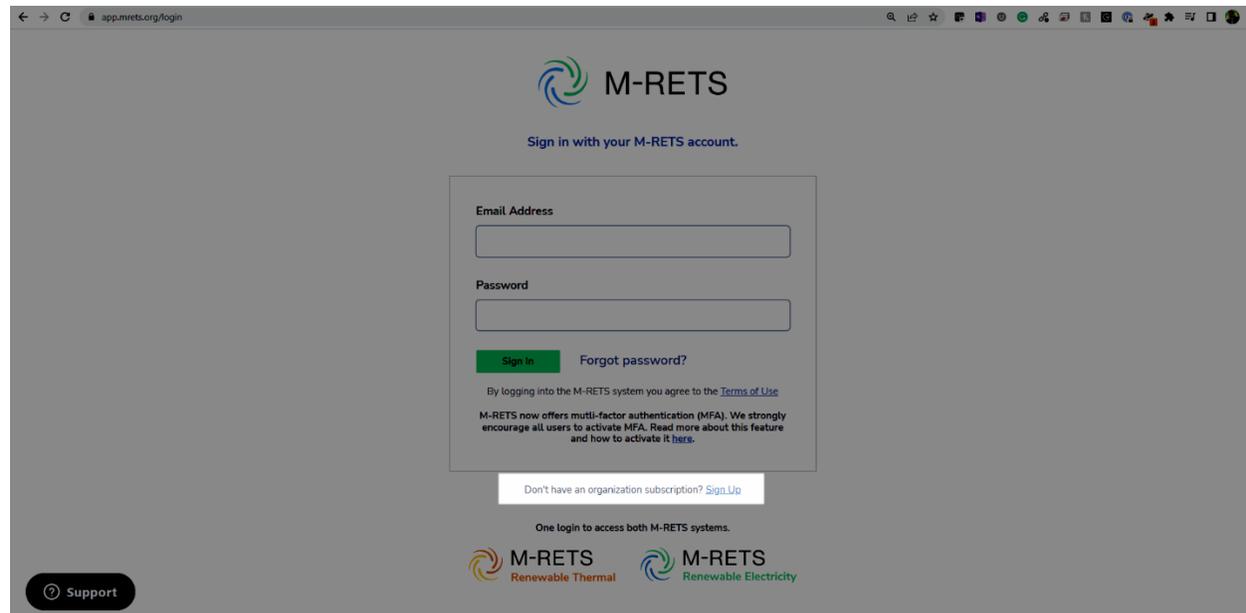
### 3.3.1 Registration Process: STEP 1 -- Initiate the online registration

- o Initiate the registration by visiting the M-RETS application page. The URL address is [WWW.MRETS.ORG](http://WWW.MRETS.ORG)

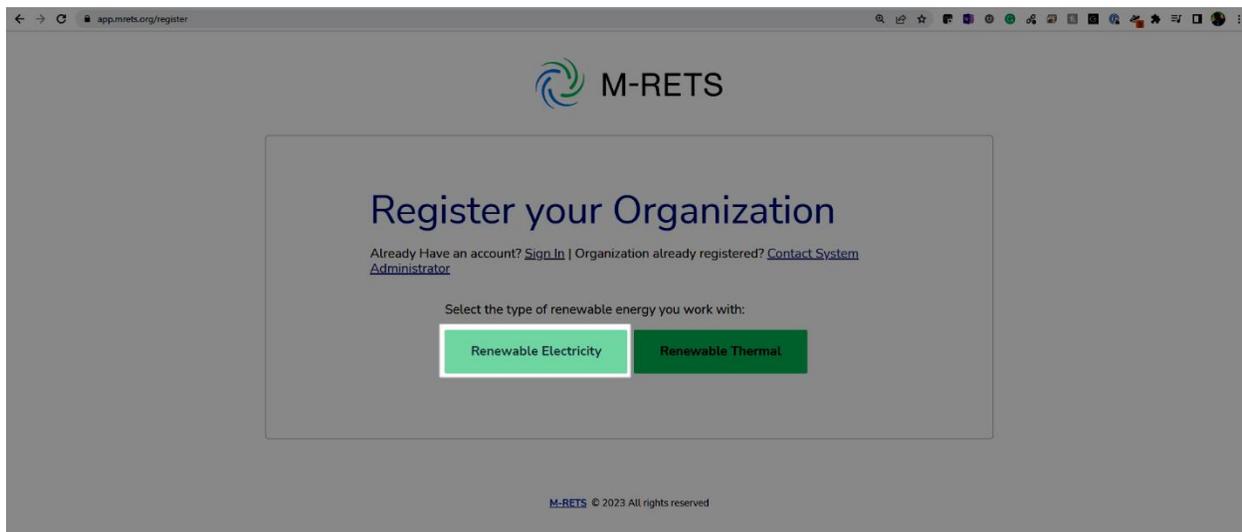
o Select the Login button



o If you do not have a registered organization, select the signup link to fill out the Registration form.



o Select the type of renewable energy system you would like to work with. Participants in the Ontario Clean Energy Credit Registry shall register in the M-RETS Renewable Electricity System



### 3.3.2 Registration Process: STEP 2: Complete the Online Registration Form

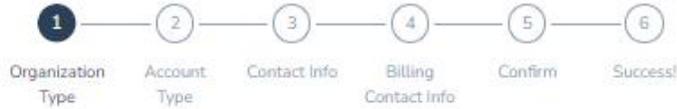
#### Organization Type:

- o Select the Organization type that best describes your organization
- o Complete the Name and email address fields for the account manager.
- o The 'Account Manager' name and e-mail needs to be a real individual;
- o Sharing M-RETS logins is prohibited under the Operating Procedures and Terms of Use. M-RETS permits the organization to set up an unlimited number of users to access the account.
- o The Ontario Clean Energy Credit Program permits the all Organizations except for the Program Administrator and Qualified Reporting Entities

For market participants with generating facilities under contract with the IESO, please reach out to the IESO at [contract.management@ieso.ca](mailto:contract.management@ieso.ca) to confirm ownership of the environmental attributes and eligibility to participate in the Ontario CEC program.

# Register your Organization

Already Have an account? [Sign In](#) | Organization already registered? [Contact System Administrator](#)



What type of organization are you registering? \*

- Renewable Energy Generator or Marketer
- Voluntary Market Participant
- Cooperative Utility
- Investor-Owned Utility
- Municipal or Crown Utility
- Public Interest Organization
- Qualified Reporting Entity (QRE)
- Program Administrator/State or Provincial Regulator
- Other

Do you participate in the Ontario Program? Please see the [IESO website](#) for further information.

- Yes
- No

Have you read the [Ontario Program Rules](#) ?

- Yes
- No

Do you intend to retire certificates against load? ⓘ

- Yes
- No

If you intend to register as an Ontario Transferee, do you have a customer account with the IESO or Distributor Account with respect to your consumption of electricity in Ontario?

- Yes
- No

First Name \*

Last Name \*

Email address \*

Email address confirmation \*

Back

Continue

## Account Type

- o Select the Subscription Level
- o The Ontario Clean Energy Credit Registry Program requires Ontario Participants to register with a General Account subscription

The screenshot shows the M-RETS registration process at Step 2, 'Account Type'. The progress bar indicates that 'Organization Type' is complete, and 'Account Type' is the current step. Below the progress bar, the user is asked to 'Select the M-RETS account type you would like to setup\*'. There are four radio button options: 'Generator Account' (\$550 per year), 'General Account' (\$2200 per year), 'Market Administrator' (No Fee), and 'Regulator' (No Fee). The 'General Account' option is currently selected. At the bottom, there are 'Back' and 'Continue' buttons.

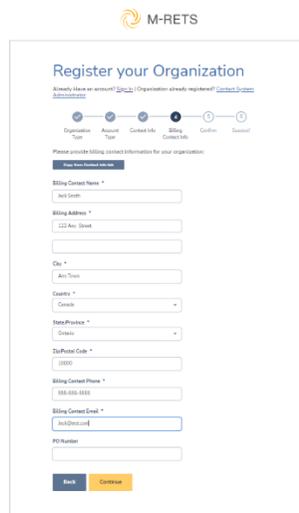
## Contact Information

- o Complete your Organization's contact information

The screenshot shows the M-RETS registration process at Step 3, 'Contact Information'. The progress bar indicates that 'Organization Type' and 'Account Type' are complete, and 'Contact Info' is the current step. Below the progress bar, the user is asked to 'Please provide contact information for your organization:'. The form contains several fields: 'Contact Name \*', 'Title or Role \*', 'Organization Name \*', 'Address \*' (with two input lines), 'City \*', 'Country \*' (with a dropdown menu), 'State/Province \*' (with a dropdown menu), 'Zip/Postal Code \*', 'Phone \*', and 'Website' (with a link icon). At the bottom, there are 'Back' and 'Continue' buttons.

## Billing Contact Information

- o Complete your Organization's Billing contact information



The screenshot shows the M-RETS registration process. At the top, the M-RETS logo is displayed. Below it, the heading "Register your Organization" is followed by a progress bar with six steps: Organization Type, Account Type, Contact Info, Billing Contact Info (which is the current step), Confirm, and Success. The current step contains a form with the following fields: Billing Contact Name, Billing Address (with a sub-field for "222 Ave. Street"), City, Prov, Country, Zip/Postal Code, Billing Contact Phone, and Billing Contact Email. A "PCH number" field is also present. At the bottom of the form are "Back" and "Continue" buttons.

## Confirm the registration information is accurate

- o Select the acknowledgment that states:

"submitting this registration form will result in the establishment of an official registered subscription in M-RETS. I agree to pay the above registration fee within 30 days of receiving the invoice. If not paid in this time, I understand my subscription will be canceled."

### 3.3.3 Registration Process: Step 3: Administrator Review

The M-RETS System Administrator will review the registration and perform our Know-Your-Client (KYC) check before approving the registration. The Administrator review can take up to a week to complete. Review times can vary depending on the number of registrations in our pipeline. Please contact the M-RETS Administrator if you have questions about your pending registrations. The KYC check includes:

- o A review of incorporation documents
- o A Review of the Organization's website
- o A review of the Organization and Account Manager's LinkedIn profiles and;
- o A review of the Office of Foreign Assets Control (OFAC) Sanction List

If the MRETS System Administrator cannot verify the organization or is unsatisfied with the documentation publicly available, the Organization may be asked for additional information including, but not limited to:

- o A Board Resolution or other appropriate authorization document stating that the applicant has been chosen to open an account with M-RETS and that the Account Manager listed on the application is duly appointed and authorized to accept the Terms of Use

**M-RETS**

## Register your Organization

[Already Have an account? Sign In](#) | [Organization already registered? Contact System Administrator](#)

Organization Type Account Type Contact Info Billing Contact Info Confirm Success

**Registration & Organization Information:**

Name: Jack Smith  
Email: Jack@test.com  
Organization: Third Organization  
Organization Type: Renewable Thermal Generator or Marketer  
Subscription Level: General Account  
Subscription Fee: 2200

**Contact Information:**

Name: Jack Smith	Name: Jack Smith
Job Title: Manager	Phone: 555-555-5555
Phone: 555-555-5555	Email: Jack@test.com
Address: 123 Any Street	Address: 123 Any Street
Postal Code: 10000	Postal Code: 10000
City: Any Town	City: Any Town
State/Province: ON	State/Province: ON
Country: Canada	Country: Canada
Website:	PO Number:

I acknowledge that submitting this registration form will result in the establishment of an official, registered subscription in M-RETS. I agree to pay the above registration fee within 30 days of receiving the invoice. If not paid in this time, I understand my subscription will be cancelled.

**Back** **Submit**

- o A government-issued identification document with a photograph for the Account Manager (e.g., a Passport).
- o Schedule C: Designation of Agency

The Account Manager will receive an email when the Organization Account has been approved.

## 4. Overview of Multifactor Authentication (MFA)

After an Organization subscription has been established, it is recommended that the account manager set up Multifactor Authentication (MFA). M-RETS provides security for Users and Organizations by providing Multi-Factor Authentication (MFA). This feature is available to all users. Multi-factor authentication (MFA) works by combining "something you know" (i.e., your credentials) with "something you have" (i.e., a time-based one-time password retrieved via a trusted mobile device) to gain access to a system.

MFA is an opt-in process for Organizations. The M-RETS MFA supports receiving the MFA key via SMS, authenticator app, email, or phone call. If you have any questions on setting up your MFA, please contact the M-RETS System Administrator.

Multi-factor authentication has rapidly become a security best practice, and we want to encourage all organizations and users to consider opting into its use. MFA protects against the risks associated with compromised passwords by adding a layer of security to system authentication. The reality is that employees do fall for phishing scams, and they do share passwords. If you're not using multi-factor authentication (MFA), your organization is wide open to attacks. A vast, if not one of the biggest, security threat today is the risk of compromised credentials.

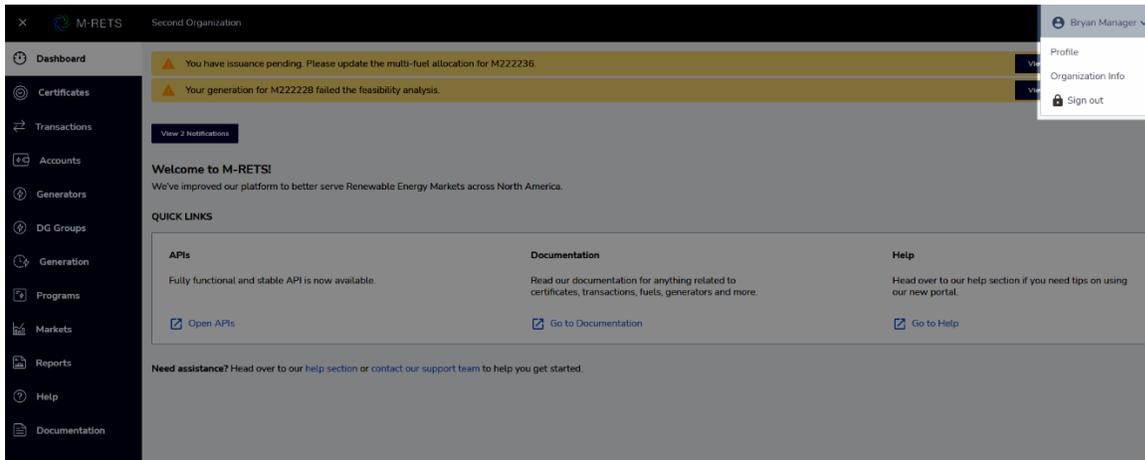
Authy is a [two-factor authentication](#) service for mobile devices and computers. It is used as a smartphone application that pairs with your online accounts. Once connected, Authy sends an [SMS](#) message containing a 6-digit code to your [Android](#) or [iOS](#) device to access your online accounts.



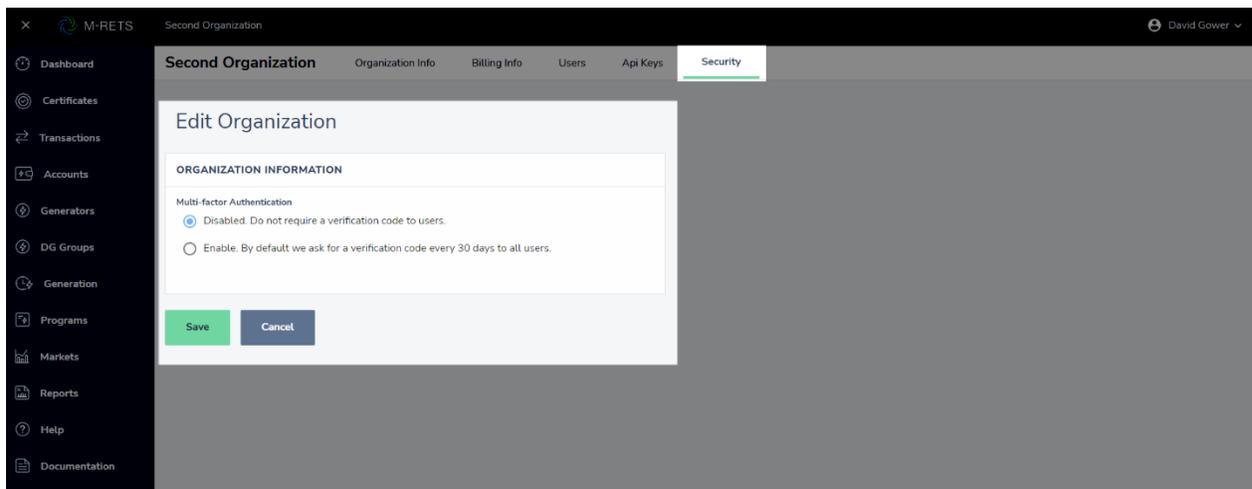
Please note that sharing logins is prohibited under the M-RETS TOU. Sharing logins that are set up with MFA may result in being locked out of the account. The Account Manager should invite additional users to the Organization's account if multiple people need to access the account.

### 4.1 How to Turn On Multifactor Authentication (MFA)

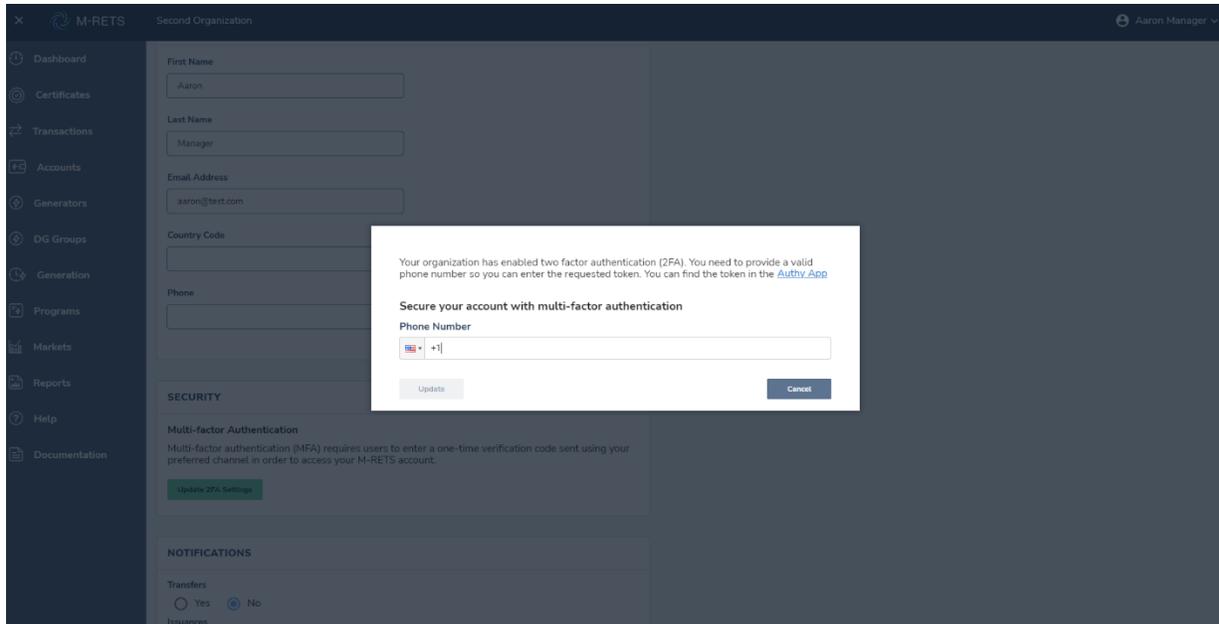
Multifactor Authentication must be activated for the Organization by a User with Manage Organization Permissions. The Organization's Multifactor Authentication can be activated by selecting your name in the upper right corner. Select the Organization Info



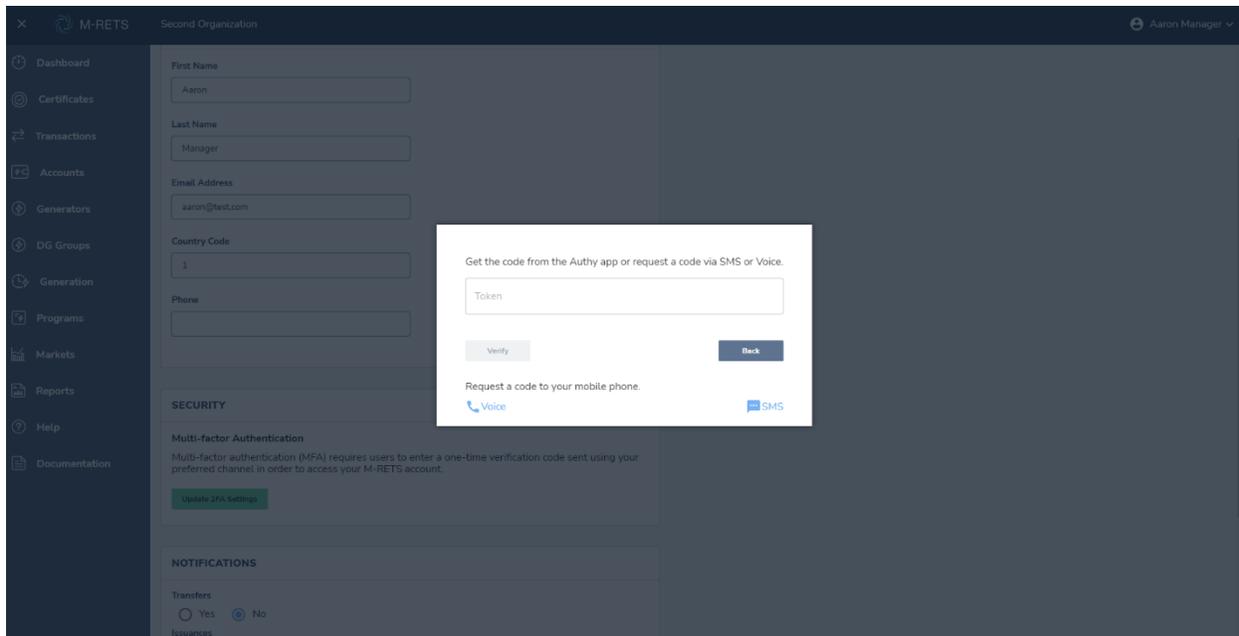
The Security tab is where the Organization can enable the Multi-factor authentication (MFA) for all users that access the Organization.



