



**MICHIGAN RENEWABLE ENERGY CERTIFICATION SYSTEM
OPERATING PROCEDURES**

November 2018

Table of Contents

Glossary	iii
1 Introduction.....	1
2 MIRECS User Registration.....	2
2.1 Participation in MIRECS	2
2.2 Establishing an Account	2
3 Account Types and Sub-Account Structure.....	3
3.1 Deposits to Active Sub-Accounts	4
3.2 Transfers from Active Sub-Accounts	4
3.3 Retirement Sub-Accounts	5
3.4 Group Retirement Sub-Accounts	6
3.5 Transfers between Accounts	6
3.6 Transfers between Registries	6
3.6.1 Transfers to MIRECS	6
3.6.2 Transfer from MIRECS	7
4 Access to Accounts and Confidentiality	7
4.1 Account Access.....	7
4.2 Levels of Account Access.....	8
4.2.1 Account Holder – Supervisor.....	8
4.2.2 Account Holder – View Only	8
4.3 Confidentiality	8
5 Project Registration.....	8
5.1 Registering a Project.....	9
5.1.1 Aggregated Projects	11
5.1.2 Multi-Fuel Generation Project Registration.....	11
5.1.3 Behind the Meter.....	12
5.1.4 EWR Projects.....	12
5.2 Verification of Static Data Submitted During Project Registration.....	13
5.3 Updating Static Data	13
5.4 Misrepresentation of Static Information:	14
5.5 Terminating an Project’s Participation in MIRECS	14
5.6 Changing the Account with Which a Project is Associated	14
5.7 Assignment of Registration Rights	15
5.7.1 Termination of Registration Rights	15
6 Dynamic Data in MIRECS – Generation Data	15
6.1 Generation Data Requirements	15
6.2 Revenue Metering Standards	16
6.3 Measurement of Generation and Adjustments.....	16
6.4 Prior Period Adjustments	17
6.5 Notification of Adjustments.....	17

6.6	Data Collection Procedure	17
6.6.1	Midwest ISO (MISO) Data	18
6.7	Requirements of Data Reporting Entities	18
6.8	Special Requirements for Self-Reporting Projects Only	19
6.9	Generation Activity Log	20
6.10	Multi-fuel Generation Projects	21
6.10.1	Allocating Output for Each Fuel Source.....	21
7	Creation of Credits	22
7.1	Credit Creation.....	22
7.2	Process and Timeline for Credit Creation.....	23
7.3	Credit Creation for Accumulated Generation	23
7.4	Data Fields Carried on Each Credit	24
8	Credit Errors and Correction.....	25
8.1	Generation Data Validity Check.....	25
8.2	Credit Errors Discovered After Credit Issuance	25
9	MIRECS Compliance Requirements	25
9.1	RE Compliance Sub-Account	25
9.2	EWR Compliance Sub-Account	26
10	Importing and Exporting.....	28
10.1	Importing Credits	28
10.2	Exporting Credits	28
11	Public Reports	28
11.1	Account Holder Reports	29
12	Data Security.....	30
Appendix A: Account Holder Registration Process		1
Appendix B: Project Registration Process		1
Appendix C: Essential Generation Characteristics for Aggregate Metering		1
Appendix D: Documentation Requirements for Multi-Fuel Generation Projects		1
Appendix E: MIRECS Fuel Types		1
Appendix F: List of Referenced Documents		1

Glossary

Account: An Account is needed to use MIRECS. There are six account types in MIRECS, as described in Section 3 below.

Account Holder: An Account Holder is a party that has registered with MIRECS and has established an Account within MIRECS.

Account Manager: An Account Manager is 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 Credits: An Active Credit is a Credit that is held in an Active Sub-account. Such Credits may be traded, transferred, exported or Retired at the discretion of the Account Holder of the Active Sub-account.

Active Sub-account: The Active Sub-account is a sub-account of an Account Holder's Account and is the holding place for all Active Credits. If the Account Holder is the owner of a Generating Unit, or is the Responsible Party of a Generating Unit, their Active Sub-account will be the first point of deposit for any Credits created that are associated with the Project ID number, unless the Credit is subject to a Forward Credit Transfer. An Active Sub-account may be associated with one or more Projects.

Balancing Authority: The responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a balancing authority area, and supports interconnection frequency in real time.

Beneficial Ownership Rights: With respect to any Credit, 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 Credit or (ii) any contractual or other right to receive the benefits of such Credit or any proceeds from the sale or other disposition of such Credit.

British Thermal Unit (BTU): Is a Unit of Measure for Thermal Projects in MIRECS to receive Credits. This Unit of Measure is 'MMBtu' (One million BTUs,) where $3.412 \text{ MMBtu} = 1 \text{ REC}$.

Bulletin Board: The Bulletin Board Sub-account is a sub-account of an Account Holder's Account and is the holding place for all Active Credits that the Account Holder has posted for sale on the Bulletin Board.

Commenced Operation Date: The month and year a Generating Unit first began commercial operation or for non-commercial facilities, the date approved by the licensing or permitting agency.



Commission: The Commission is the Michigan Public Service Commission and any successor agency.

CPNODE – Commercial Price Node. The Meter Data Management Agent reports generation data to MISO using the CPNODE. The MIRECS Project using MISO as a reporting entity will use the CPNODE as the Reporting Entity ID in the Project’s registration screen.

Credit: MIRECS will issue three types of Credits: Renewable Energy Credits (REC), Energy Waste Reduction Credits (EWRC) and Incentive Renewable Energy Credits (IREC).

Creation Date: The date that a Credit is created. Credits are created monthly, approximately seven (7) days after the Account Holder has accepted the generation amount of the Generation Activity Log.

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).

Directory of Account Holders: The Directory of Account Holders is a listing of all Account Holders registered with MIRECS. This directory includes limited information for contacting the Account Holder.

Directory of Registered Generating Projects: This is a listing of all approved Projects within MIRECS.

Dynamic Data: Dynamic data is variable information that is associated with a specific MWh, MCF, or MMBtu from a Project, such as Credit serial number or date of generation.

Essential generating characteristics: This term refers to the generation characteristics that have to be the same in order for small generating facilities to register as an aggregated generation facility. The specific requirements are outlined in Appendix C.

Energy Waste Reduction Credit (EWRC): A Credit certified pursuant to Section 87 of that Public Acts of 2016: Act No. 342 that represents achieved energy waste reduction.

Fuel Type: Fuel Type designates the type of fuel used to fire a Generating Unit being registered with the MIRECS, using one of the Fuel Type codes set forth in [Appendix E](#).

Generating Unit: A renewable energy generator.

Generation Activity Log: The Generation Activity Log is an electronic ledger where generation is posted prior to Credit creation. Each time generation data is received by



MIRECS for a particular project, the date and quantity of MWhs is posted to the Generation Activity Log. Adjustments received will be posted likewise.

Generation Month: The Generation Month is the calendar month in which the generation occurred.

General Account: This type of Account can hold, transfer (outgoing and incoming), and Retire Credits. A General Account can also register and maintain Projects and have Credits issued to it for its Projects.

Group Retirement Sub-account: A Group Retirement Sub-account is a type of Retirement Sub-account used to designate Credits being Retired by an Account Holder on behalf of an Indirect Owner. Once a Credit has been transferred into a Group Retirement Sub-account, it cannot be transferred again to any other Account. See the MIRECS Terms of Use for more detail on the requirements related to beneficial ownership.

Inbox: Credit 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 Credits will be deposited in the sub-account designated by the Account Holder.

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

Megawatt-hour (MWh): One thousand kilowatt-hours or 1 million watt-hours, and whereby 1MWh = 1 REC.

Michigan Utility Service Provider Account: This type of Account can hold, transfer (outgoing and incoming), and Retire Credits. A Michigan Utility Service Provider Account can also register and maintain Projects and have Credits issued to it for its Projects. **A Michigan Utility Service Provider Account is the only type of Account that can Retire Credits for compliance with PA295 or PA 342.**

Million Cubic Feet (MCF): One million cubic feet, where one MCF = 1 EWRC.

Multi-fuel Generation Project: A Multi-fuel Generation Project is one that is 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 0 below

MIRECS Administrator: The MIRECS Administrator is the entity with the authority to administer or oversee the administration and implementation of the MIRECS Operating Procedures. Oversight is being provided by the Commission and any request for exemptions to the rules will be referred to the Commission.