Once the Organization has Enabled MFA for all users accessing the Organization's MRETS account, the User can login and set up their MFA from a pop up screen that will be displayed.

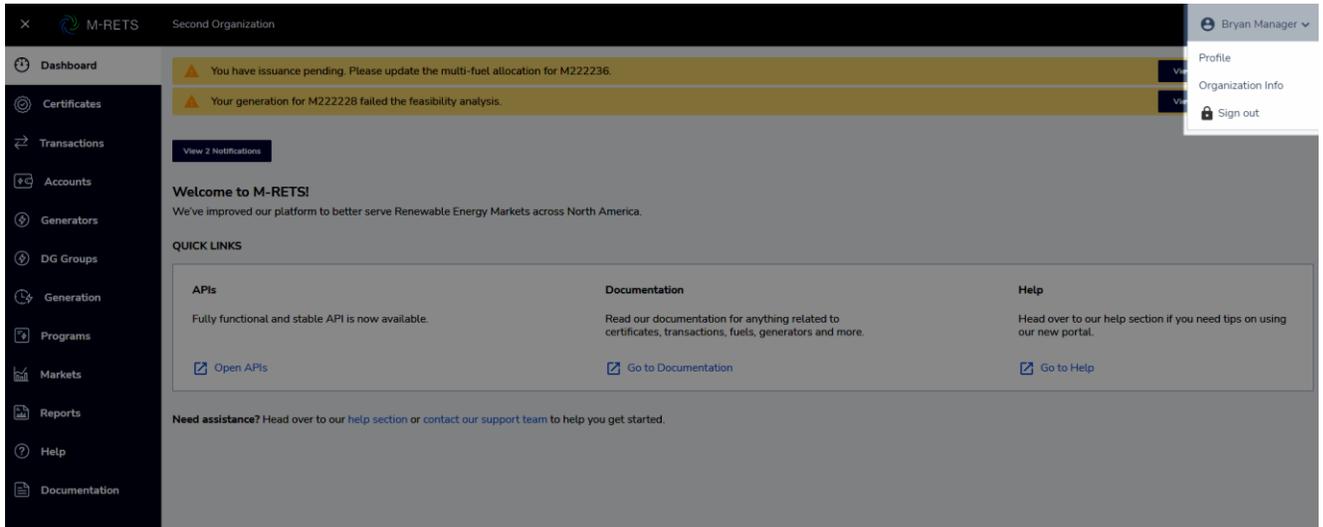


The user will be asked to enter a Token from the Authy App associated with the user's phone number. Tokens can also be provided via SMS Text message or phone call using the links provided in the popup.

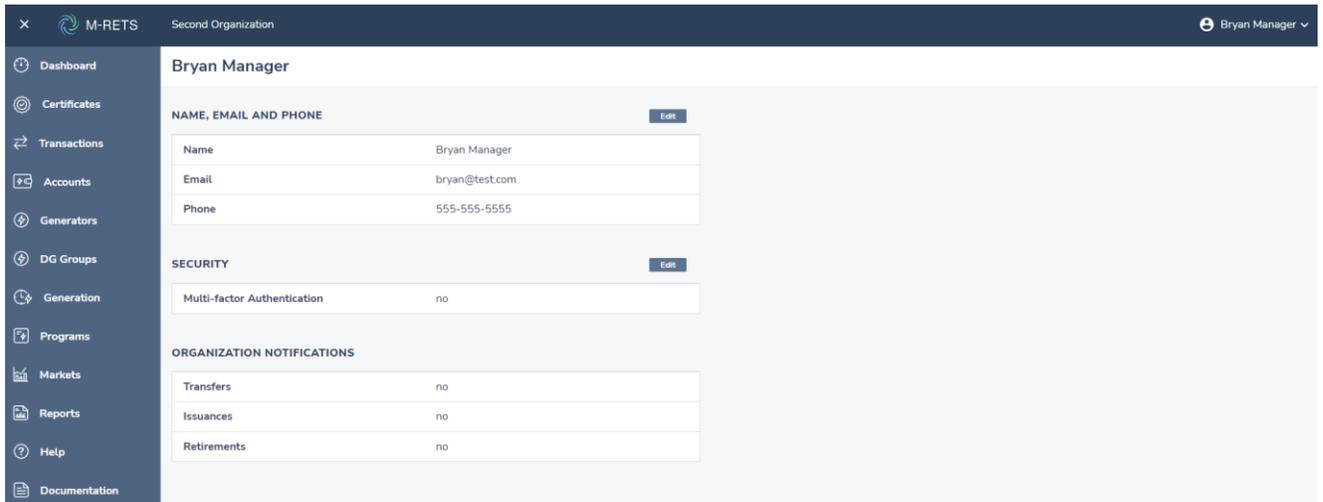


## 4.2 Organization Management > Profile

M-RETS provides Users access to review their User Profile using the dropdown from their name located in the top right of the Dashboard. Select 'Profile' to Edit the User Profile information, set up User Multifactor Authentication and User Notification Preferences.

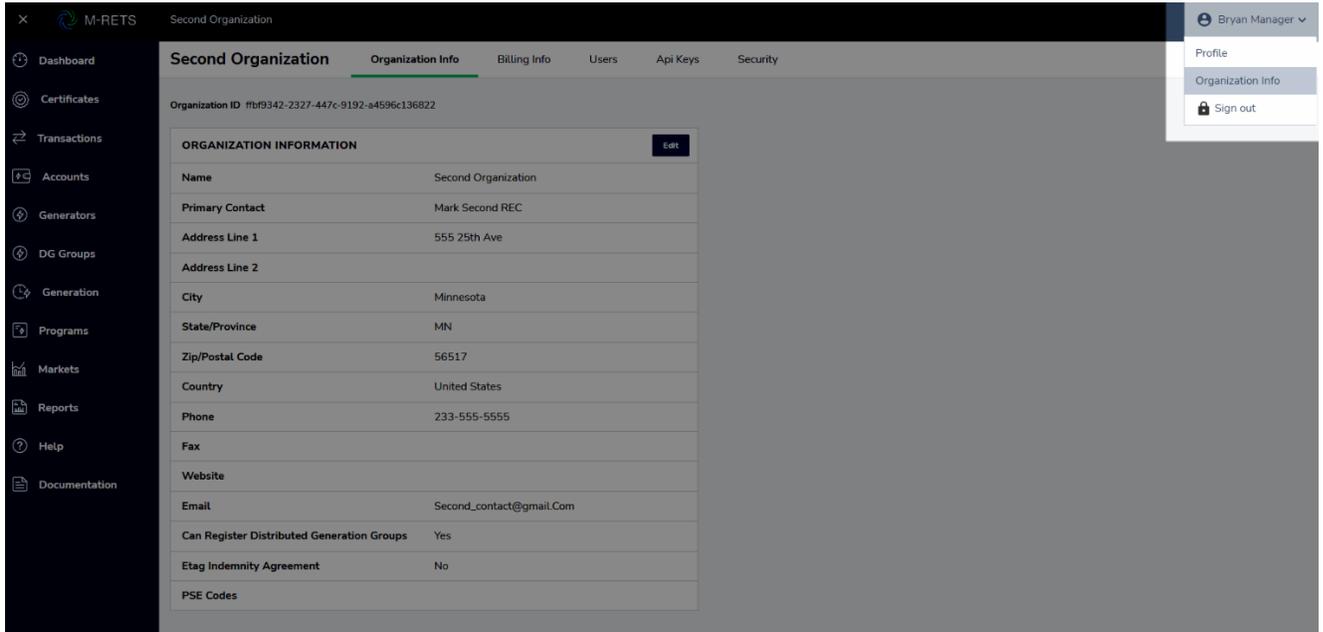


All Users can edit their Profile contact information, MFA registration and Notification Preferences by selecting the Edit button. It is advisable for users to login and activate their notification preferences after first accessing their M-RETS Dashboard.

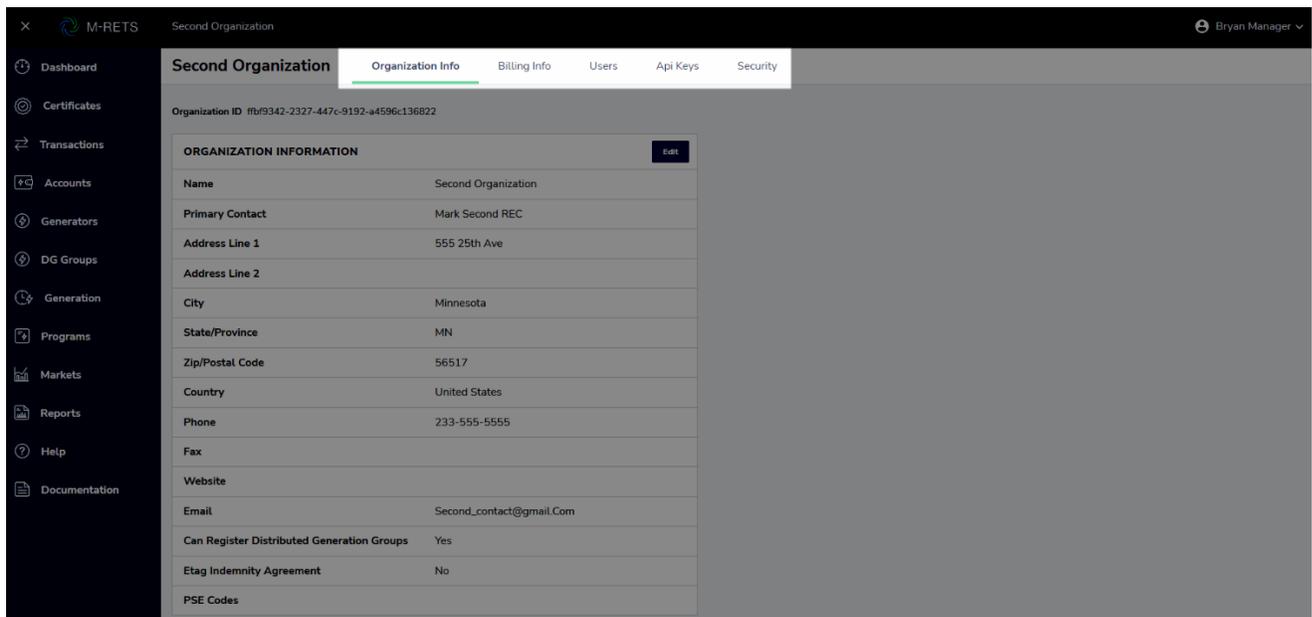


## 4.3 Organization Management > Organization Info

M-RETS users with Manager Organization permissions can manage their Organizational Info, Billing Information, Users, add API Keys and set up their Security MFA settings from the Organizational Info. Select the Username to access the dropdown in the top right of the dashboard and Select Organization Info.



The Organizational Info tab displays all information from the Organization's registration. Users with Manager Organization permission can edit this information using the Edit button.



## 4.4 Organization Management > Billing

The Billing tab is where the Organization can view and edit the billing information for the account. It is important to keep the billing contact information up to date.

The screenshot shows the M-RETS interface for a "Second Organization". The "Billing Info" tab is active, displaying the following information:

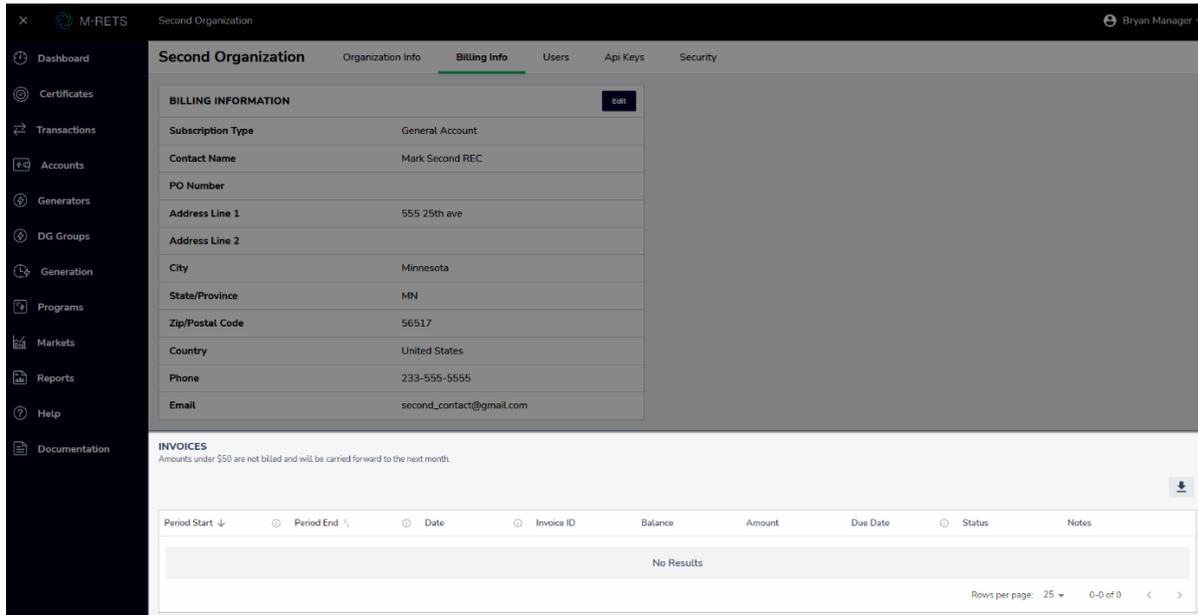
BILLING INFORMATION		edit
Subscription Type	General Account	
Contact Name	Mark Second REC	
PO Number		
Address Line 1	555 25th ave	
Address Line 2		
City	Minnesota	
State/Province	MN	
Zip/Postal Code	56517	
Country	United States	
Phone	233-555-5555	
Email	second_contact@gmail.com	

Below the form is an "INVOICES" section with a note: "Amounts under \$50 are not billed and will be carried forward to the next month." Below this is a table with columns: Period Start, Period End, Date, Invoice ID, Balance, Amount, Due Date, Status, and Notes. The table currently shows "No Results".

At the bottom, there is a form with the following fields:

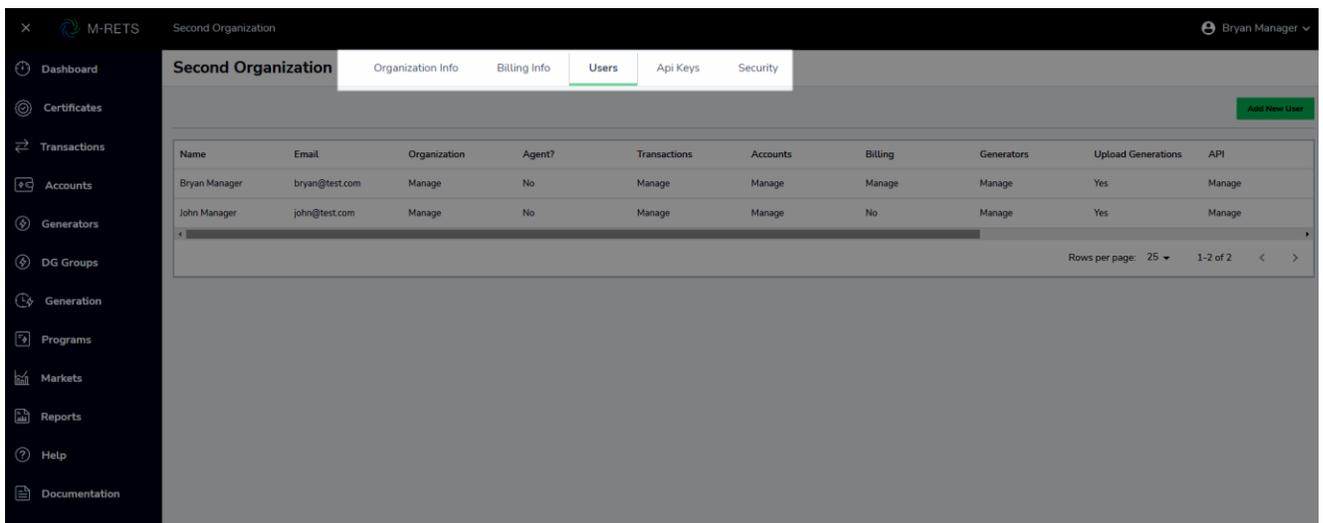
Fax	
Website	
Email	Second_contact@gmail.Com
Can Register Distributed Generation Groups	Yes
Etag Indemnity Agreement	No
PSE Codes	

Organizations with posted Invoices can review the invoice numbers and charges in the Invoices section. The transactions making up volumetric fees can be reviewed using a link associated with the invoice.

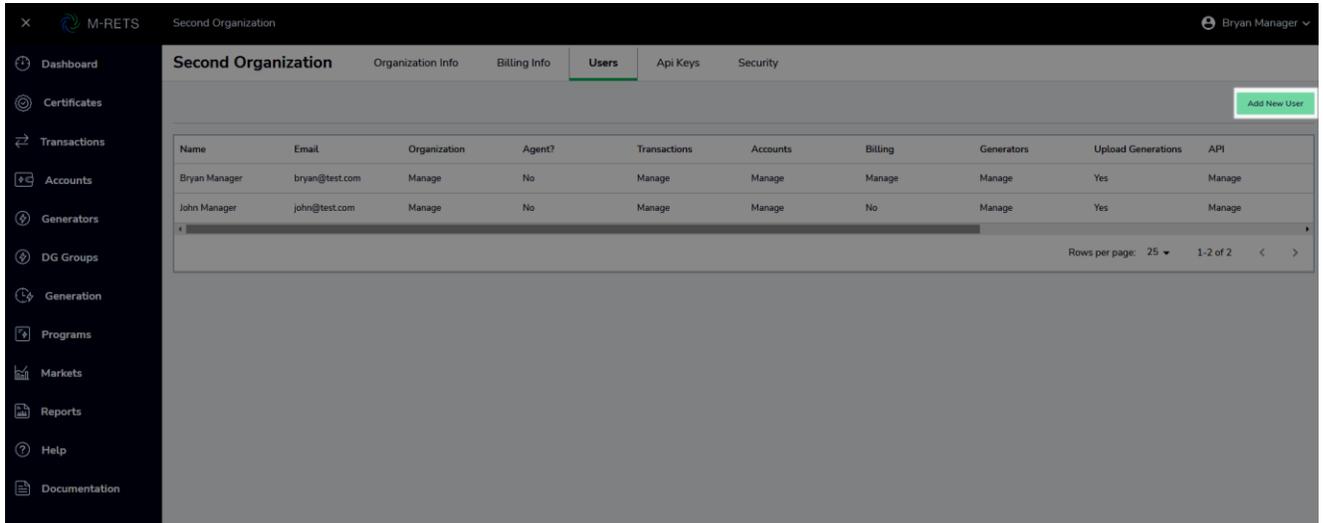


## 4.5 Organization Management > Users

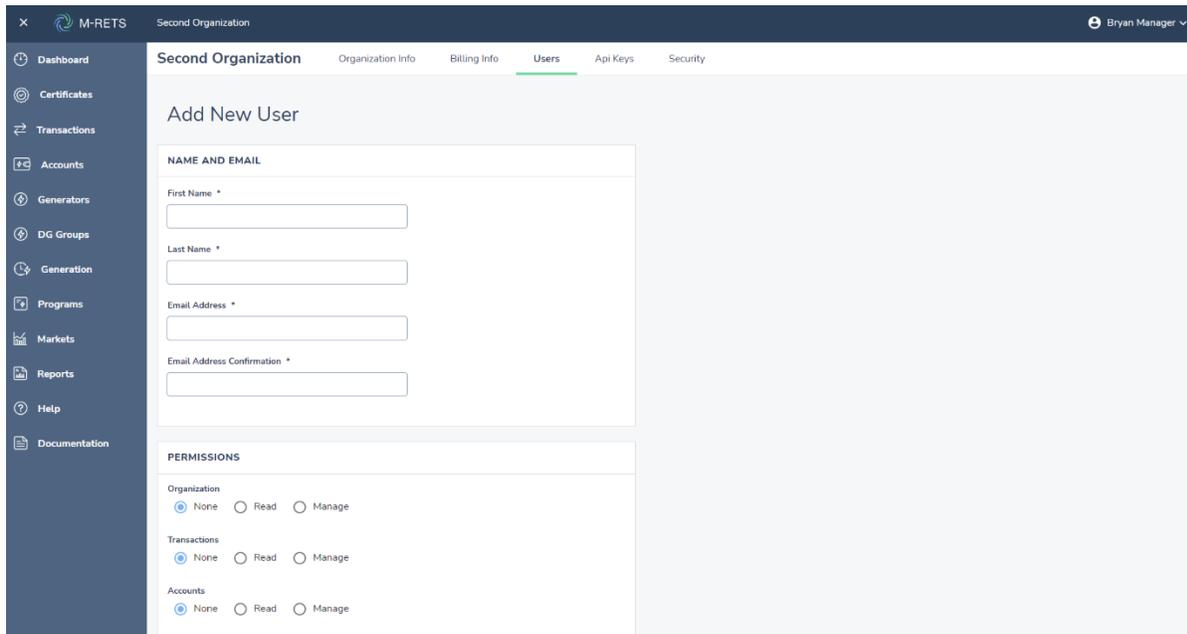
The Users tab is where the Organization can view all users invited to the account, invite new users and manage their preferences.



To Invite new users, select the 'Add New User' button to send an email to a new user.