Nameplate Capacity: The maximum rated output of a generator, prime mover or other electric power production equipment under specific conditions designated by the manufacturer. Size classification is based on Nameplate Capacity.

Non-profit Wholesale Power Provider Account: A non-profit entity that supplies wholesale electric power to one or more Michigan Utility Service Providers that maintain a Michigan Utility Service Provider Account. This type of Account can hold, transfer (outgoing and incoming), and Retire Credits. This Account type can also register and maintain Projects and have Credits issued to it for its Projects.

Outbox: After initiating a Credit transfer, an Account Holder will see the Credits in its Outbox. The Account Holder to whom the Credits have been transferred will either accept or reject the transfer. If rejected, the Credits will be returned to the Active Sub-account from which they were transferred. If accepted, the Credits are transferred to the receiving Account Holder.

Program Administrator: Administrators of compliance and/or certification programs. Program Administrators can have a separate Account type (see Program Administrator Account in Section 3 below) allowing them functionality to denote eligibilities for the specific program as well as other verification functionalities.

PA295 or “the Act”: PA295 is the State of Michigan’s Clean, Renewable, and Efficient Energy Act, 2008 PA295, MCL 460.1001 et seq.

PA342: An ACT to amend 2008 PA 295. The purpose of this act is to promote the development and use of clean and renewable energy resources and the reduction of energy waste through programs

Program Administrator Account: This type of Account is provided to administrators of compliance and voluntary programs that utilize MIRECS and/or have eligibilities noted for certain Credits. 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.

Project: A Project is defined in Section 5.

Project Account: This type of Account can register Projects and have Credits issued to it for its Projects. A Project Account can hold, transfer (only outgoing transfers), withdraw and retire Credits. A Project Account cannot receive transfers from other parties.

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



Qualified Reporting Entities (QRE): A Qualified Reporting Entity is an entity reporting meter reading and other generation data to the MIRECS Administrator. Qualified Reporting Entities may include the control area operator, Balancing Authorities interconnecting utility, and other independent parties accepted by the MIRECS Administrator. The protocol for such reporting is outlined in the *MIRECS Requirements for Qualified Reporting Entities* document.

Qualified Reporting Entity (QRE)/ Verifier Account: An Account Holder with a QRE Account is assigned to a Project and is responsible for verifying generation or storage information from that Project. MIRECS tracks the specific types of Projects for which QRE's are approved to provide services, ensuring that they are suitably qualified and accredited. The QRE Account cannot hold Credits.

Registration Rights: The right to register a Project in MIRECS.

Renewable Energy Credit (REC): See Credits.

Responsible Party: An Account Holder who has been assigned the Registration Rights for a given Project. This gives the designated Account Holder *full and sole* management and authority over the transactions and activities related to the Project within MIRECS.

Retail Purchaser Account: This type of Account is for retail purchasers of Credits. A Retail Purchaser Account can hold, accept incoming transfers, and retire Credits. They can also register and maintain Projects that are under 1MW in capacity and have Credits issued in their Account. A Retail Purchaser Account cannot make outgoing transfers.

Retirement Sub-account: A Retirement Sub-account is used as a repository for Credits that the Account Holder wants to designate as Retired and remove from circulation either for voluntary or compliance reasons. Once a Credit has been transferred into a Retirement Sub-account, it cannot be transferred again to any other Account.

Retirement of Credits or Retirement/Retire: Retirement of Credits is an action taken to remove a Credit from circulation within MIRECS. Retirement may be initiated only by the Account Holder for Credits in his/her own Accounts. Retirement is effectuated by transferring Credits into a Retirement Sub-account or a Group Retirement Sub-account.

Revenue-Quality Meter: As defined in Section 6.2 below.

Self-Reporting Project: A Customer-Sited Distributed Generation installation with a Nameplate Capacity of less than 1 MW, an EWR Project, or a Thermal Project that elects to have dynamic data transmitted to the MIRECS Administrator via the Self-Reporting Interface pursuant to Section 6.8.

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 MIRECS Administrator pursuant to Section 6.8

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

Station Service: The electric supply for the ancillary equipment used to operate a generating station or substation.

Storage Project: A Storage Facility accepted by the MIRECS Administrator that is eligible for receiving Incentive Credits.

Storage Facility: An advanced electric storage technology facility or a hydroelectric pumped storage facility.

Test Energy: Energy produced during the development of a generating unit for the purpose of testing generating unit operation. Power resulting from test energy shall contribute to credit issuance only if it is delivered to the grid through meters in compliance with the MIRECS Operating Procedure 6.1.

Thermal Project (Steam): A thermal energy facility

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 by notifying the MIRECS Administrator. MIRECS will be able to track the specific activities of each User through the unique login and password.

1 Introduction

The Michigan Renewable Energy Certification System (MIRECS or the System) collects and issues and tracks Credits for facilities eligible for Michigan's *Clean, Renewable, and Efficient Energy Act*, 2008 PA295, 2016 PA342, MCL 460.1001 *et seq.* (The Act or PA 295). MIRECS assists Utility Service Providers in Michigan in demonstrating compliance with the Act and is used by the Michigan Public Service Commission to verify Renewable Energy (RE) and Energy Waste Reduction (EWR) compliance. By creating a reliable process to evidence verification, issuance and retirement of Credits, MIRECS brings increased levels of integrity and trust to purchasers, sellers and regulators in the market.

The MIRECS Administrator will issue one electronic Credit for each MWh of renewable energy (including thermal energy¹), Energy Waste Reduction² and generation eligible for Incentive Credits that is generated by registered Projects. MIRECS will track and display the certifications and program eligibilities associated with each Credit, as established by documentation and/or third-party verification during the Project registration process. Projects can be registered in MIRECS based on claimed ownership of the Project or, subject to certain conditions, on authorization to act as a Responsible party for a Project.

Any party, such as generators, traders, marketers, non-profits or retail purchasers, wishing to have Credits issued, held, transferred, or Retired must establish an Account in MIRECS to do so. All Account Holders must agree to follow the rules and operating procedures described in this document and in the MIRECS Terms of Use.

All MIRECS Accounts use two types of sub-accounts to manage Credits: Active Sub-accounts and Retirement Sub-accounts. Active Sub-accounts are used for holding and transferring Credits. Retirement Sub-accounts are used for retiring Credits from circulation so that they can no longer be transferred between Account Holders or within an Account.

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

Credits will indicate eligibilities under PA 295 and PA 342, as well as for the following voluntary programs: Green-e Energy, and the Low Impact Hydropower Institute.

MIRECS 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 MIRECS

¹ For Thermal 3.412 MMBtu = 1 Credit

² Unit of Measure will be "MCF" (Million Cubic Feet) for Gas EWRCs



website. These public reports are designed to ensure transparency of Credits issued and Retired within MIRECS as well as highlighting the Credit attributes and program eligibilities.

2 MIRECS User Registration

2.1 Participation in MIRECS

Any party is eligible to participate in MIRECS. Utility Service Providers that have to comply with PA 295 and PA 342 are required to participate in MIRECS. Any party that registers with MIRECS and pays the applicable fees³ may seek to establish an Account in the MIRECS. MIRECS will track Credits originating from Projects registered in MIRECS.

2.2 Establishing an Account

Any person or entity wanting to participate in MIRECS must establish an Account. Accounts should be established in accordance with the timeline for credit creation (see Section 7.2) to ensure Credit eligibility.

Registrants will provide basic Account registration information, such as Account Holder name, address and contact information, to the MIRECS Administrator through a secure web-page on the MIRECS website⁴ and agree to the Terms of Use. See Appendix A for step-by-step instructions. The MIRECS Administrator will review the Account application and may request more information before, in its sole discretion, approving or rejecting the application. An Account will remain active until terminated. Termination can be initiated by the Account Holder by notifying the MIRECS Administrator. Accounts can also be terminated if an Account Holder fails to pay the MIRECS fees or is otherwise in default under the Terms of Use. 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. See Michigan Renewable Energy Certification System Terms of Use

³ As described in the MIRECS Terms of Use and the MIRECS Fee Schedule, available online at <http://mirecs.org>

⁴ <http://mirecs.org>

3 Account Types and Sub-Account Structure

The types of Accounts available in MIRECS:

- **Michigan Utility Service Provider Account:** This type of Account can hold, transfer (outgoing and incoming), and Retire Credits. A Michigan Utility Service Provider Account can also register and maintain Projects and have Credits issued to it for its Projects. **A Michigan Utility Service Provider Account is the only type of Account that can Retire Credits for compliance with PA 295 and PA 342.**
- **Non-profit Wholesale Power Provider Account:** A non-profit entity that supplies wholesale electric power to one or more Michigan Utility Service Providers that maintain a Michigan Utility Service Provider Account. This type of Account can hold, transfer (outgoing and incoming), and Retire Credits. This Account type can also register and maintain Projects and have Credits issued to it for its Projects.
- **General Account:** This type of Account can hold, transfer (outgoing and incoming), and Retire Credits. A General Account can also register and maintain Projects and have Credits issued to it for its Projects.
- **Import Certification Account:** This type of Account is strictly for a project owner or representative to upload generation data for Imported Credits.
- **Project Account:** This type of Account can register Projects and have Credits issued to it for its Projects. A Project Account can hold, transfer (only outgoing transfers), withdraw and retire Credits. A Project Account cannot receive transfers from other parties.
- **Retail Purchaser Account:** This type of Account is for retail purchasers of Credits. A Retail Purchaser Account can hold, accept incoming transfers, and retire Credits. They can also register and maintain Projects that are under one MW in capacity and have Credits issued in their Account. A Retail Purchaser Account cannot make outgoing transfers.
- **Qualified Reporting Entity (QRE)/ Verifier Account:** An Account Holder with a QRE Account is assigned to a Project and is responsible for verifying generation or storage information from that Project. MIRECS tracks the specific types of Projects for which QRE's are approved to provide services, ensuring that they are suitably qualified and accredited. The QRE Account cannot hold Credits.
- **Program Administrator Account:** This type of Account is provided to administrators of compliance and voluntary programs that utilize MIRECS and/or have eligibilities noted for certain Credits. 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.

Accounts that can hold Credits (Michigan Utility Service Provider, Non-profit Wholesale Power Provider Account, General, Project and Retail Purchaser Accounts) are organized

using two principal types of Sub-accounts, Active and Retirement. When an Account is created in the System, a single default Retirement Sub-account and a single default Active 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. Retirement Sub-accounts cannot be renamed if they hold Credits. When Credits are deposited into an Account by the MIRECS Administrator, they are placed into an Active Sub-account that is designated when a Project is registered. When Credits 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 Credits held in each Sub-account and their attributes (e.g. documents, eligible program certifications and origination details).

Accounts that can hold Credits will also have a single Bulletin Board Sub-account, used to post Credits for sale on the MIRECS Bulletin Board. See Section 9 below.

Each Account and Sub-account will have a unique identification number. For ease of reference, Account Holders may attach aliases to Sub-accounts (e.g., by customer or by product name).

With the exception of Group Retirement Sub-accounts, (i) Account Holders cannot hold Credits on behalf of any other party, and (ii) an Account Holder must have full legal title of and all Beneficial Ownership Rights in the Credits held in its Accounts.

3.1 Deposits to Active Sub-Accounts

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

- (a) Within an Account, Credits can be transferred from one Active Sub-account or Bulletin Board Sub-account to another.
- (b) An Account Holder can accept a transfer of Credits from another Account Holder.
- (c) Credits can be generated by a Project and deposited by the MIRECS Administrator.

3.2 Transfers from Active Sub-Accounts

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

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

3.3 Retirement Sub-Accounts

A Retirement Sub-account is used as a repository for Credits that the Account Holder wants to designate as Retired.⁵ There are three ways that Credits are deposited in a Retirement sub-account:

- (a) Within an Account, Credits can be transferred from an Active Sub-account or a Bulletin Board Sub-account to a Retirement Sub-account.
- (b) An Account Holder can accept a transfer of Credits from another Account Holder directly into a Retirement Sub-account.
- (c) A Standing Order Transfer can be set up by the Account Holder to automatically deposit Credits into a Retirement Sub-account.

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

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

MIRECS validations ensure that Credits deposited in a Retirement Sub-account are no longer transferable to another party or another Sub-account. MIRECS reports allow Account Holders to show evidence of the Retirement to Program Administrators or the public. For more details on Retirement in compliance with PA 295 and PA 342, see *Section 9 MIRECS Compliance Retirements.*

⁵ An Account Holder may want to Retire Credits for any number of reasons, including, but not limited to, Retiring Credits for compliance, on behalf of the Indirect Owners of the Credit or making claims about the environmental quality benefits of the Credits.