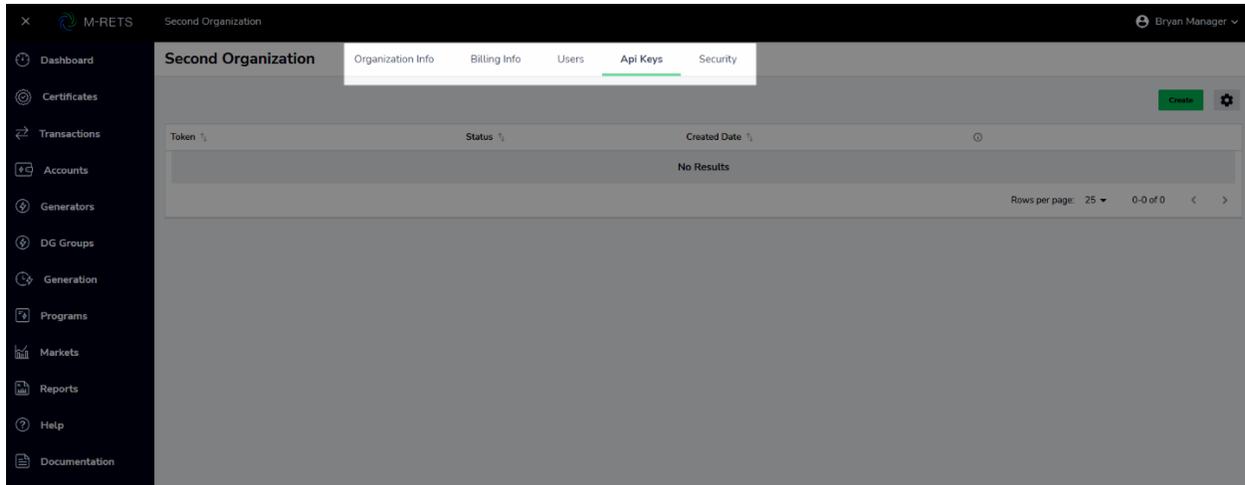


Complete the New User's Name and Email information and appropriate permissions. The new User will receive an email to complete their profile and set up a password. A full description of the User Permissions can be found in the M-RETS Operating Procedures.



## 4.6 Organization Management > API Keys

The API Keys Tab is where the Organization can create an Application Programming Interface Key to access their account via an API. Contact the M-RETS Administrator if you are interested in setting up API Access.



## 4.7 Organization Management > Security

The Security tab is where the Organization can edit its Multi-factor authentication (MFA) settings for the Organization.



## 5. Fee Structure

Ontario Clean Energy Credit Registry Program Participants will be subject to the following fees.

- **Subscription Fees:** Ontario Clean Energy Credit Registry Program Participants will be required to register a General Account subscription.
- Issuance Fee
- Voluntary Retirement Fee

All invoices will be emailed to the billing contact identified in the registration. Invoices will be issued once the billable activity reaches at least \$50 USD.

See <https://www.mrets.org/m-rets-fees/> for the most up-to-date fees above.

If a subscriber fails to pay their invoiced fees within ninety days (90) of issuance, M-RETS will close the Organization's access to the System. A User that wishes to reactivate an Organization that is closed due to failure to pay shall be required to pay the full Fee as well as an additional reactivation fee equal to 65% of the current Subscription Fee applicable to the closed Organization.

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## 6. Generator Registration Fee Structure

### 6.1 Eligible Fuel Types

The Ontario Clean Energy Credit Registry Program only allows the generation Registrations with the following fuel sources:

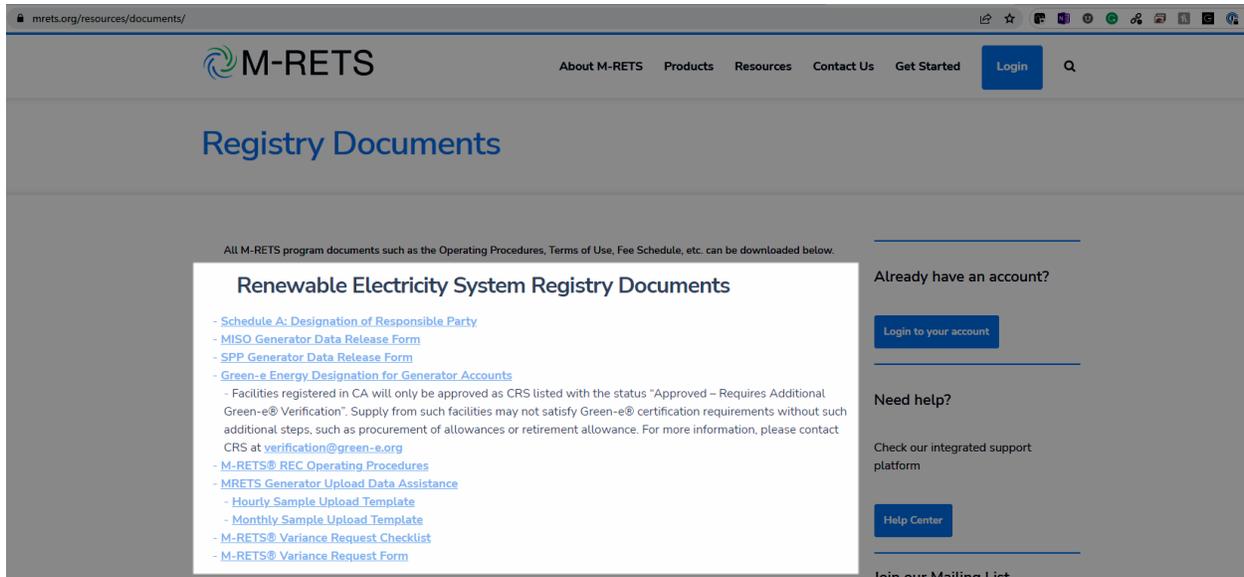
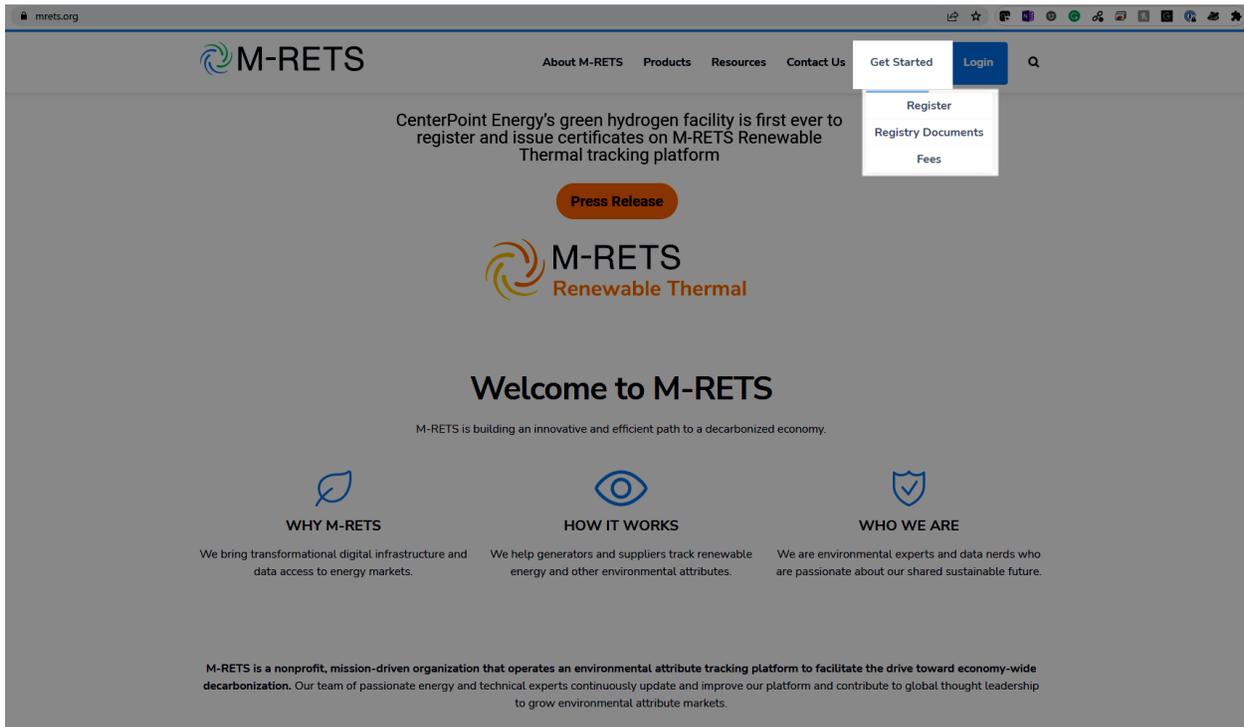
- o Biofuel
- o Biogas
- o Biomass
- o Hydro
- o Nuclear
- o Solar
- o Wind

### 6.2 Required Documentation

As part of the Generator Registration Agreement, the User must attest that this Generator is not registered in any other registry. Generator Assets that are jointly owned must privately appoint a single Organization where the Generator will be registered.

To register the Generator Asset, the owner of the Generator Asset or the Responsible Party must submit the following:

i. A completed [Schedule A from the M-RETS Terms of Use](#) outlining the [Generator Owner's Designation of Responsible Party](#) is required if the Organization registering the Generator is not the Owner of the Generator. The Schedule A form can be found posted on M-RETS.org. Select the Registry Documents located under the Getting Started menu for a list of all M-RETS Documentation.



- ii. Documentation to verify the registration information, including Location, Ownership, Nameplate Capacity Commercial Operation Date. The M-RETS Administrator may ask for additional documentation if the M-RETS System Administrator or IESO Ontario Clean Energy Credit Registry Program Administrator determines it is necessary. Typical documentation could include:
  - a. Utility Signed Interconnection Agreement
  - b. Utility Certificate of Completion
  - c. Provincial Air Permit
  - d. Provincial Regulatory Order
- iii. Documentation supporting the capacity factor calculation and annual output of a generator, (e.g., Engineering report prepared by a licensed professional engineer; solar design tool reports such as Aurora, HelioScope, PVsyst, PV Watts, etc.)
- iv. Multi-fuel Generators must submit to M-RETS a report prepared by a licensed professional engineer containing documentation for measuring and verifying the quantities of each fuel type, the method of determining the net heat content and moisture content of each fuel source, and the heat rate of the Generator. M-RETS will share this documentation with state or provincial regulators upon request of the regulator.
- v. Generator Assets with installed battery backups must provide documentation to illustrate that grid power used to charge the battery is not metered as generation from the clean Generating Asset.

### 6.3 Types of Generator Registrations

M-RETS facilitates several types of generator registrations. The Generators include:

- o Standard Generator registrations facilitate three variations:
  - REC/CEC Generators
  - Alternative Energy Credit Generators
  - Aggregate Meter Groups
- o Distributed Generation Groups (DGG)

REC also known as CEC Generator registrations are used to register all renewable energy generator registrations with the Ontario program.

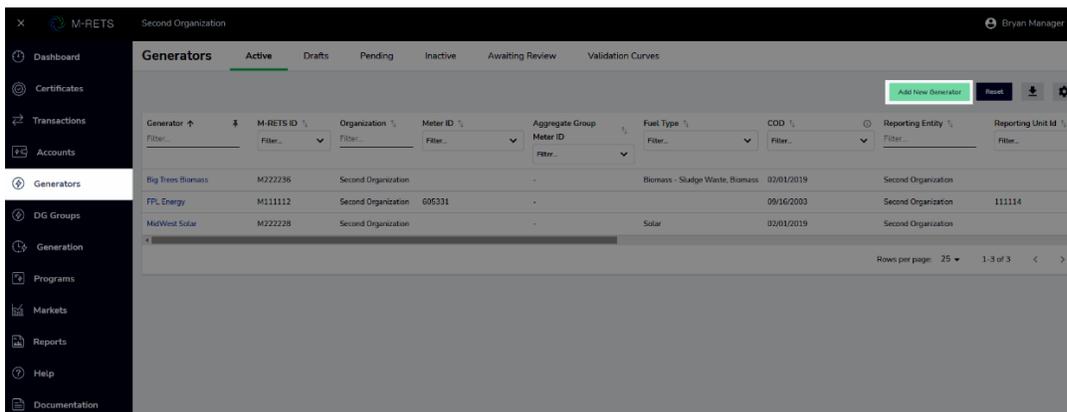
Alternative Energy Credit Generator registrations are used to register Nuclear generators with the Ontario program. An Alternative Energy Certificates Generator will be designated in the Fuel Tab of the Generator Registration screen.

## 6.4 Register a Generator

The Generator Asset registration process will include both mandatory and optional data entry. The M-RETS Administrator will verify all reported registration data prior to making a Generator Active.

Appendix A: Generator Static Data Fields lists the method of verification for each data field.

To begin a registration, select the Generators dashboard from the left menu. You will now see Active generators registered for your Organization. Select the Add New Generator button to begin a new registration.

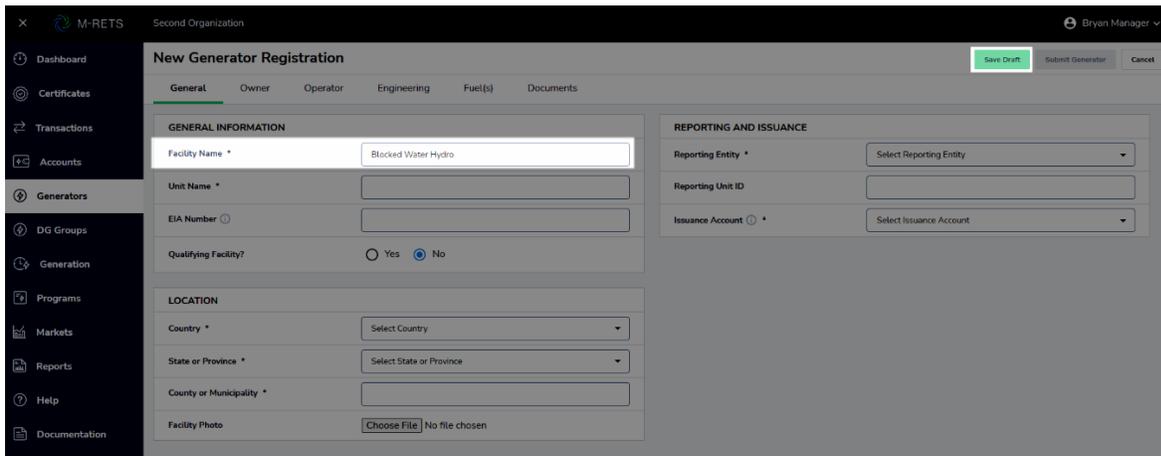


The screenshot shows the M-RETS Generators dashboard for a 'Second Organization'. The dashboard includes a left-hand navigation menu with options like Dashboard, Certificates, Transactions, Accounts, Generators, DG Groups, Generation, Programs, Markets, Reports, Help, and Documentation. The main content area is titled 'Generators' and has tabs for Active, Drafts, Pending, Inactive, Awaiting Review, and Validation Curves. The 'Active' tab is selected, showing a table of generators. At the top right of the table area, there is a green 'Add New Generator' button, a 'Reset' button, and a download icon. The table has columns for Generator, M-RETS ID, Organization, Meter ID, Aggregate Group, Fuel Type, COD, Reporting Entity, and Reporting Unit Id. The data rows are:

Generator	M-RETS ID	Organization	Meter ID	Aggregate Group	Fuel Type	COD	Reporting Entity	Reporting Unit Id
Big Trees Biomass	M22236	Second Organization			Biomass - Sludge Waste, Biomass	02/01/2019	Second Organization	
FPL Energy	M11112	Second Organization	006331			09/16/2003	Second Organization	111114
MidWest Solar	M22228	Second Organization			Solar	02/01/2019	Second Organization	

At the bottom right of the table, there is a 'Rows per page' dropdown set to 25 and a page indicator '1-3 of 3'.

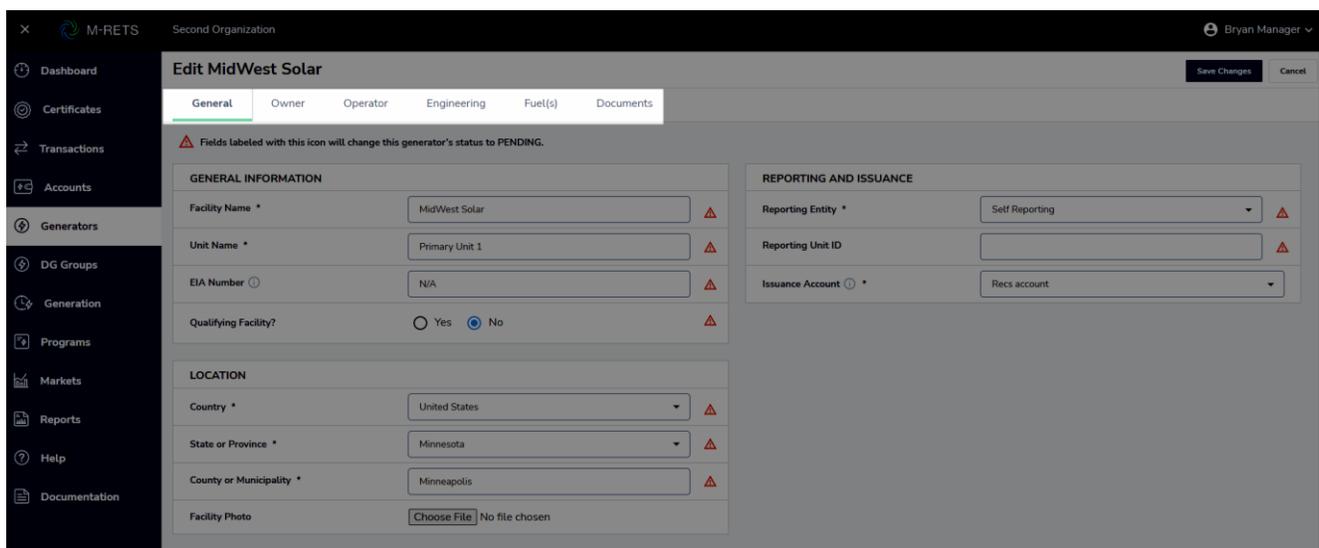
Give your generator a name and click 'Save Draft'. You can change the name later in the process.



The generator is now in "Draft" status. You can continue to update your generator, however, make sure you save changes by selecting the 'Save Draft' button. Complete the six generator registration tabs. Fields that are required (indicated by an asterisk) but not applicable to a generator located in Canada can be designated as 'No' or filled in with 'NA'

### o General Tab

- General Information: Facility and Unit Name Identification
- Location: Country, Province, Municipality and Facility Photo
- Reporting and Issuance: Reporting Entity and Issuance Account
  - All Ontario Generators should designate Self Reporting
  - The Reporting Unit ID can be left blank
  - Issuance Account: The Active Account all CECs from the Generator will be initially deposited



### o Owner Tab

- General Ownership Information: Single Ownership facility designation. Selecting this may necessitate a Schedule A to be uploaded.
- Owner Contact Information: Name and address of the primary owner
- Ownership Type and Registration Rights: Type of Owner and Assignment of Registration Rights information details

**Edit Big Trees Biomass**

General Ownership Information

Single-owner facility? \*  Yes  No

Ownership Type and Registration Rights

Ownership Type(s) \*

- Corporate Owner
- Electric Service Provider
- Federal Marketer/Power Administrator
- Independent Power Producer
- Investor-Owned Utility
- Irrigation District
- Municipal Utility
- Privately Owned Distributed Generation
- Rural Electric Cooperative
- Tribal Organization
- Other

Owner Contact Information

Company Name \* MidWest Solar

Address \* 123 Any Street

Address Line 2

Country \* United States

State or Province \* Minnesota

City \* Minneapolis

Zip/Postal Code \* 64000

Phone 555-555-5555

Email bryan@test.com

Website

## o Operator Tab

- Facility Operator Information: Contact information of the onsite operator

**Edit Big Trees Biomass**

Facility Operator Information

Job Title Manager

Name \* MidWest Solar

Address \* 123 Any Street

Address Line 2

Country \* United States

State or Province \* Minnesota

City \* Minneapolis

Zip/Postal Code \* 64000

Phone 555-555-5555

Email bryan@test.com

- o Engineering Tab
- Interconnection Information: Report the applicable Generator Classification, Balancing Authority and Interconnected Utility

- Note:

Generators not located in Ontario or if they are not directly connected to either the IESO-controlled grid or a distributor's distribution system (e.g., behind-the-meter generators, off grid generators, etc.) are not eligible to register.

Generators that register must have electricity that is delivered into the IESO-controlled grid or a distributor's distribution system (i.e., electricity intended for credit creation must not be consumed by on site loads or stations service load).

- Engineering -
  - Commenced Operation Date: In-service date of Generator
  - Nameplate Capacity (MW) in A/C\*: The maximum rated output of a Generator
  - Capacity Factor\*: The ratio of the electrical energy produced by a Generating Unit for the period of time considered to the electrical energy that could have been produced at continuous full-power operation during the same period.
  - Maximum Annual Energy\*: Maximum annual output in MWH of the facility in 365 days
  - Biomass Net Generation BTU/kWh: Only Required for Biomass Generators.
- Metering Information
  - Aggregate Metering - Yes/No - Multiple units that do not share essential generating characteristics should be registered as separate Generators under one metering group. Contact the M-RETS Administrator if your Generator meets this metering description
  - Revenue Quality Meter designation

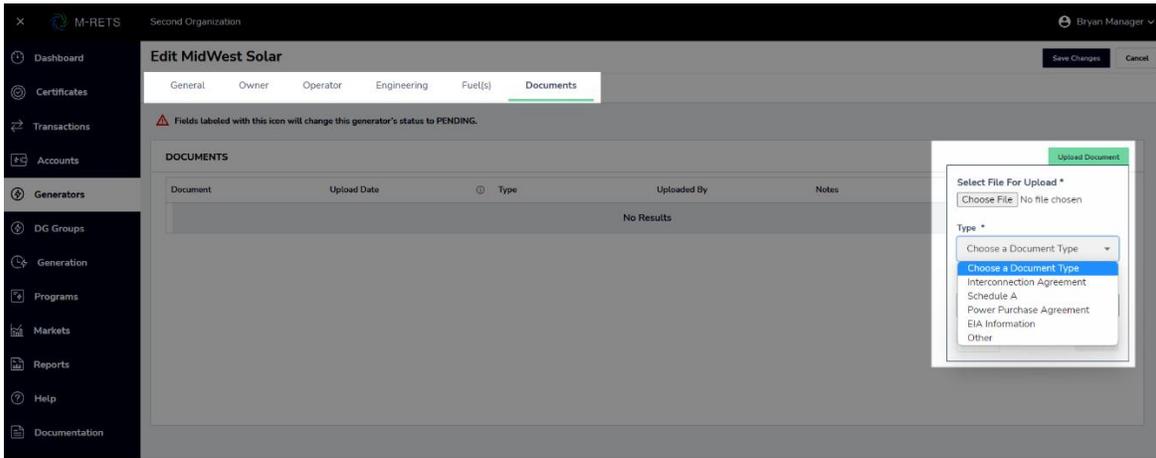
## Meter ID

The screenshot shows the 'Edit Big Trees Biomass' form in the M-RETS system, specifically the 'Engineering' tab. The form is divided into three main sections: 'INTERCONNECTION INFORMATION', 'METERING INFORMATION', and 'ENGINEERING'. The 'INTERCONNECTION INFORMATION' section includes fields for Generator Classification (Wholesale Generation), Balancing Authority (Select Balancing Authority), Balancing Authority ID, Interconnected Utility (Select an Interconnected Utility), and Interconnected Utility ID. The 'METERING INFORMATION' section includes Aggregate Metering (Yes/No), Is this a Revenue Quality Meter? (Yes/No), and Meter ID. The 'ENGINEERING' section includes Commenced Operation Date (02/01/2019), Nameplate Capacity (50.0 MW in A/C), Capacity Factor (100 %), Maximum Annual Energy (MWh), Biomass Net Generation (10000 BTU/kWh), and Repower Date(s) (Add Repower Date). A warning message at the top states: 'Fields labeled with this icon will change this generator's status to PENDING.' The user 'Bryan Manager' is logged in.