3.4 Group Retirement Sub-Accounts

In order to provide full transparency to markets and regulators, as well as enhancing the integrity of the MIRECS's ownership records, as a general matter, Account Holders cannot hold Credits on behalf of any other party. Specific exemptions to this are outlined in the MIRECS Terms of Use. One such exception to this is the Group Retirement Sub-account. Holders of a General Account can establish a Group Retirement Sub-account in which they can hold Credits on behalf of Indirect Owners solely for purposes of Retiring such Credits. The Group Retirement Sub-account can be used in connection with retirements on behalf Green Pricing sales and or REC sales in the voluntary market. The establishment and use of a Group Retirement Sub-account are subject to the terms and conditions in Section 6(c) of the Terms of Use.

3.5 Transfers between Accounts

Michigan Utility Service Provider, Non-profit Wholesale Power Provider, General and Project Account Holders may transfer Active Credits to other Account Holders at any time⁶. Credits will be specified by their serial numbers. The Account Holder will select the recipient from a pull-down list of Account Holders. After the transfer has been initiated, the Credits that are pending transfer will be marked as "transfer pending" in the Account Holders Outbox. This will have the effect of "freezing" the Credits so that they cannot be moved to another Sub-account or to another Account Holder.

After the transfer has been initiated, the System will send an electronic notification of the request to transfer Credits to the proposed recipient. The transfer recipient can review the Credit transfer details from the Account Holder's 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 to which the Credits are to be delivered. As soon as the recipient has confirmed or rejected the transfer, MIRECS 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 MIRECS. If the transfer is withdrawn, MIRECS will notify the recipient of the action.

3.6 Transfers between Registries

3.6.1 Transfers to MIRECS

Michigan Utility Service Provider, Non-profit Wholesale Power Provider, General and Retail Purchaser Account Holders may receive transfers from Compatible Tracking Systems. This type of transfer process is known as Importing. The MIRECS Account Holder will receive a notification to review their inbox for imported Credits. If rejected, the Credits are returned to the exporting Compatible Tracking System. If the MIRECS Account Holder accepts the import, the Credits will be in a "confirmed" status but cannot

⁶ An exception to this is EWRCs, which are not allowed to be transferred between Account Holders.



be moved to another Sub-account or to another Account Holder until the next day (further details on importing can be found in Section 10.1).

3.6.2 Transfer from MIRECS

Michigan Utility Service Provider, Non-profit Wholesale Power Provider, General and Project Account Holders may transfer Active Credits to Compatible Tracking Systems. This type of transfer process is known as Exporting. The MIRECS Account Holder will select a Compatible Tracking System to receive the exported credits. Then the MIRECS Account Holder will use a drop down list which contains the Account Holders of the Compatible Tracking System, in order to select their counter-party. After the export has been initiated, the Active Credits that are pending export will be marked as “export pending” in the MIRECS Account Holder’s Outbox. This will have the effect of “freezing” the Active Credits so that they cannot be moved to another Sub-account or to another Account Holder. Once the recipient has either accepted or rejected the export, then the Credits will be unfrozen (further details on exporting can be found in Section 10.2).

4 Access to Accounts and Confidentiality

4.1 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 setup and manage additional logins and login privileges for 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/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 login as well as designate the login name and password.

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

Once a login is established, MIRECS will send an email to the login contact specified by the Account Manager with details on the individual’s login name. The Account Manager is required to communicate the password. Upon logging into the MIRECS for the first time, the new User will be prompted by the MIRECS 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 MIRECS Administrator may at any time remove or add permissions to a login by using the account administration screens.



The MIRECS 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).

4.2 Levels of Account Access

When an Account Holder creates logins for additional Users, the Account Holder assigns to the login one of two levels of access specific rights to login:

4.2.1 Account Holder – Supervisor

When completing the login profile for a new User, the Account Manager can assign “Account Holder – Supervisor” privileges to a login. The new login will be able to register projects, manage Credits, and create additional logins, if necessary. The Account Manager can also give this login a subset of these privileges if needed.