- o Fuel(s) tab
- Fuel Type and Fuel Source Designation
- Eligibility Designation - Designate the Ontario eligibility

The screenshot shows the 'Edit MidWest Solar' form in the M-RETS system, specifically the 'Fuel(s)' tab. The form is divided into two main sections: 'SOLAR' and 'Program Eligibility'. The 'SOLAR' section includes fields for Fuel Type (Solar), Fuel Source(s) (Solar), and Label (optional). The 'Program Eligibility' section includes a dropdown menu for Program Eligibility, with a list of options: Alternative Energy Certificate, Ecologo Certified, IL ABP, Illinois Utility, Iowa, Iowa AEP, Iowa Voluntary Green, Manitoba, Minnesota, Minnesota SES Small Solar, and Montana. A warning message at the top states: 'Fields labeled with this icon will change this generator's status to PENDING.' The user 'Bryan Manager' is logged in. The app version is 3.0.11.

- o Documents - Upload all documents supporting the Generator registration prior to submitting the Generator



Once you have filled in all of the information required (indicated by an asterisk), you will submit the generator registration to the System Administrator for approval. If you are not sure what a field is asking, please consult Appendix A of the M-RETS Operating Procedures or contact the M-RETS System Administrator.

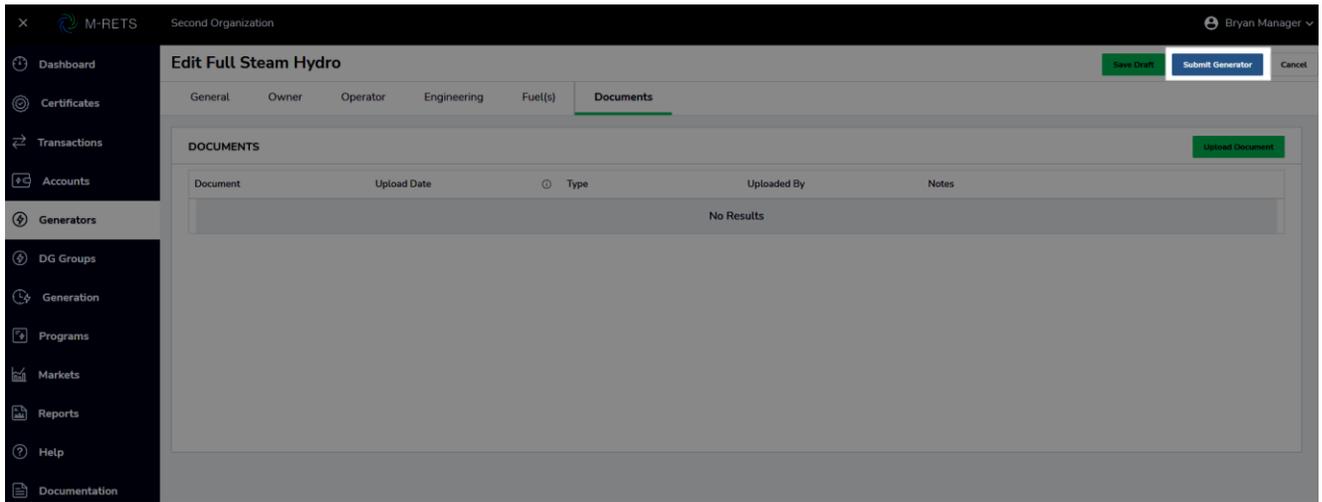
The System Administrator will try and approve generators submitted with all the required information within seven days. If you need your generator approved sooner, please email [systemadmin@mrets.org](mailto:systemadmin@mrets.org) and communicate your deadline.

## 6.5 Submission and Review

Selecting the Submit Generator button will submit the generator to the M-RETS System Administrator for their review. PLEASE NOTE: Your generator must be submitted or it will not be accepted.

The M-RETS Administrator will then be notified of the New Asset Registration via email. Your generator will then be put into Pending mode until the System Administrator Approves the generator or asks for further information.

Please Note: By submitting a generator for approval, the user represents and warrants to M-RETS that all information for this generator shall be true, complete, and correct to the best of its knowledge, information and belief. Any changes after submission may result in a delay in the approval process.



## 6.6 Generation Data

All Generation reported for the Ontario Program will be reported by the designated reporting entity in the generator's registration. The Ontario Clean Energy Credits Registry Program requires data Self Reported unless other wise permitted by the Ontario Program Administrator.

### 6.6.1 When Can Generation Data Be Reported?

To encourage timely reporting, M-RETS enabled automatic validations to generation uploads. Newly registered Generator Assets can report Generation back three (3) months from the date the Generator Asset is approved. The Ontario Clean Energy Credit Registry program will not permit generation prior to January 2023 to be reported from participating Generators.

All meter data must be submitted by the Transfer and Retirement Deadline which is six (6) months after the end of the calendar year in which a Credit was generated

### 6.6.2 What Data Can Be reported?

M-RETS will measure the output from each Generating Unit delivered into either the transmission or distribution grid. Credits do not reflect, nor does M-RETS measure losses occur on the bulk transmission or distribution systems after the metering. M-RETS will not create Credits for that portion of the generation used to supply station service. Therefore, generation data supplied to M-RETS must not reflect station service supplied from the Generator's side of the point of interconnection.

Credits from participating Generators shall be associated with electricity generated by a Generator Asset located in Ontario and directly connected to the IESO-Controlled Grid or a Distributor's Distribution System. Credits from participating generators shall not be associated with electricity consumed before being delivered into either IESO-Controlled Grid or a Distributor's Distribution System. All meter data submitted to the Ontario Program must be Self-Reported and must have originated from metering data that complies with Chapter 6 of the IESO's Market Rules and associated appendices or the Ontario Energy Board's Distribution System Code. Notwithstanding the foregoing, where revenue-grade meter data is not available, meter data may be submitted as permitted by the M-RETS Operating Procedures.

If the cumulative meter data is negative for any hour (i.e., the Generator Asset's electricity production is less than the electricity consumed) meter data must be recorded as zero MWh for such hour.

### **6.6.3 How Is Generation Data Reported?**

Any User with Generation Upload permissions can submit generation in either MWh or kWh data into M-RETS. Each time M-RETS receives generation data for a Generator, the date and quantity of MWhs is posted to the Generation Log. Any fractional remainders (i.e., kWh) will not issue Credits but will roll over to the next month of generation. Once uploaded, data will be labeled with one of the following:

- **Accepted:** Applies to all generation less than 1 MWh reported to M-RETS. The System will add this data to the subsequent month of generation for issuance.
- **Issued:** Applies to all generation 1 MWh or greater and indicates the Credits are now active.
- **Rejected:** Applies all data Rejected by the Account Holder, QRE or Administrator. Data can be reloaded for Vintages in a Rejected Status
- **Pending:** Applies to all generation that 1) Generation that fails feasibility and therefore needs M-RETS approval; 2) generation waiting to receive a 'fuel type' allocation from a multi-fuel Generator; or 3) Generation subject to the 14-day Holding Period to issue Credits (to be implemented 2023; see Section 4.4.8: for more information on Holding Period Issuances). Pending Generation is not issued and therefore not represented by Active Credits.

### **6.6.4 Data Formatting**

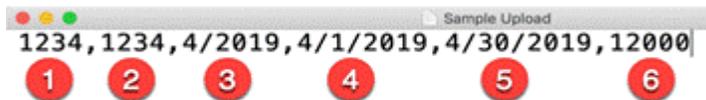
Generation data can be loaded using the CSV or User Interface.

## Loading Data via CSV

Users must upload generation through the M-RETS portal. Data loaded by a file must be in a .csv or .txt file format. Excel or Notepad can be used to create a generation data file. Programs (e.g., Microsoft Excel) that add formatting may reformat date fields which will result in errors when loading the file. The data shall be in ASCII Text with data fields delimited by commas (Comma-Separated Value – CSV format). M-RETS supports two types of reporting. All Generation data is to be reported in UTC. The switch to daylight saving time does not affect UTC and is not adjusted to reflect changes either to or from Daylight Saving Time. Please note that all generation must be reported without gaps from previously reported data.

### Monthly Generation Data Field Requirements

The monthly Generation Data file has six columns.



1. Generator ID: The M-RETS ID. Use just the number (e.g., M805 should be listed as 805).
2. Reporting Unit ID: The Reporting Unit ID. Use the M-RETS ID if your generator does not have a Reporting Unit ID.
3. Vintage: Month and year of generation, formatted at MM/YYYY for any month in the current Reporting Period. This must be 7 characters long or the upload will fail.
4. Start Date of the Month: Begin month-day-year of generation output period formatted as MM/DD/YYYY. This must be 10 characters long or the upload will fail.
5. End Date of the Month: End month-day-year of generation output period formatted as MM/DD/YYYY. This must be 10 characters long or the upload will fail
6. Total MWh: Total MWhs for the Reporting Month

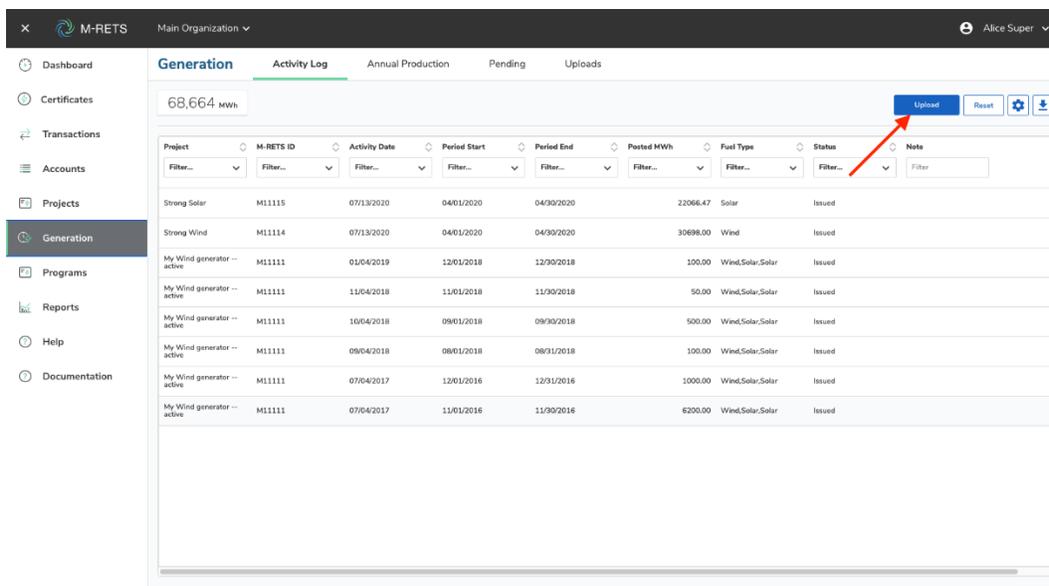
### Hourly Generation Data Field Requirements

The Hourly Generation Data file has 6 columns:

1. Generator ID: The M-RETS ID. Use just the number (e.g., M805 should be listed as 805).
2. Reporting Unit ID: The Reporting Unit ID. Use the M-RETS ID if your generator does not have a Reporting Unit ID
3. Date of Generation: The date the generation occurred formatted as MM/DD/YYYY
4. Hour of Generation (1-24). All hours for the total reporting period must be accounted for or the file will be rejected.
5. Total kWh for that specific hour
6. Peak: Optional column to identify On Peak (Yes) or Off Peak (No) data

The monthly generation will be uploaded in MWh. Hourly/minute data must be uploaded in kWh.

When the user is ready to load the file with generation data, navigate to the Generation tab and select the "Upload" button.



Under "Select File for Upload", select 'Choose File' navigate to a local file on your computer and select it. You should see the file name change in the upload window.

**SELECT FILE FOR UPLOAD**

No file chosen

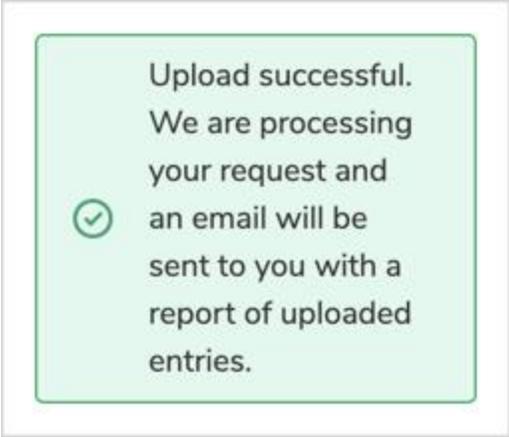
**UPLOAD GRANULARITY**

By Month     By Hour

By Minute

[More about data templates](#)

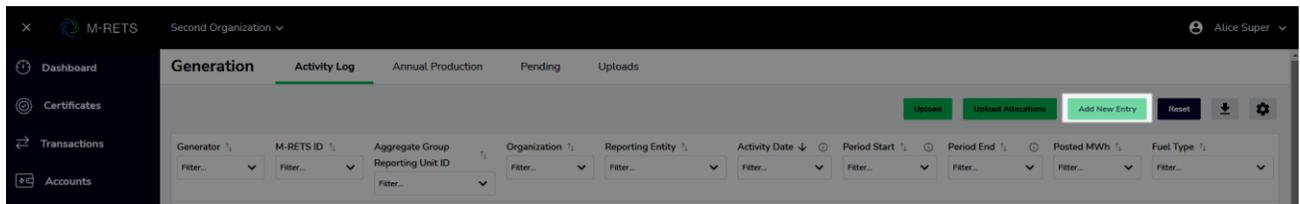
Select your 'Upload Granularity'. By default, Monthly will be selected. Select the Upload button. The file will be uploaded and the generation will be verified. If your upload file contains multiple generators, you should see the following window.



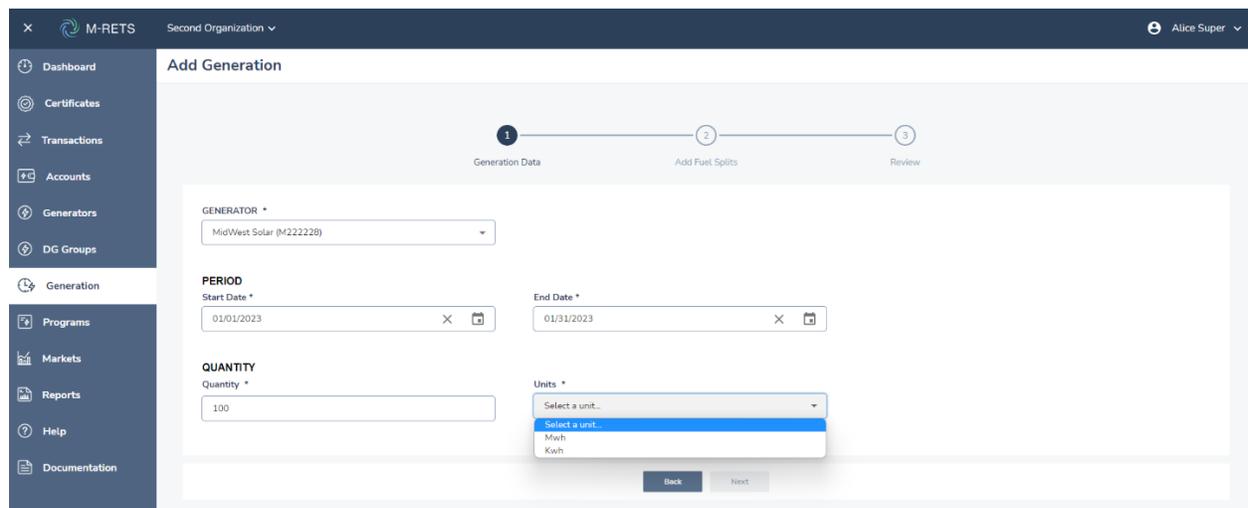
Please note: This dialog box only confirms your file was uploaded correctly. A more detailed report of your file will be emailed to you. This report may contain detailed errors. The Generation Dashboard will provide status details on loaded generation data in the Activity Log tab, the status of Pending Data in the Pending Tab and the status of the loaded file in the Uploads tab.

## Loading Data via the User Interface

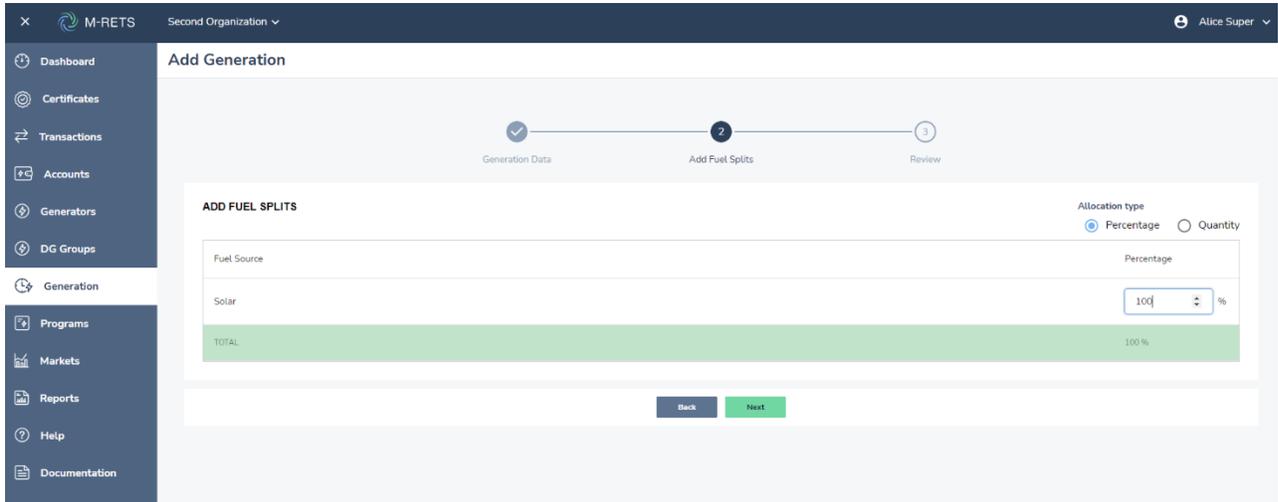
Generation can also be reported from the User Interface using the Add New Entry button located in the Generation Dashboard



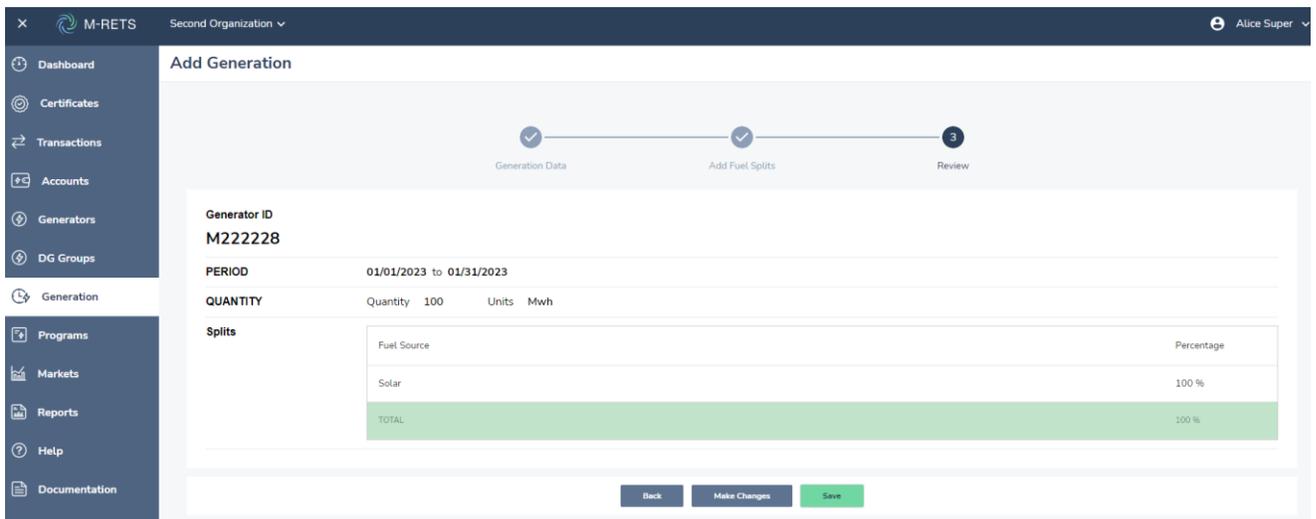
The User Interface allows the Organization to select the Generator and report for a specific period.



The User Interface will ask the user to designate Fuel Splits. If the Generator is a single fuel generator, the User will be required to enter 100%



The final page of the Generation Reporting User Interface, allows the user to review the reported generation before submitting



M-RETS Second Organization Alice Super

Dashboard Certificates Transactions Accounts Generators DG Groups Generation Programs Markets Reports Help Documentation

### Add Generation

Generation Date Add Fuel Splits Review

Generator ID  
M222228

PERIOD 01/01/2024 - 12/31/2024

QUANTITY Quantity

Splits

By clicking Submit, I acknowledge that I have reported 100% of the selected Generator's generation.

Go Back Submit

	Percentage
Solar	100 %
TOTAL	100 %

Back Make Changes Save

## 7. Creating Credits

### 7.1 Validations > Capacity Factor Validation

All generation data submitted to M-RETS will undergo an automatic validation to verify that the reported data is feasible for the hours reported in the file. The feasibility validation will ensure there are no overlapping generation entries, and that there are no gaps in reported dates. Using the reported Capacity Factor and Nameplate Capacity, M-RETS will verify reported generation is within an acceptable threshold of 2%. The Capacity Factor is commonly defined as the ratio of the electrical energy produced by a Generating Unit for the period of time considered to the electrical energy that could have been produced at continuous full power operation during the same period. M-RETS will use the following formula to calculate the feasible generation for a reported period.

$$([\text{Nameplate Capacity}] * [\text{Capacity Factor}]) * [\text{Hours in the Reported Duration}] * 1.02$$

Reported vintages that fail M-RETS' Data Feasibility Validation will need to be validated by the System Administrator. If your data fails the Capacity Factor Validation, it will be displayed on the Pending tab of the Generation Dashboard. The Status will be reflected as Pending: Capacity Feasibility

Generator	M-RETS ID	Aggregate Group Reporting Unit ID	Organization	Reporting Entity	Status	Activity Date	Period Start	Period End	Posted MWh
Primary Unit 1	M222228	-	Second Organization	Second Organization	Pending: Capacity Feasibility	02/17/2023 20:09	01/01/2023	01/31/2023	100
Primary Unit 1	M222228	-	Second Organization	Second Organization	Pending: Capacity Feasibility	02/17/2023 00:16	05/01/2022	05/31/2022	150
Primary Unit 1	M222228	-	Second Organization	Second Organization	Pending: Capacity Feasibility	02/17/2023 00:15	04/01/2022	04/30/2022	100
Primary Unit 1	M222228	-	Second Organization	Second Organization	Pending: Capacity Feasibility	02/17/2023 00:14	03/01/2022	03/31/2022	90
Primary Unit 1	M222228	-	Second Organization	Second Organization	Pending: Date Feasibility	02/17/2023 00:13	01/01/2022	01/31/2022	50

The User should provide their meter readings or screenshots of their meter data acquisition system substantiating the reported data. The M-RETS System Administrator will approve the generation and make recommendations to update your Capacity Factor if there is enough data to do an analysis.

Using an average Capacity Factor for generators subject to seasonal variations (e.g., solar and wind) can result in a validation process that falsely accepts all reported generation in seasons of low generation and falsely rejects all reported generation in seasons of high generation. The M-RETS Administrator can review historic meter data to model monthly Capacity Factors. Using validated data to perform an analysis and calculate monthly Capacity Factors, the M-RETS Administrator can add a Validation Curve to make the capacity validation more accurate.

## 7.2 Validations > Date Validation

M-RETS will validate that the reported generation is within three months of it first being registered or not prior to January 2023. If reported generation is outside of the acceptable reporting period window, the data will be set to the Pending: Date Feasibility status

Contact the M-RETS Administrator to review data in this status.

Generator	M-RETS ID	Aggregate Group Reporting Unit ID	Organization	Reporting Entity	Status	Activity Date	Period Start	Period End	Posted MWh
Primary Unit 1	M222228	-	Second Organization	Second Organization	Pending: Capacity Feasibility	02/17/2023 20:09	01/01/2023	01/31/2023	100
Primary Unit 1	M222228	-	Second Organization	Second Organization	Pending: Capacity Feasibility	02/17/2023 00:16	05/01/2022	05/31/2022	150
Primary Unit 1	M222228	-	Second Organization	Second Organization	Pending: Capacity Feasibility	02/17/2023 00:15	04/01/2022	04/30/2022	100
Primary Unit 1	M222228	-	Second Organization	Second Organization	Pending: Capacity Feasibility	02/17/2023 00:14	03/01/2022	03/31/2022	90
Primary Unit 1	M222228	-	Second Organization	Second Organization	Pending: Date Feasibility	02/17/2023 00:13	01/01/2022	01/31/2022	50

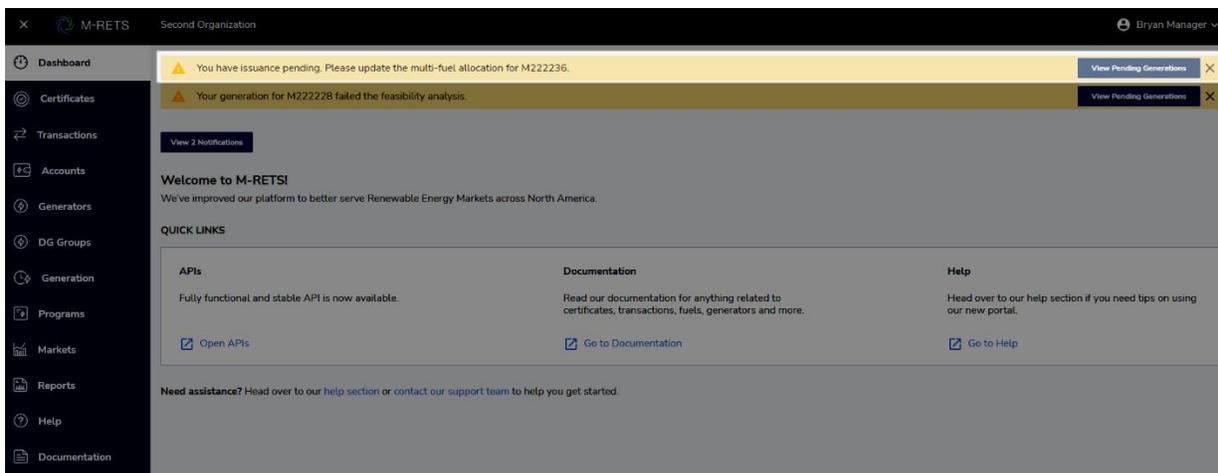
### 7.3 Validations > Multi-Fuel Generation: Fuel Splits

Generators with multiple fuel sources will be set to a Pending status until the user reviews the loaded generation and reports the fuel split.

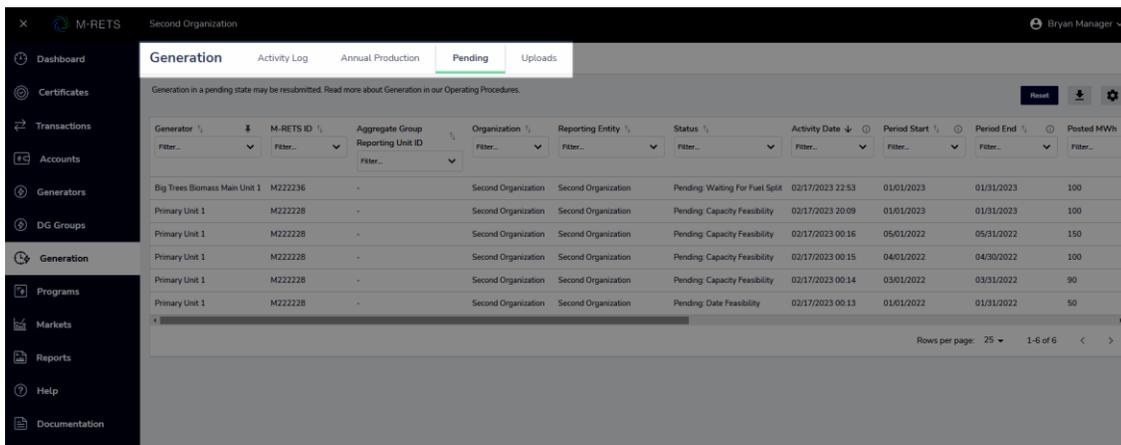
Generation data will be used to issue credits when the data has been accepted.

There are two ways to access the multi-fuel issuance fuel split screen.

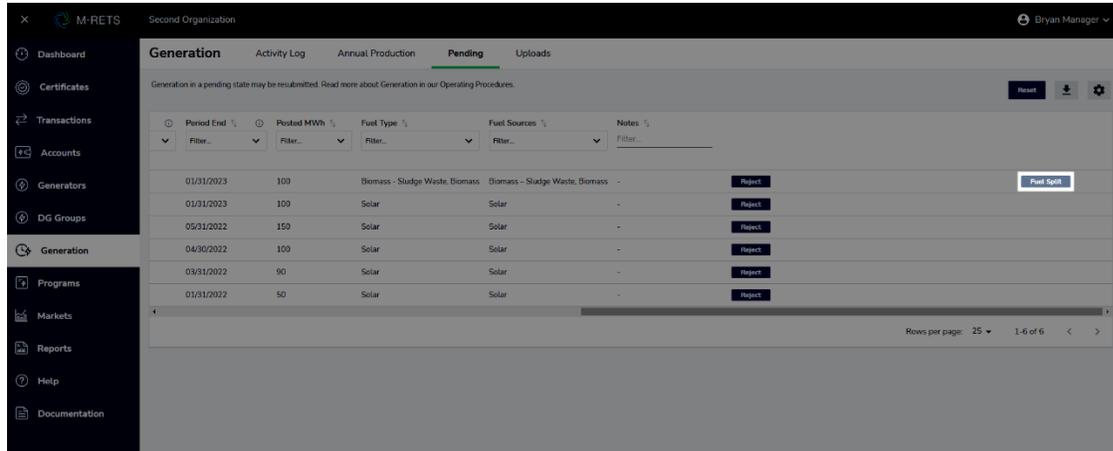
You can enter the interface to update fuel splits by selecting on Update Fuel Split in the Dashboard notice that is displayed when data for a multi-fuel generator is loaded and waiting for a fuel split.



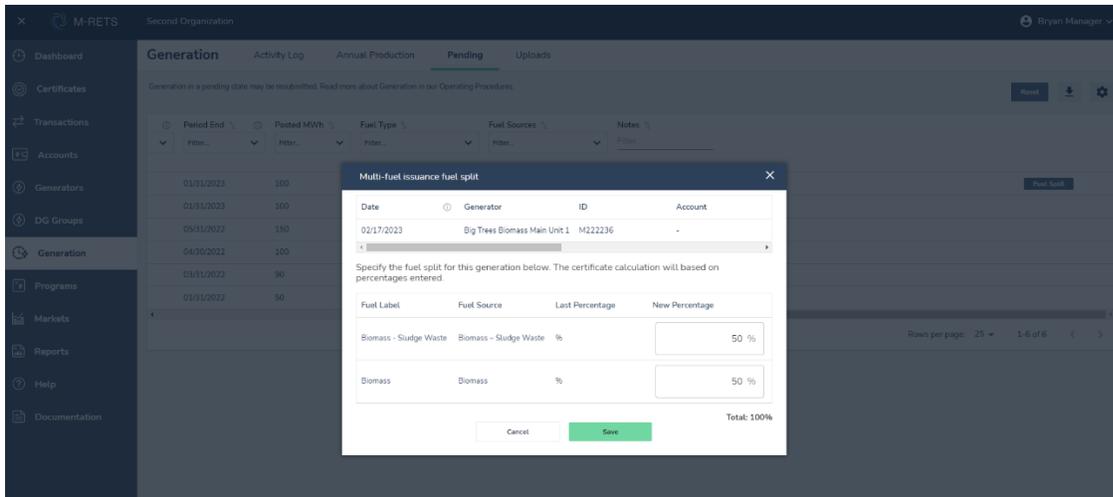
You can also access this interface from the Generation Dashboard and selecting the Pending tab.



Scroll to the right of the report and select the Fuel Split button.



From the popup window, review the reported generation and enter the percentage of each fuel source.



Selecting Save will move the generation into an Accepted Status and then into an Issued Status when the credits are issued.

### 7.3.1 Issuance

Generation data loaded into M-RETS for single-fuel generators that do not fail the feasibility validation, will be used to issue credits immediately. The Generation data can be reviewed in the Generation Dashboard's Generation Log tab.

Generator	M-RETS ID	Aggregate Group Reporting Unit ID	Organization	Reporting Entity	Activity Date	Period Start	Period End	Posted MWh	Fuel Type
Big Trees Biomass Main Unit 1	M222236	-	Second Organization	Second Organization	02/17/2023 22:53	01/01/2023	01/31/2023	100	Biomass - Sludge Was
Primary Unit 1	M222228	-	Second Organization	Second Organization	02/17/2023 20:09	01/01/2023	01/31/2023	100	Solar
Primary Unit 1	M222228	-	Second Organization	Second Organization	02/17/2023 00:49	11/01/2022	11/30/2022	90	Solar
Primary Unit 1	M222228	-	Second Organization	Second Organization	02/17/2023 00:49	10/01/2022	10/31/2022	101	Solar
Primary Unit 1	M222228	-	Second Organization	Second Organization	02/17/2023 00:49	09/01/2022	09/30/2022	111	Solar
Primary Unit 1	M222228	-	Second Organization	Second Organization	02/17/2023 00:49	08/01/2022	08/31/2022	151	Solar
Primary Unit 1	M222228	-	Second Organization	Second Organization	02/17/2023 00:49	07/01/2022	07/31/2022	130	Solar
Primary Unit 1	M222228	-	Second Organization	Second Organization	02/17/2023 00:22	06/01/2022	06/30/2022	120	Solar
Primary Unit 1	M222228	-	Second Organization	Second Organization	02/17/2023 00:16	05/01/2022	05/31/2022	150	Solar
Primary Unit 1	M222228	-	Second Organization	Second Organization	02/17/2023 00:15	04/01/2022	04/30/2022	100	Solar
Primary Unit 1	M222228	-	Second Organization	Second Organization	02/17/2023 00:14	03/01/2022	03/31/2022	90	Solar
Primary Unit 1	M222228	-	Second Organization	Second Organization	02/17/2023 00:14	02/01/2022	02/28/2022	60	Solar
Primary Unit 1	M222228	-	Second Organization	Second Organization	02/17/2023 00:13	01/01/2022	01/31/2022	50	Solar
Primary Unit 1	M222228	-	Second Organization	Second Organization	02/16/2023 03:37	12/01/2022	12/31/2022	100	Solar
My Hydro generator	M111112	-	Second Organization	Second Organization	07/20/2022 16:46	09/01/2018	09/30/2018	750	
My Hydro generator	M111112	-	Second Organization	Second Organization	07/20/2022 16:46	10/01/2018	10/31/2018	10000	
My Hydro generator	M111112	-	Second Organization	Second Organization	07/20/2022 16:46	08/01/2018	08/30/2018	600	

Issued Credits can be reviewed from the Credit Dashboard's Active Tab

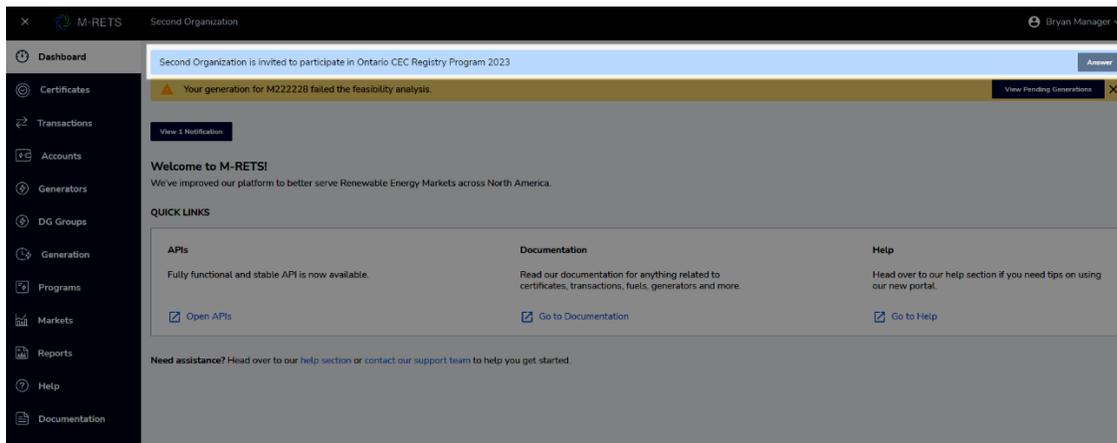
Account	Account ID	M-RETS ID	Organization	Generator	Fuel Type	Vintage	Generation Start Date	Generation End Date	Location
Recs account	2B2E97B6-A3E8	M111112	Second Organization	My Hydro generator	Hydroelectric Water	09/2018	09/01/2018	09/30/2018	ND
Recs account	2B2E97B6-A3E8	M111112	Second Organization	My Hydro generator	Hydroelectric Water	10/2018	10/01/2018	10/31/2018	ND
Recs account	2B2E97B6-A3E8	M222236	Second Organization	Big Trees Biomass Main Unit 1	Biomass	01/2023	01/01/2023	01/31/2023	MN
Recs account	2D2E97B6-A3E8	M222236	Second Organization	Big Trees Biomass Main Unit 1	Biomass - Sludge Waste	01/2023	01/01/2023	01/31/2023	MN
Recs account	2B2E97B6-A3E8	M222228	Second Organization	Primary Unit 1	Solar	02/2022	02/01/2022	02/28/2022	MN
Recs account	2B2E97B6-A3E8	M111114	Second Organization	Agg Generator 2	Wind	04/2021	-	-	ND
Recs account	2B2E97B6-A3E8	M111114	Second Organization	Agg Generator 2	Wind	08/2019	-	-	ND
Recs account	2B2E97B6-A3E8	M111112	Second Organization	My Hydro generator	Hydroelectric Water	08/2018	08/01/2018	08/30/2018	ND
Recs account	2B2E97B6-A3E8	M111114	Second Organization	Agg Generator 2	Wind	04/2021	-	-	ND
Recs account	2B2E97B6-A3E8	M222228	Second Organization	Primary Unit 1	Solar	07/2022	07/01/2022	07/31/2022	MN
Recs account	2B2E97B6-A3E8	M222228	Second Organization	Primary Unit 1	Solar	08/2022	08/01/2022	08/31/2022	MN
Recs account	2B2E97B6-A3E8	M222228	Second Organization	Primary Unit 1	Solar	09/2022	09/01/2022	09/30/2022	MN
Recs account	2B2E97B6-A3E8	M222228	Second Organization	Primary Unit 1	Solar	10/2022	10/01/2022	10/31/2022	MN
Recs account	2B2E97B6-A3E8	M222228	Second Organization	Primary Unit 1	Solar	11/2022	11/01/2022	11/30/2022	MN

## 8. Participating in the Ontario Program

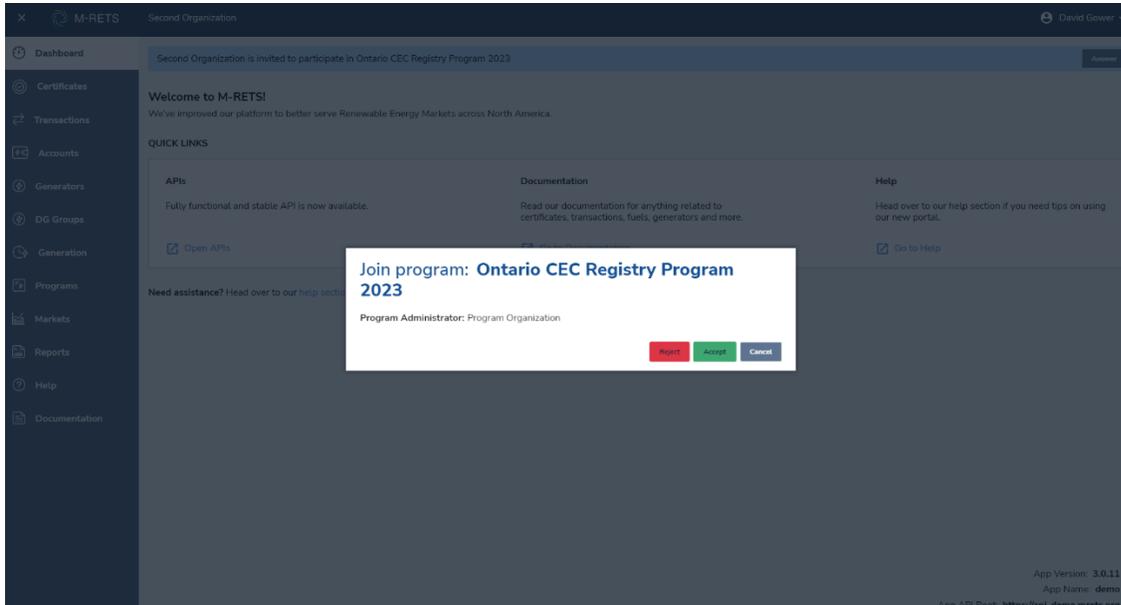
The Program feature helps Program Administrators manage the complexity of their program's requirements and program participants more efficiently. The Program feature provides the ability to set up rulesets that prevent retirements of Credits outside the parameters sent to a specified Retirement Account. The Ontario Clean Energy Credit Registry Program Administrator will create a Program for the program year and send an invitation to each Ontario Participant registered in M-RETS. All participants will receive a notification inviting them to participate in the Program. Prior to becoming active Program participants, the invitee must accept the invitation.

### 8.1 Accepting an invitation to a Program

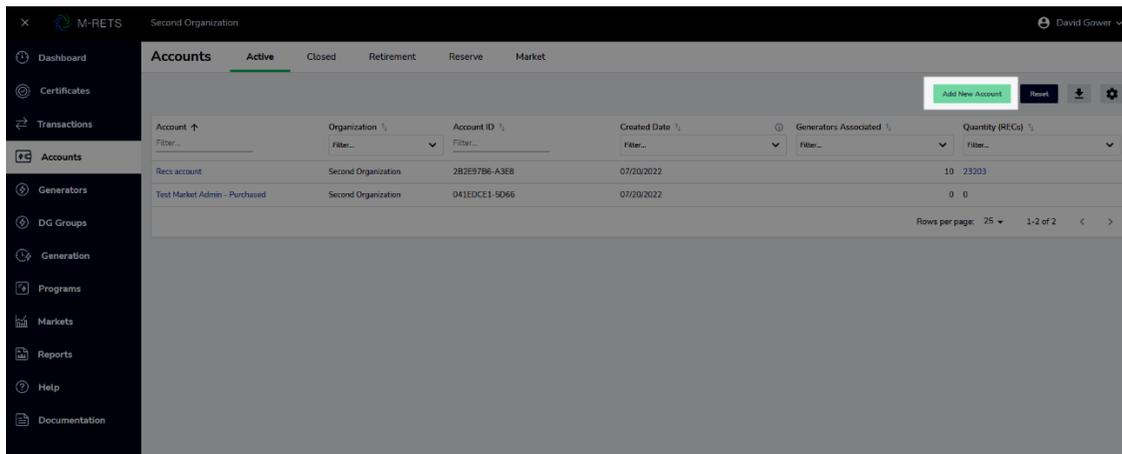
When the Ontario Clean Energy Credit Registry Program Administrator invites a participant to the annual program, a notification will be displayed in the Organization's M-RETS Dashboard. To accept the invitation, select the Answer button.



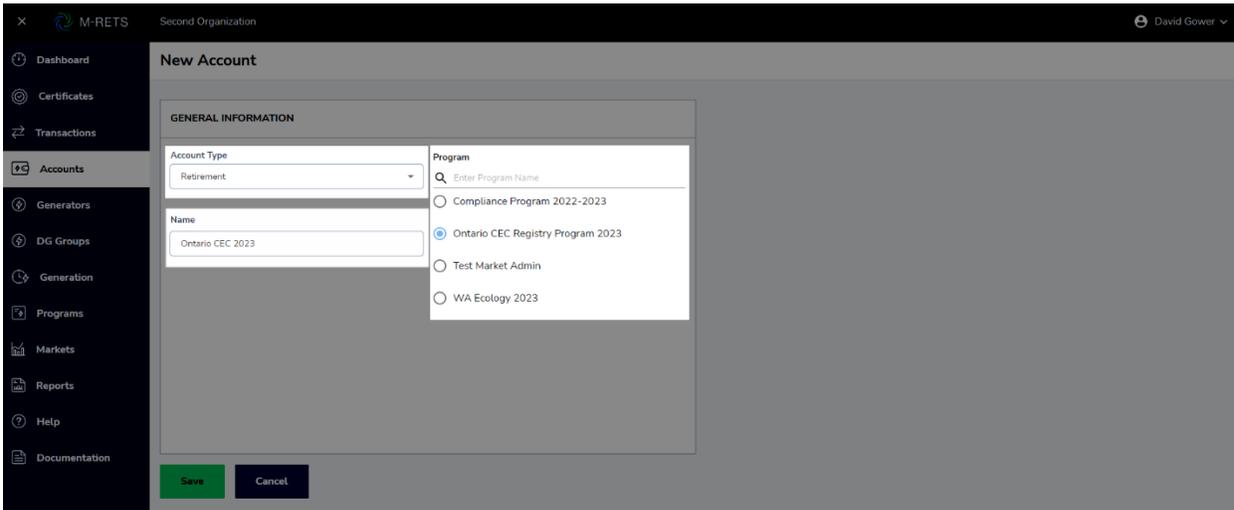
Select the Accept button on the confirmation popup.



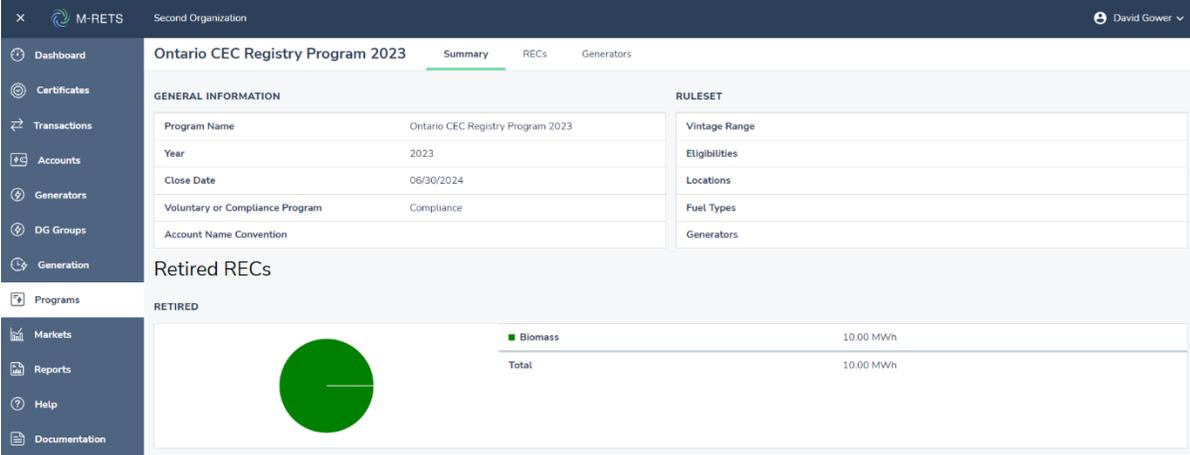
Once an Organization accepts an invitation to participate in a Program, the participating Organization must create a new Retirement Account and link the Account to the Program. Open the Accounts Dashboard and select the Add New Account button

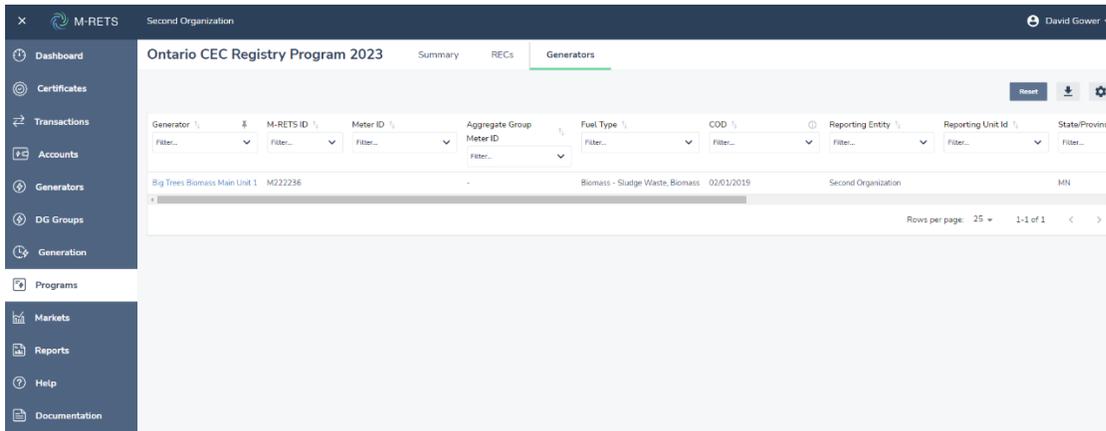
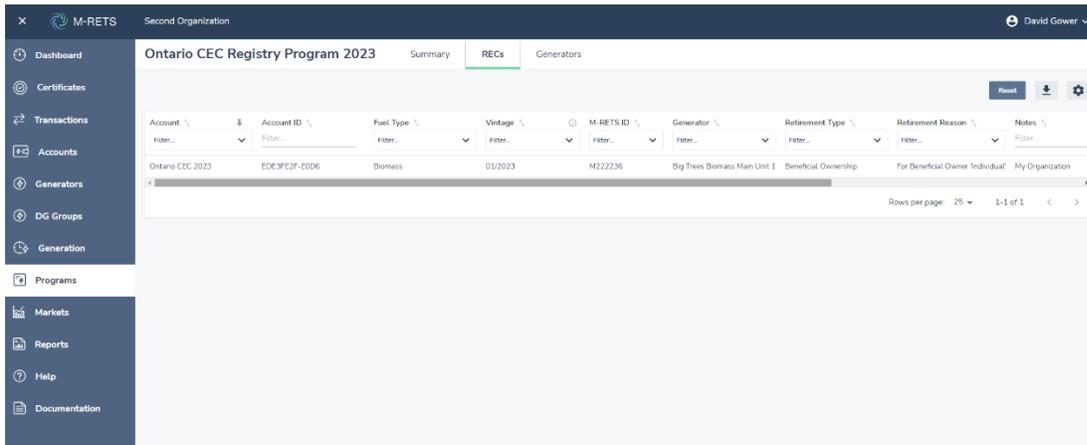


Select the Retirement Account type. Select the Program to associate with the Retirement Account and enter a name relevant to the Program. Select Save.



As Credits are retired into this Account, they will automatically appear on both the Program Administrator's and the participant's Program dashboard. This dashboard is tailored to only show relevant information for their Program.





If a User attempts to retire Credits that do not match the predetermined criteria of the Program, the System blocks the retirement. This prevents the retirement of incorrect Credits.

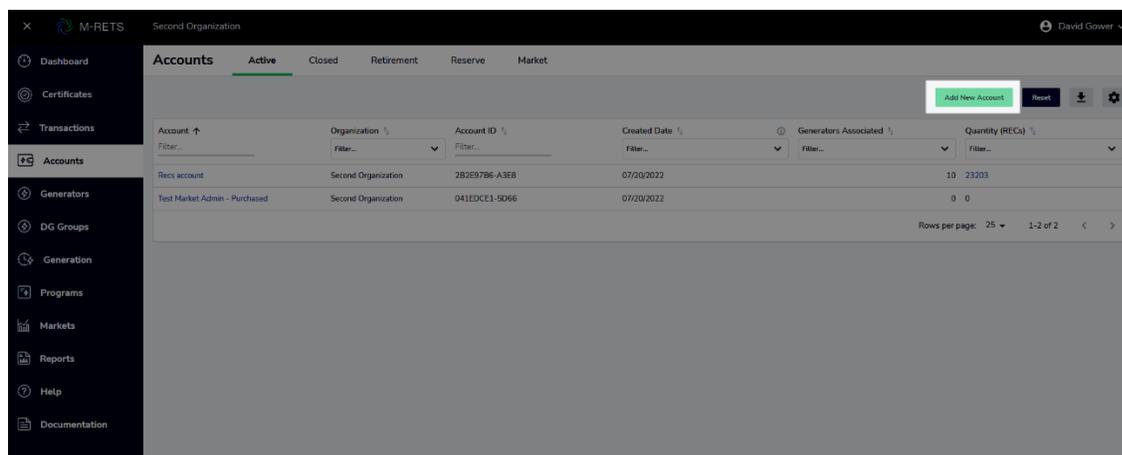
## 9. Credit Management

The Ontario Clean Energy Credit Registry permits active credits to be transferred between Ontario Participants, into Active Accounts and into Retirement Accounts. Users can transfer Certificates to specific Accounts manually or automatically upon upload. Each Account has a unique identification number, like a banking system. Users may attach aliases to Accounts for ease of reference (e.g., by state, by product name, etc.). Ontario Clean Energy Credit Registry permits transfers if:

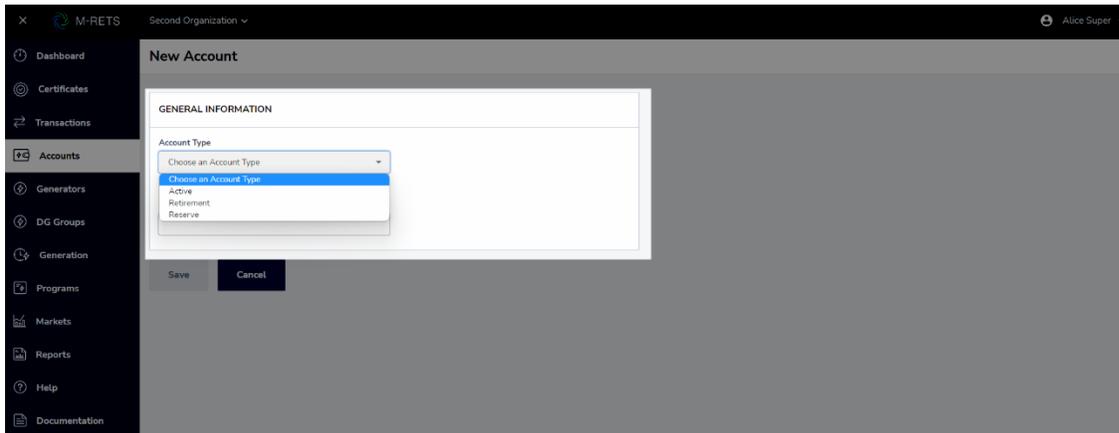
- (i) the Transfer occurs by the Transfer and Retirement Deadline; (All transfers and retirements for a year must be completed by June 30th of the following year)
- (ii) the Credit has been generated in the calendar year immediately prior to the applicable Transfer and Retirement Deadline;
- (iii) the Credit is transferred to an Ontario Transferee; Transfers to Non Ontario Participants is not permitted
- (iv) the Credit will be retired by, or on behalf of, such Ontario Transferee against electricity consumed by the Ontario Transferee in Ontario in the same calendar year in which the Credit was generated; and
- (v) the Credit has not previously been transferred or retired.

For clarity, an Ontario Transferor shall not export a Credit from the Clean Energy Credit Registry. Certificates, M-RETS Certificates, associated with a Generator Asset located outside of Ontario may not constitute Credits for the Ontario Program and may not be imported into the Clean Energy Credit Registry.

Certificates are managed in M-RETS through Active and Retirement Accounts. A user can create an Active or Retirement Account from the Accounts Dashboard. Open the Accounts Dashboard and select the Add New Account button.

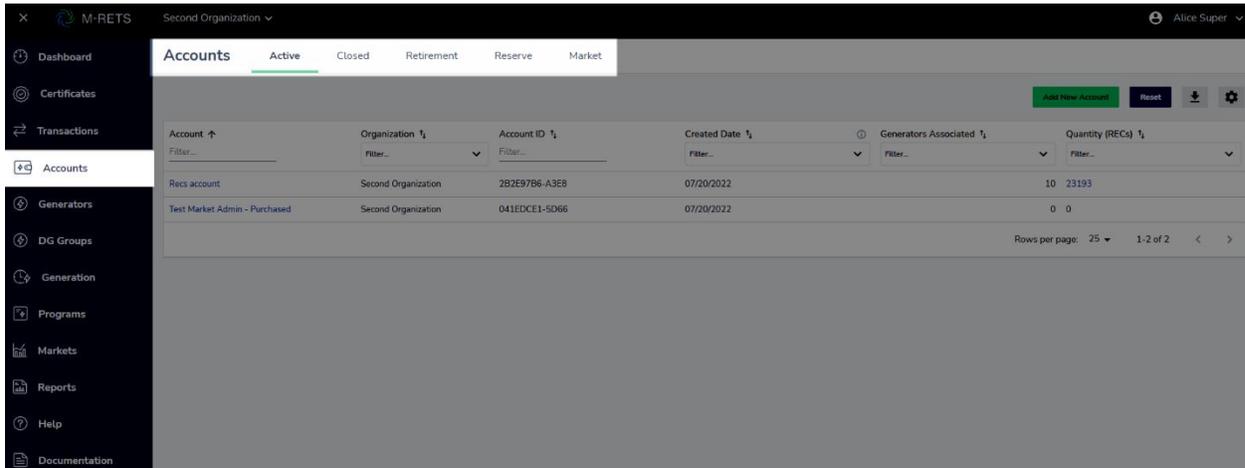


Select the Account Type. The Ontario Clean Energy Credit Registry Program only permits the use of Active and Retirement Accounts for Ontario credits. Enter a name relevant to the Program. Select Save.



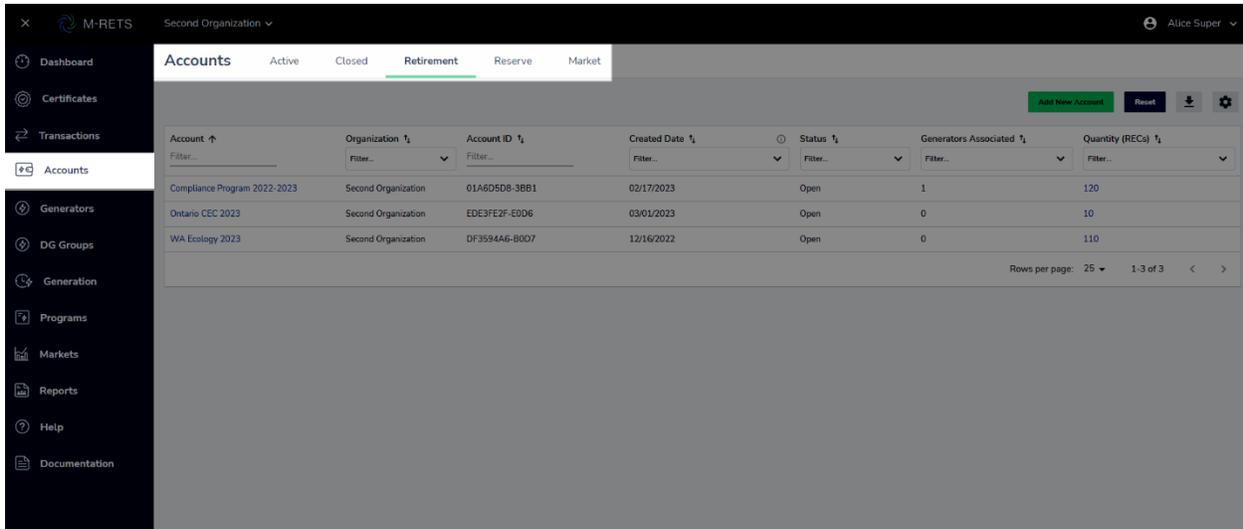
## 9.1 Active Accounts

An Organization can have one or more Active Account(s). An Active Account is the holding place for all active M-RETS Credits. The Active Account is like a cash checking Account. M-RETS Certificates in Active Accounts are liquid and an Organization can transfer, or retire the Credits. If the Account has a Generator Registration associated with it, the Active Account will be the first point of deposit for any M-RETS Credits created that are associated with the Generator Unit ID number. Active Accounts can be accessed and created from the Accounts Dashboard. Open the Accounts Dashboard and select the Active tab



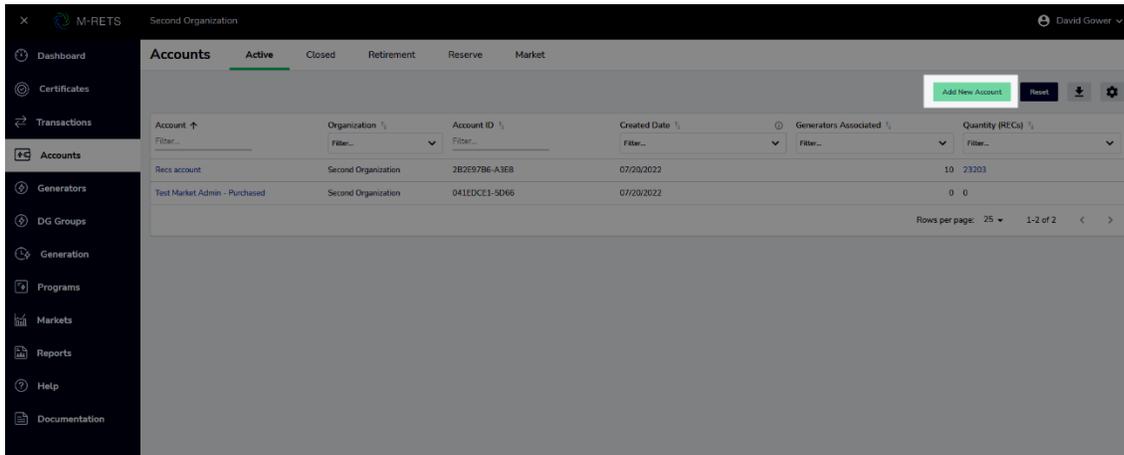
## 9.2 Retirement Accounts

An Organization may establish multiple Retirement Accounts. Retirement accounts can be accessed and created from the Accounts Dashboard. Open the Accounts Dashboard and select the Retirement tab

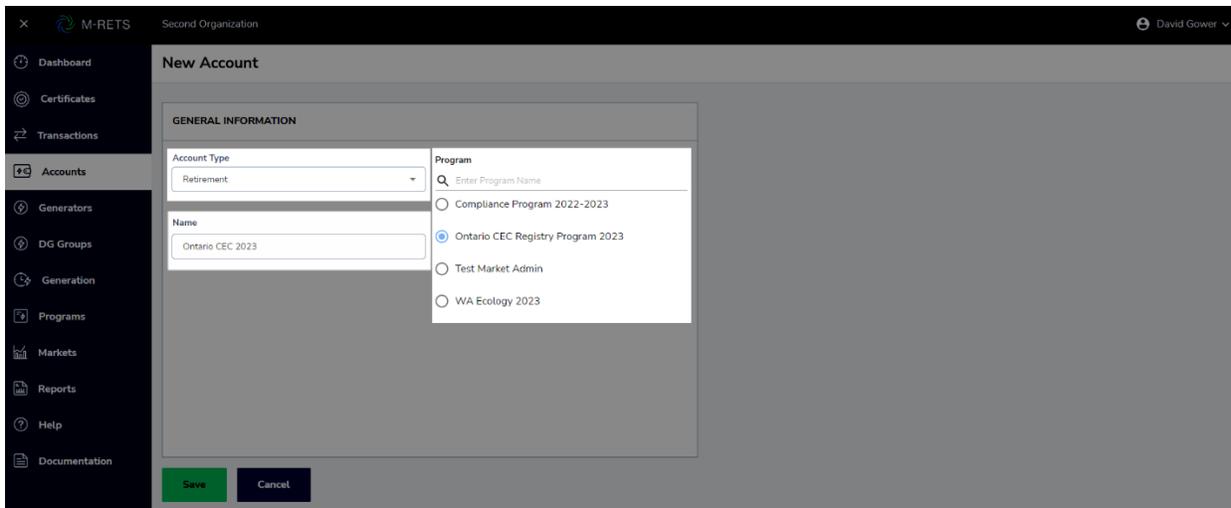


All Ontario Participants will be invited to the Ontario Program. A retirement Account must be linked to the program. Ontario participants are not permitted to manage retirement accounts that are not linked to the annual Ontario Program.

Once an Organization accepts an invitation to participate in a Program, the participating Organization must create a new Retirement Account and link the Account to the Program. Open the Accounts Dashboard and select the 'Add New Account' button



Select the Retirement Account type. Select the Program to associate with the Retirement Account and enter a name relevant to the Program. Select Save.



As Credits are retired into this Account, they will automatically appear on both the Program Administrator's and the participant's Program dashboard. This dashboard is tailored to only show relevant information for their Program.

**Ontario CEC Registry Program 2023** Summary RECs Generators

**GENERAL INFORMATION**

Program Name	Ontario CEC Registry Program 2023
Year	2023
Close Date	06/30/2024
Voluntary or Compliance Program	Compliance
Account Name Convention	

**RULESET**

Vintage Range
Eligibilities
Locations
Fuel Types
Generators

**Retired RECs**

RETIRED

Biomass	10.00 MWh
<b>Total</b>	<b>10.00 MWh</b>

**Ontario CEC Registry Program 2023** Summary RECs Generators

Account %	Account ID %	Fuel Type %	Vintage %	M-RETS ID %	Generator %	Retirement Type %	Retirement Reason %	Notes %
Ontario CEC 2023	EDESPEZF-E006	Biomass	01/2023	M222236	Big Trees Biomass Main Unit 1	Beneficial Ownership	For Beneficial Owner 'Individual'	My Organization

Rows per page: 25 1-1 of 1

**Ontario CEC Registry Program 2023** Summary RECs Generators

Generator %	M-RETS ID %	Meter ID %	Aggregate Group %	Fuel Type %	COD %	Reporting Entity %	Reporting Unit ID %	State/Province %
Big Trees Biomass Main Unit 1	M222236			Biomass - Sludge Waste, Biomass	02/01/2019	Second Organization		MN

Rows per page: 25 1-1 of 1

If a User attempts to retire Credits that do not match the predetermined criteria of the Program, the System blocks the retirement. This prevents the retirement of incorrect Credits.

A Retirement Account is a repository for M-RETS Certificates that the Organization wants to designate as retired for a Voluntary environmental claim, for a beneficial owner, or toward a Program. M-RETS Credits in a Retirement Account are no longer transferable to another party and serve as an electronic proof of retirement.

Once an M-RETS Credits is retired to a Retirement Account, those Certificates may not be transferred into any other Account, including another Retirement Account (i.e., if an Organization has multiple Retirement Accounts). The Retirement Account is effectively the last resting place for an M-RETS Credit.

An Ontario Transferee that accepts the Transfer of a Credit shall retire the Credit, by moving it to the Ontario Transferee's Ontario Program Retirement Account and selecting the Ontario Retirement Type and Voluntary retirement reason, by the Transfer and Retirement Deadline, against electricity consumed by the Ontario Transferee from the IESO-Controlled Grid or a Distributor's Distribution System within the same calendar year in which the Credit was generated.

An Ontario Transferor that does not Transfer a Credit shall retire the Credit, by moving it to the Ontario Transferor's Ontario Program Retirement Account and selecting the Ontario Retirement Type and Voluntary reason, by the Transfer and Retirement Deadline.

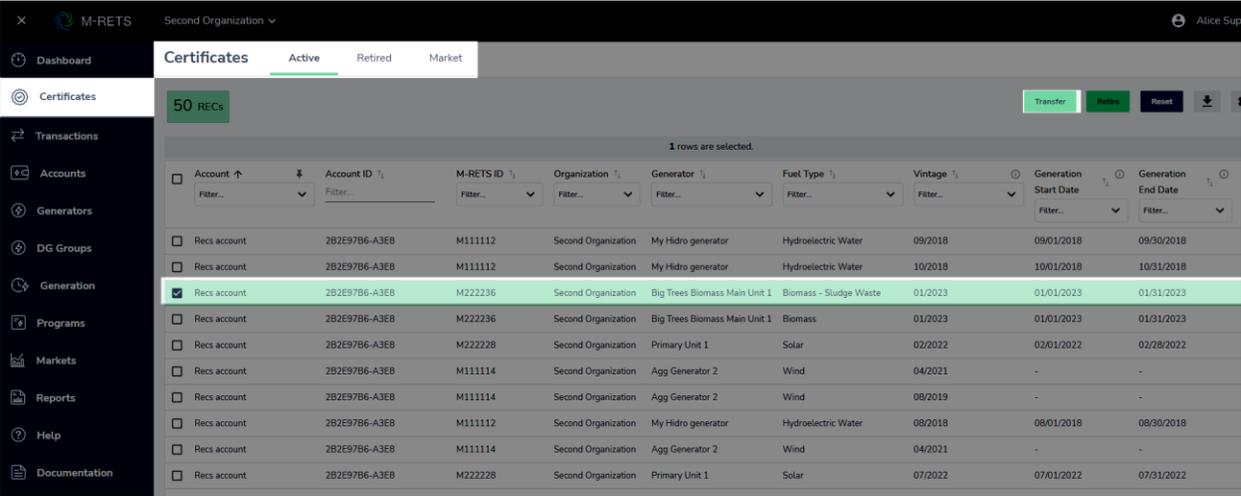
### 9.3 Credit Transactions

M-RETS Users may transfer Active Certificates to:

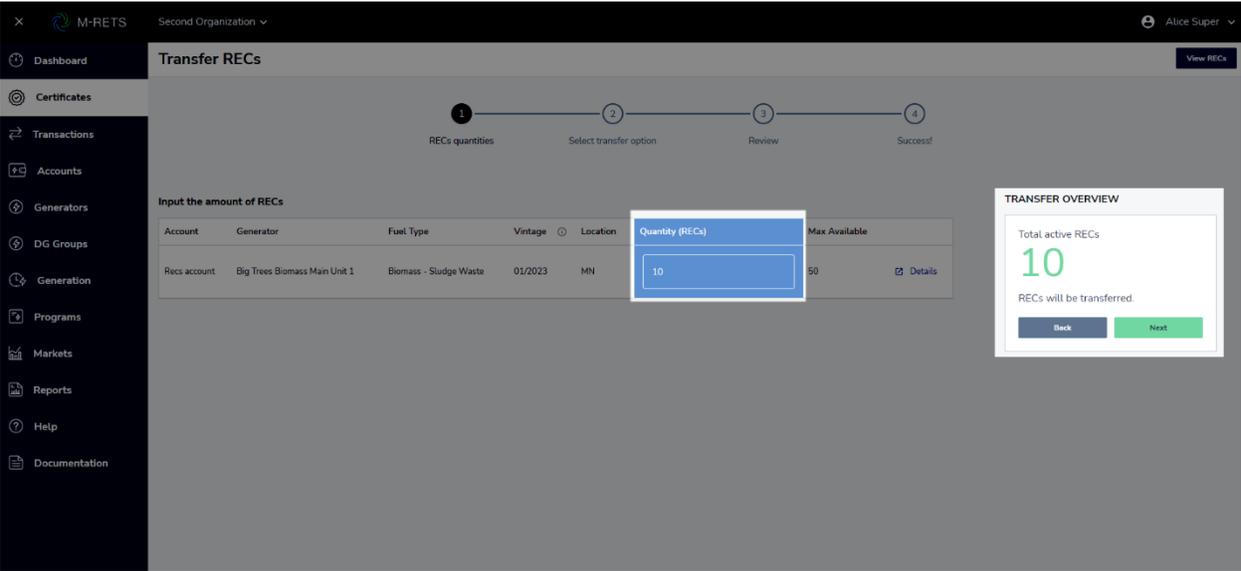
- Another Organization
- Another Active Account
- To a Retirement Account

### 9.4 Transferring Credits to Another Organization

Ontario Participants are not allowed to transfer or export Ontario credits outside of the Ontario Clean Energy Credit Registry. All Transfers must be sent to Ontario Transferees that will retire the credits to meet their Ontario Load. To initiate a transfer, select the credits from the Active tab on the Certificates Dashboard. Select the Transfer button located in the top Right of the report.



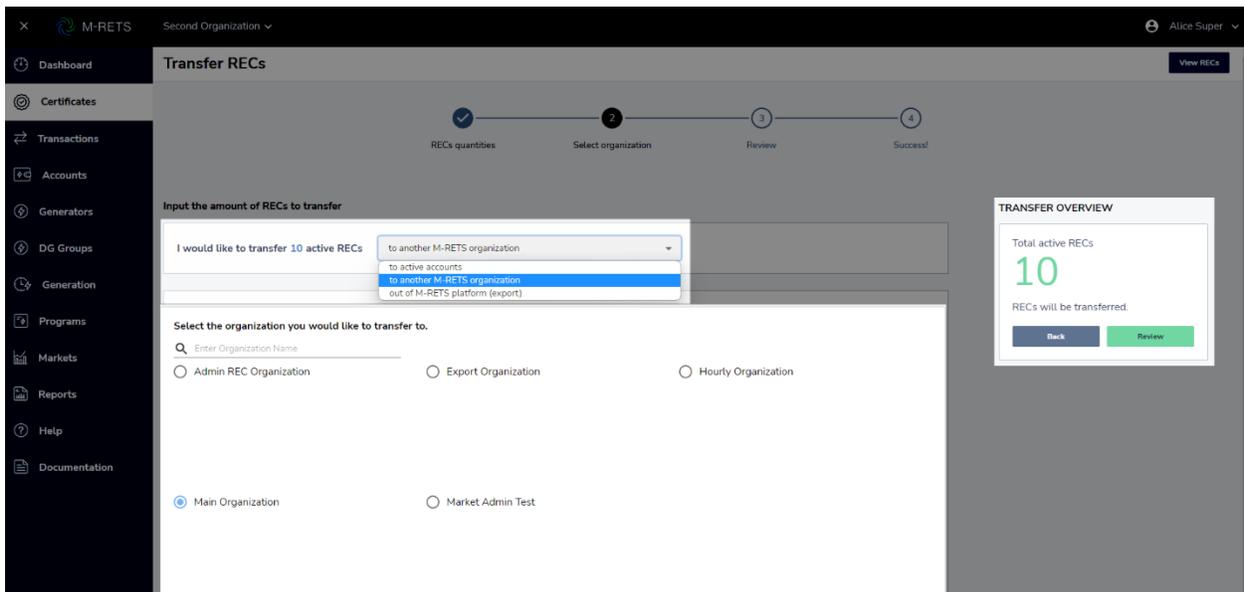
Edit the desired quantity of credits to transfer and select the Next button



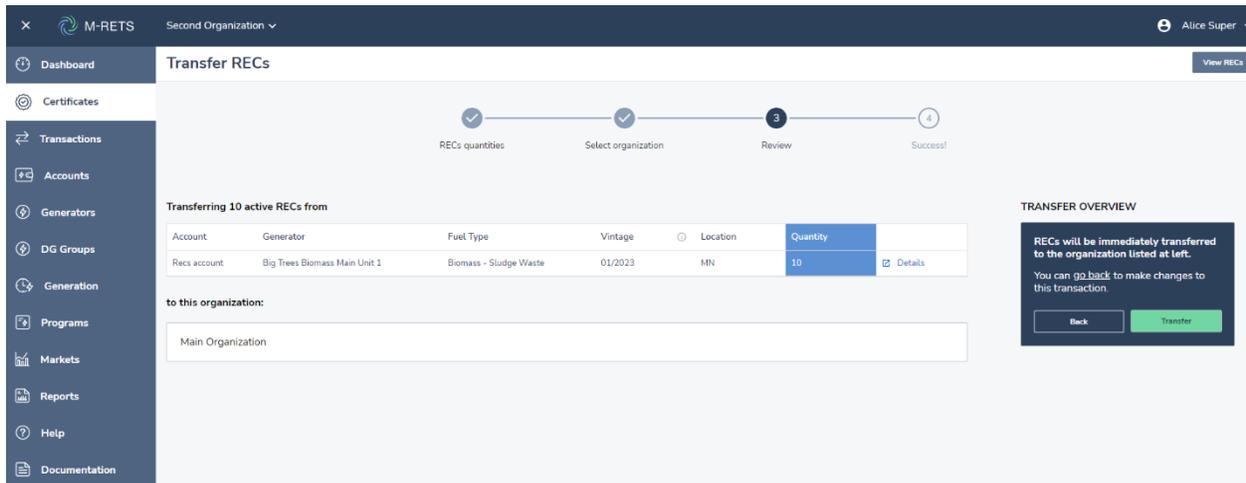
Select how you would like to transfer the credits. There are three options available in the drop-down menu:

- To Active account – to transfer the credits to an internal Active Account
- To another M-RETS Organization – to transfer it to an Ontario Transferee. Note: Ontario Participants are not permitted by the Ontario Clean Energy Credit Registry Administrator to transfer Credits to a M-RETS accounts outside of Ontario.
- Out of M-RETS Platform (export) – Note: Exporting credits is not permitted by the Ontario Clean Energy Credit Registry Administrator

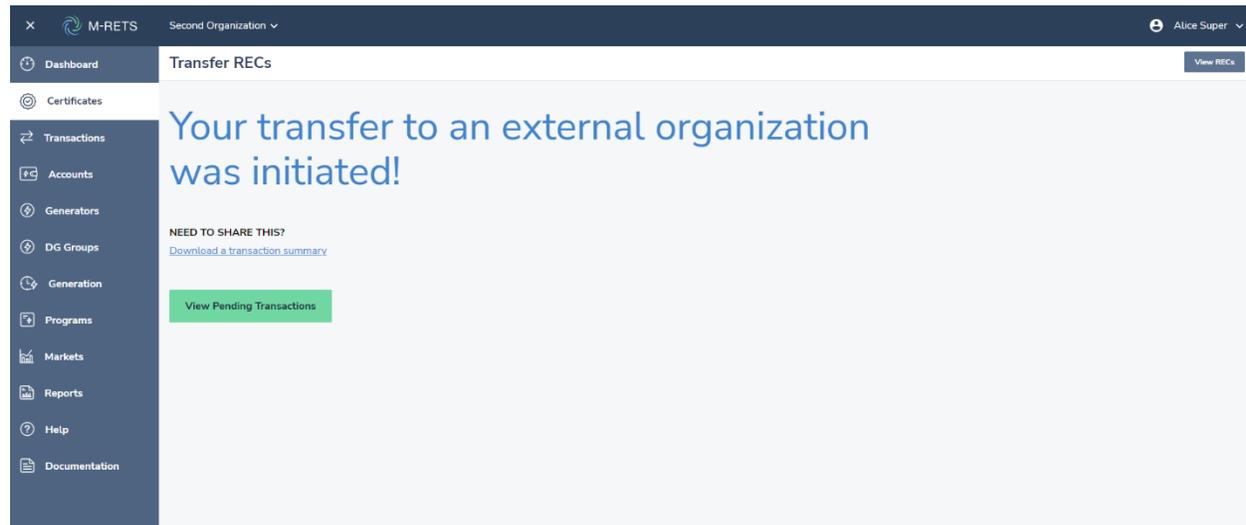
To complete the transfer to another Ontario participant, select the 'To Another M-RETS Organization' and look up and select the Ontario transferee you would like to transfer credits to. Select the Review button.



Review the Transfer and select the Transfer button if the transfer details look correct.

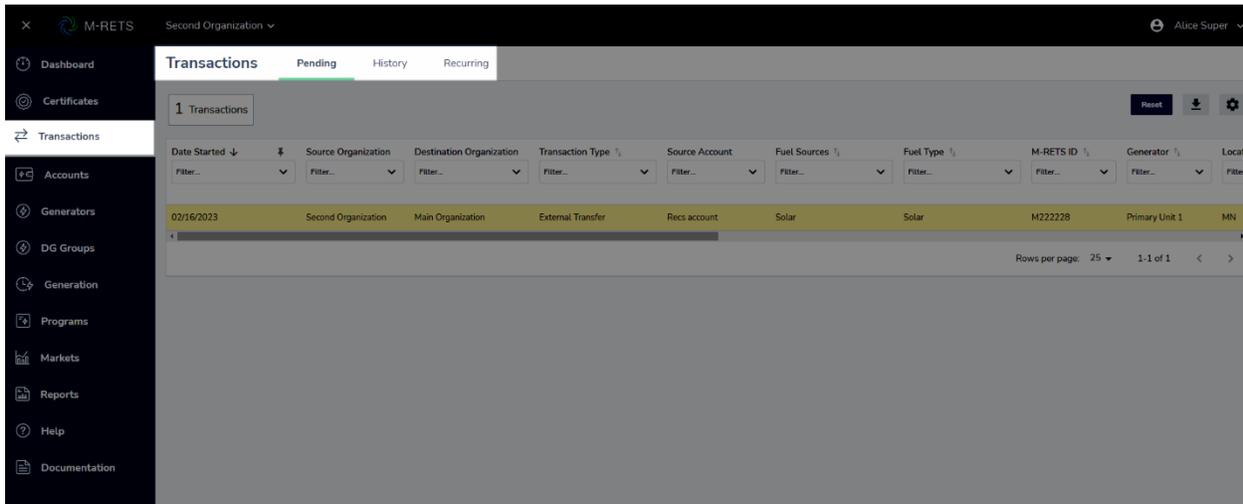


When the transfer is initiated, a confirmation screen will be displayed. This page will provide a link to download a Transaction Summary that can be sent to your Transferee or kept for your records. The confirmation screen will also have a link that redirects the user to view the Pending Transactions Dashboard.

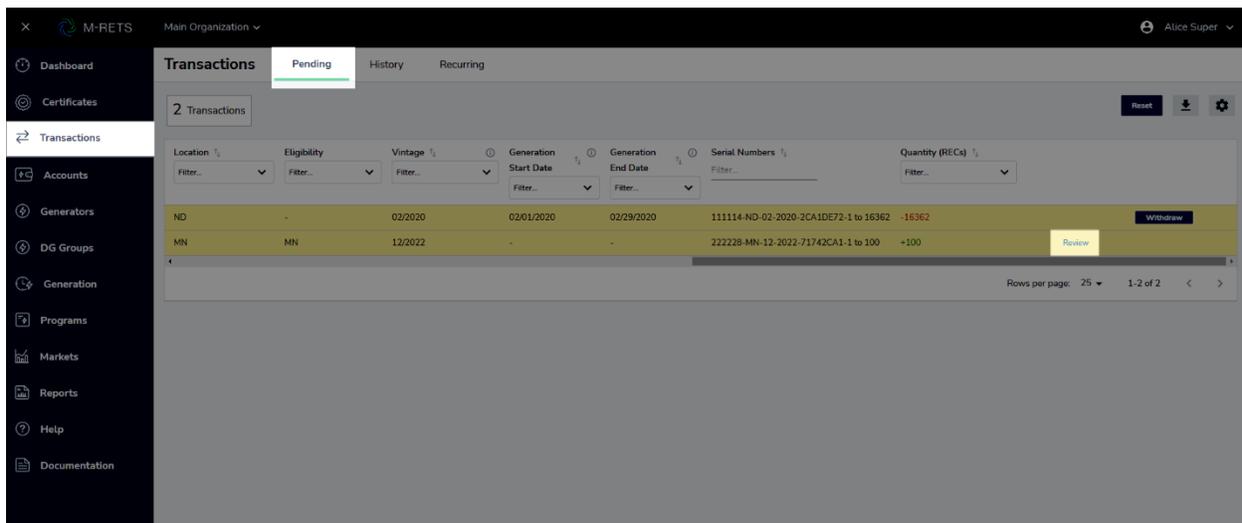


After a User initiates a transfer to another Organization, the transferred Certificates enter a 'Pending' state. This effectively "freezes" the Certificates and the System will prevent the Transferor from making additional transfers of Certificates in Pending status.

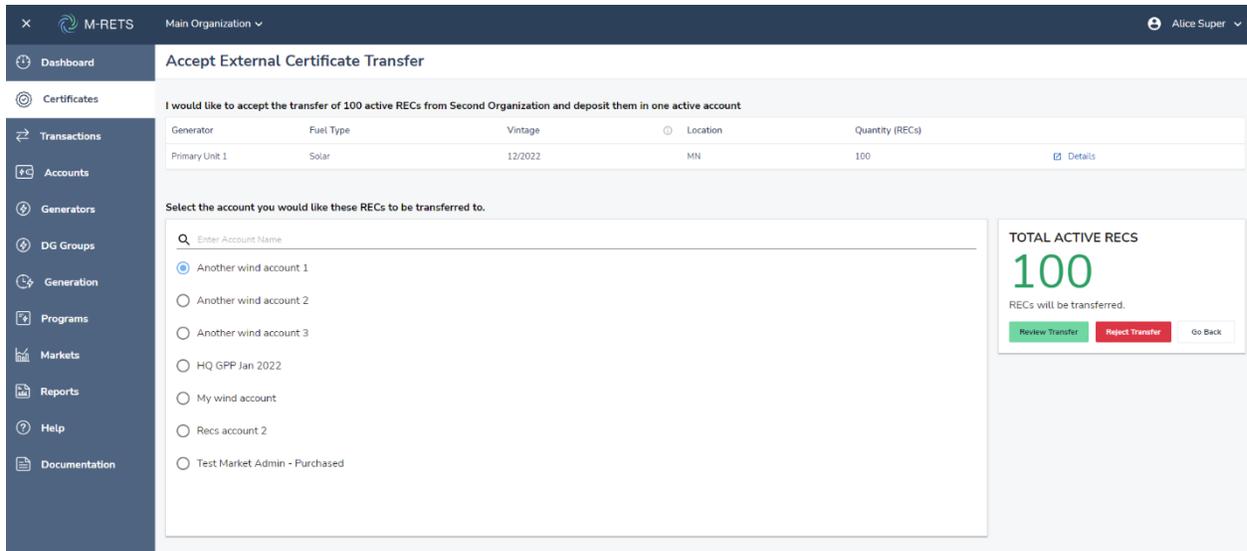
To view the Pending Transactions, select the Pending tab from the Transactions Dashboard. The table lists all Pending Transactions for both the Transferor and Transferee.



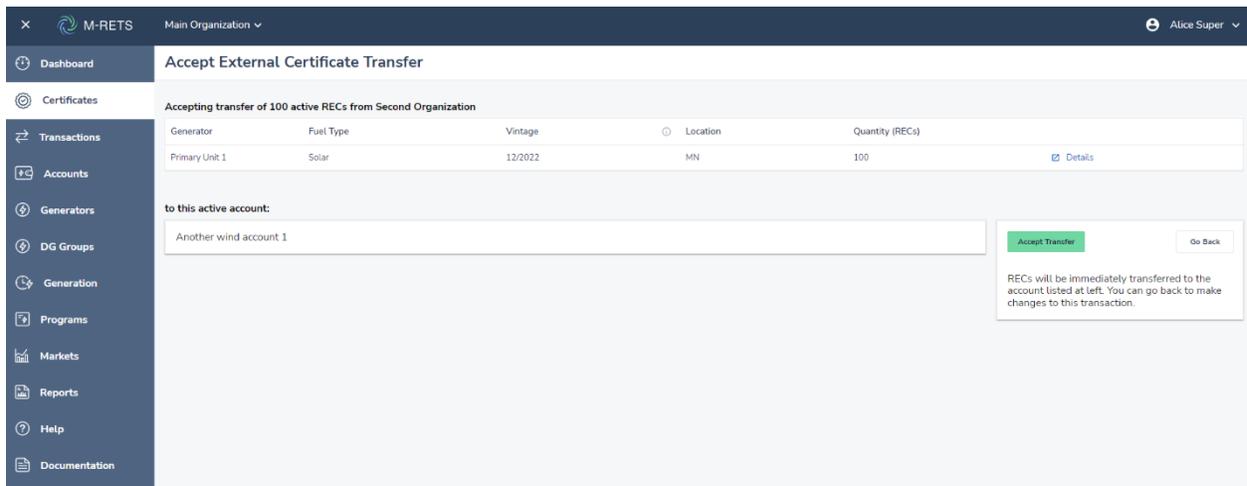
Once the Transferee confirms the transfer from the far right of the Pending tab, both the Transferor and Transferee receive an email if their notifications are enabled. The Transferee may reject a transfer prior to acceptance. To Review a transfer, the Transferee should select the Review button from the Pending tab of the Transactions dashboard.



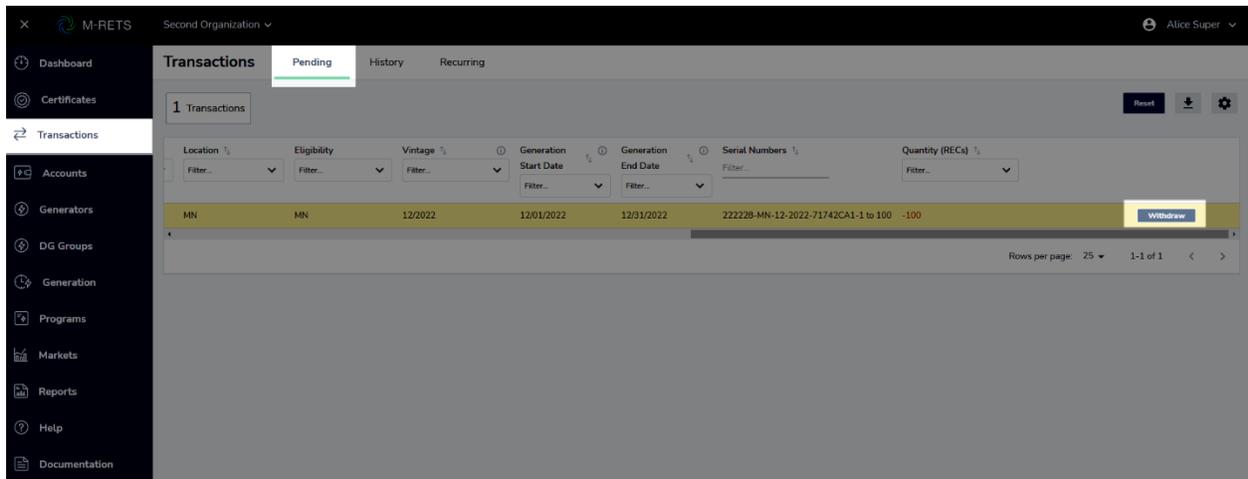
If the transfer looks incorrect, from the Accept External Certificate Transfer screen select the Reject Transfer button to send the credits back to the Transferor. To Approve the Transfer, review the credits and select the Active account where the credits should be deposited.



Select the Review Transfer button for the final review screen. Select the Accept Transfer button.



The Transferor may withdrawal any transfer before a Transferee confirms the transfer by selecting the Withdraw button from the far right of the Pending tab of the Transactions dashboard.

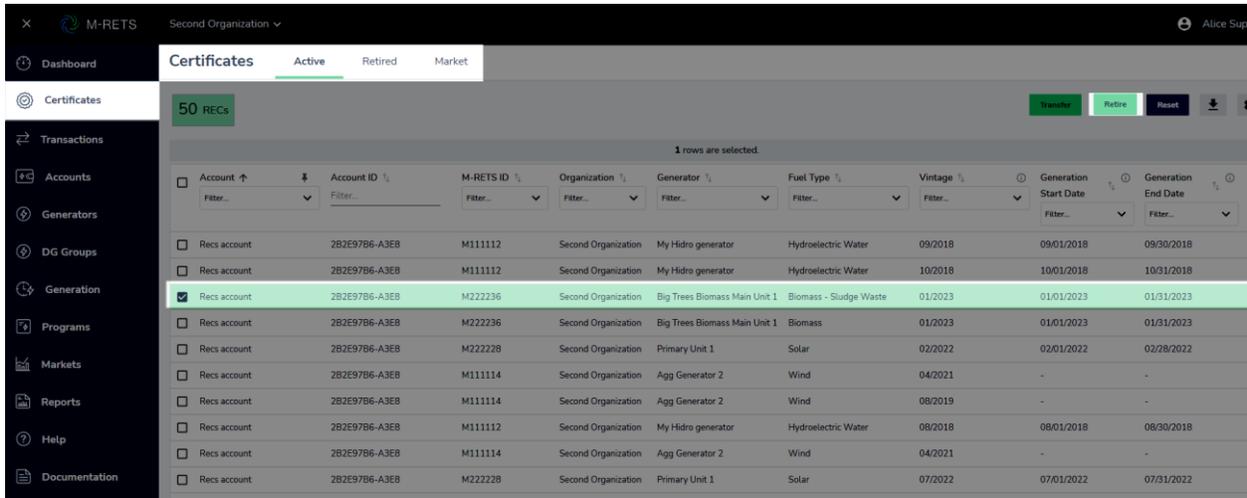


## 9.5 Transferring Credits to a retirement account

M-RETS Credits in a Retirement Account are no longer transferable to another party and serve as an electronic proof of retirement. A Certificate toward Ontario Load must be retired into a Retirement account that has been linked to an Ontario Clean Energy Credit Registry Program.

Once an M-RETS Credits is retired to a Retirement Account, those credits may not be transferred into any other Account, including another Retirement Account (i.e., if an Organization has multiple Retirement Accounts). The Retirement Account is effectively the last resting place for an M-RETS Credit.

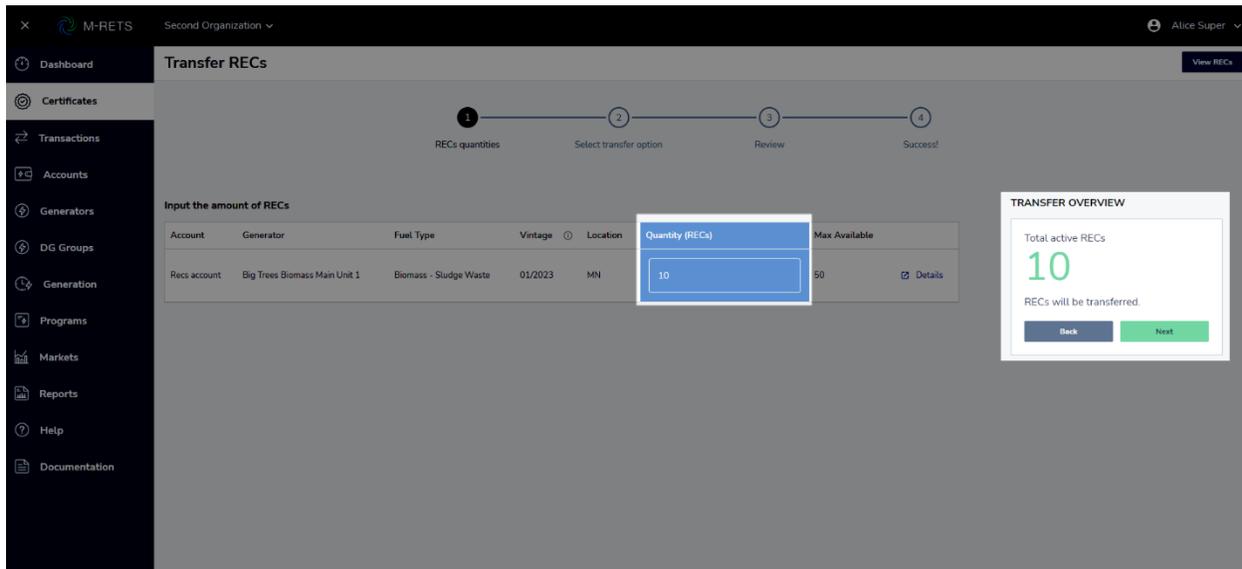
To initiate a retirement, select the credits from the Active tab on the Certificates Dashboard. Select the Retire button located in the top Right of the report.



The screenshot shows the M-RETS Certificates dashboard. The 'Active' tab is selected, showing 50 RECs. A table lists certificates with columns for Account, Account ID, M-RETS ID, Organization, Generator, Fuel Type, Vintage, Generation Start Date, and Generation End Date. The row for 'Big Trees Biomass Main Unit 1' with M-RETS ID 'M222236' is selected.

Account	Account ID	M-RETS ID	Organization	Generator	Fuel Type	Vintage	Generation Start Date	Generation End Date	
Recs account	2B2E97B6-A3E8	M111112	Second Organization	My Hidro generator	Hydroelectric Water	09/2018	09/01/2018	09/30/2018	
Recs account	2B2E97B6-A3E8	M111112	Second Organization	My Hidro generator	Hydroelectric Water	10/2018	10/01/2018	10/31/2018	
<input checked="" type="checkbox"/>	Recs account	2B2E97B6-A3E8	M222236	Second Organization	Big Trees Biomass Main Unit 1	Biomass - Sludge Waste	01/2023	01/01/2023	01/31/2023
<input type="checkbox"/>	Recs account	2B2E97B6-A3E8	M222236	Second Organization	Big Trees Biomass Main Unit 1	Biomass	01/2023	01/01/2023	01/31/2023
<input type="checkbox"/>	Recs account	2B2E97B6-A3E8	M222228	Second Organization	Primary Unit 1	Solar	02/2022	02/01/2022	02/28/2022
<input type="checkbox"/>	Recs account	2B2E97B6-A3E8	M111114	Second Organization	Agg Generator 2	Wind	04/2021	-	-
<input type="checkbox"/>	Recs account	2B2E97B6-A3E8	M111114	Second Organization	Agg Generator 2	Wind	08/2019	-	-
<input type="checkbox"/>	Recs account	2B2E97B6-A3E8	M111112	Second Organization	My Hidro generator	Hydroelectric Water	08/2018	08/01/2018	08/30/2018
<input type="checkbox"/>	Recs account	2B2E97B6-A3E8	M111114	Second Organization	Agg Generator 2	Wind	04/2021	-	-
<input type="checkbox"/>	Recs account	2B2E97B6-A3E8	M222228	Second Organization	Primary Unit 1	Solar	07/2022	07/01/2022	07/31/2022

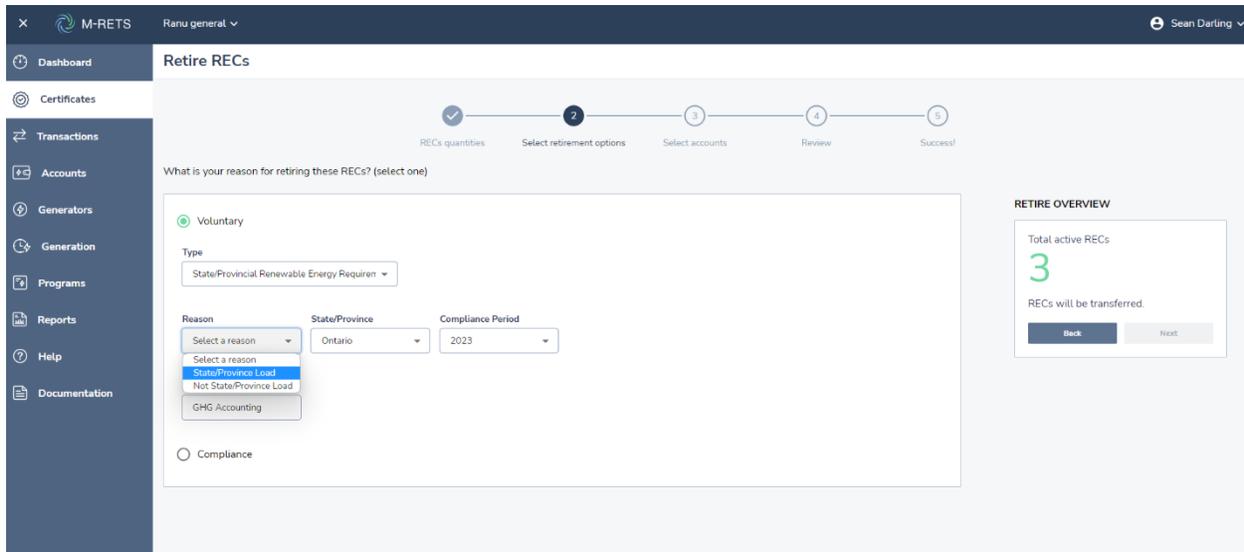
Edit the desired quantity of credits to transfer and select the Next button



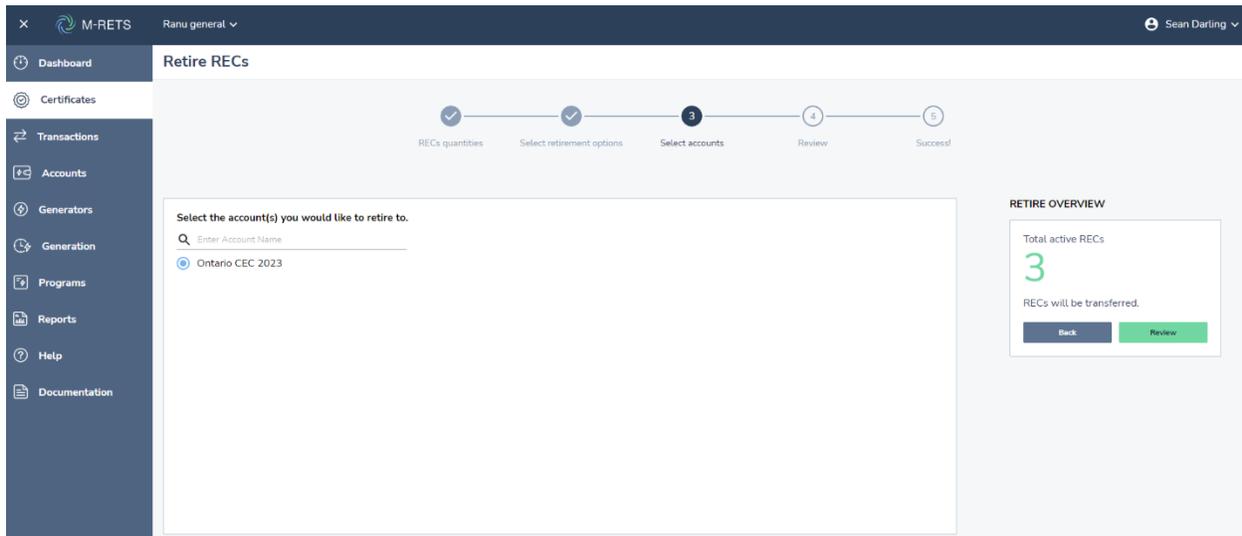
The screenshot shows the M-RETS Transfer RECs screen. A progress bar indicates the current step is 'RECs quantities'. A table lists certificates with columns for Account, Generator, Fuel Type, Vintage, Location, Quantity (RECs), and Max Available. The 'Quantity (RECs)' field is highlighted with a blue box and contains the value '10'. A 'Next' button is visible in the 'TRANSFER OVERVIEW' panel.

Account	Generator	Fuel Type	Vintage	Location	Quantity (RECs)	Max Available
Recs account	Big Trees Biomass Main Unit 1	Biomass - Sludge Waste	01/2023	MN	10	50

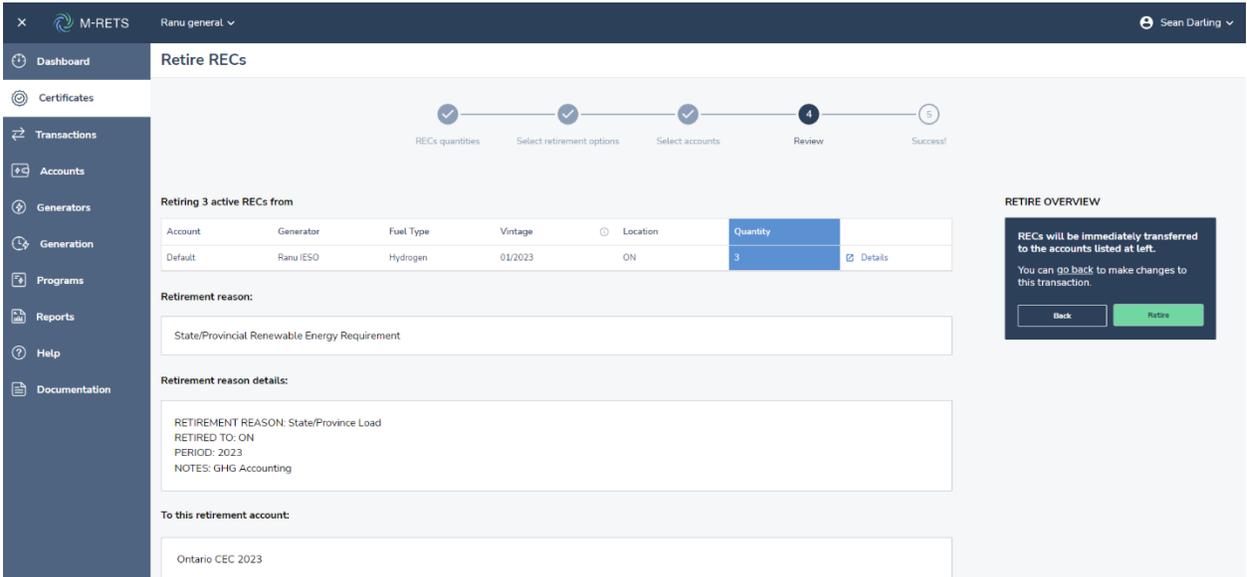
Select the State Provincial Renewable Energy Requirement Retirement Type located under the Voluntary Retirements. Designate if the Retirement is towards Provincial Load or Not Provincial Load in the Reason drop-down. Designate the Province and Compliance Period. A Notes field is provided to indicate a specific purpose for the retirement that you would like tagged with the retired credits. Select the Next button.



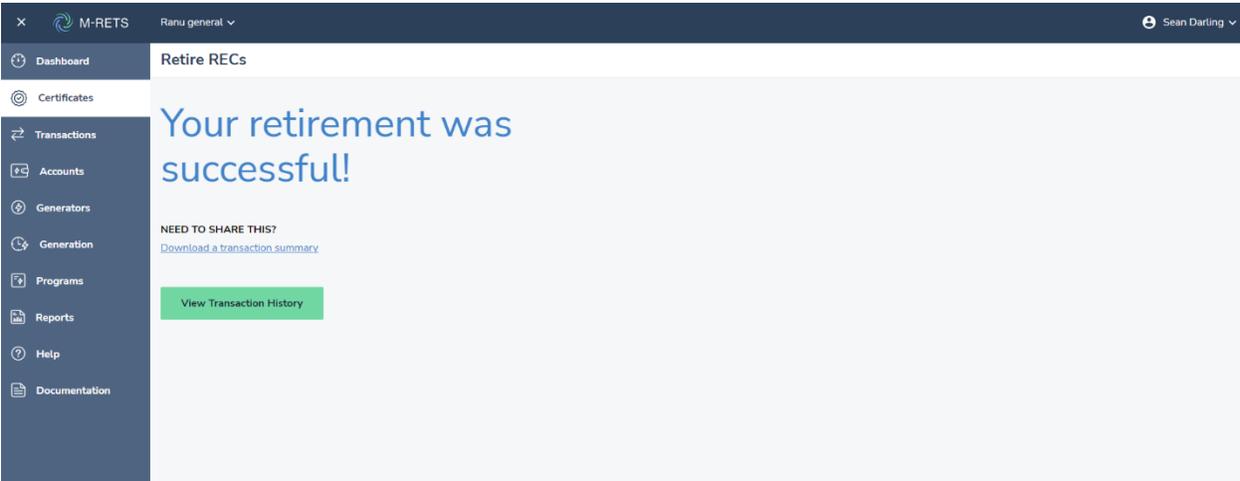
Select the Retirement account that is linked to the Ontario Clean Energy Credit Registry Program. Select Review



Review the Retirement and select Retire to submit the credits to the Retirement account and the Ontario Program Administrator.



When the retirement is complete, a confirmation screen will be displayed. This page will provide a link to download a Transaction Summary that can be sent to your customer or kept for your records. The confirmation screen will also have a link that redirects the User to view the Transaction History Dashboard.



## 10. Reports

The Ontario Clean Energy Credit Registry Program Administrator is entitled to the following reports and will make them publicly available:

- registered Ontario Transferors and Ontario Transferees;
- information respecting the number of Credits created in a calendar year from Ontario Transferees and Transferors;
- information respecting the transfer of Credits, including information respecting the Credits that are available for transfer and the total number of Credits transferred in a calendar year broken down by energy source from Ontario Transferees and Transferors
- information respecting the retirement of Credits from Ontario Transferees and Transferors
- any other information about the Ontario Clean Energy Credit Registry that is required to be published pursuant to the Ontario Electricity Act or Ontario Regulations.



## 11. Conclusion

This concludes the Ontario Clean Energy Credit Registry Program training. Please visit the [www.MRETS.org](http://www.MRETS.org) for additional information about M-RETS, Documentation, Operating Procedures, Terms of Use and additional training documentation.

Please contact the M-RETS System Administrator with any questions about the use or features

Phone: (651) 900-7891

Email: [SystemAdmin@mrets.org](mailto:SystemAdmin@mrets.org)

Please contact the Ontario Clean Energy Credit Registry Program with any questions about the Ontario Program and Requirements:

Email: [customer.relations@ieso.ca](mailto:customer.relations@ieso.ca)

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**Independent Electricity  
System Operator**

1600-120 Adelaide Street West  
Toronto, Ontario M5H 1T1

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Toll-free: 1.888.448.7777

E-mail: [customer.relations@ieso.ca](mailto:customer.relations@ieso.ca)

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