4.2.2 Account Holder – View Only

When completing the login profile for a new User, the account holder can assign the login “Account Holder – View Only” privileges. This provides the login with limited view rights. The Account Manager will then identify the specific Sub-accounts and Credits that the login will be able to access and view.

4.3 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.

5 Project Registration

Within MIRECS and all related MIRECS documents, the term “Project” is used to refer both to (1) a Generating Project, which is a Generating Unit accepted by the MIRECS Administrator and for which MIRECS issues Credits, (2) a Thermal Project, which is a Thermal Project accepted by the MIRECS Administrator and for which MIRECS issues Credits, (3) a Storage Project, which is a Storage Facility accepted by the MIRECS Administrator that is eligible for receiving Incentive Credits and (4) an EWR Project, which is an Energy Waste Reduction facility that is eligible for receiving EWRCs. A Generating Unit, Thermal Project, Storage Facility, or EWR Project is registered by an Account Holder by entering static data into MIRECS describing its attributes, subject to the review and approval by the MIRECS Administrator. Once a Project is approved, dynamic data is entered to identify monthly energy generation or energy stored for which Credits are to be issued. [Step-by-step instructions for registering a Project can be found here.](#)

Any Generating Unit, Thermal Project or Storage Facility not approved by MIRECS within six months from the time it is listed therein shall be deactivated in the MIRECS, unless a grace period of three (3) months is requested by Account Holder. Deactivation does not preclude Account Holder from registering the Generating Unit or Storage

Facility with MIRECS at a later date, but until such time as it is registered, the Generating Unit or Storage Facility will not be viewable in MIRECS.

5.1 Registering a Project

To ensure that double-counting does not occur, Generating Units being registered in MIRECS must have 100% of their output tracked by MIRECS. If a Generating Unit or an associated contract for its production was registered in another tracking system at one point, the MIRECS Administrator should be notified of this during the registration process and the Account Holder should be prepared to provide documentation to prove the Generating Unit (and, if applicable, its associated contracts) have been removed from the previous tracking system. A Thermal Project or Storage Facility must have 100% of its input tracked by MIRECS, with a similar notification to the Administrator being made if it has previously been registered with another system.

The owner, or Responsible Party, of a Generating Unit, Thermal Project or Storage Facility must first establish an Account within MIRECS, as described above, and then register it as a Generating Project, Thermal Project or Storage Project before MIRECS can certify and issue Credits attributable to it⁷. The Account types that can register Generating Units, Thermal Projects or Storage Facilities are the Michigan Utility Service Provider Account, the Non-profit Wholesale Power Provider Account, the Project Account, the General Account and the Retail Purchaser Account (subject to a size limitation).

To register a Generating Unit, Thermal Project or a Storage Facility as a Project, the owner or the Responsible Party⁸ must:

- Have an approved Account in MIRECS (either Michigan Utility Service Provider, Generator, General or Retail Purchaser);
- Submit a completed online registration form containing information related to the characteristics of the Generating Unit, Thermal Project or Storage Facility;
- Submit any required documentation and/or affidavits proving eligibility for issuance of one or more types of Credits;
- Submit proof of title and/or additional documentation proving the Account Holder is either the owner of the Generating Unit, Thermal Project or Storage Facility or has the owner's permission to act as the Responsible Party for such Generating Unit, Thermal Project or Storage Facility and register it in MIRECS in order to receive Credits⁹; and
- Pay any applicable registration fee.¹⁰

⁷ EWR Projects are automatically created by the system.

⁸ The Responsible Party is an entity to whom the owner of a Generating Unit or Storage Facility has given Registration Rights. This is described in detail in Section 5.7.

⁹ Generating Units or Storage Facilities that are jointly owned must have a single party, privately appointed among the owners, to act as the Account Holder.

¹⁰ See the MIRECS Fee Schedule for a description of all MIRECS fees.

The MIRECS Administrator will review the submitted documentation and may require additional documentation to be submitted before a Generating Unit, Thermal Project or a Storage Facility is accepted as a Project.

TABLE 5.1: AFFIDAVIT REQUIREMENTS

Fuel Characteristics	Technology	Affidavits
Single-Fuel	Any	Municipal Solid Waste (if applicable) Michigan Workforce (if applicable) Michigan Equipment (if applicable) Self-reporting (if applicable) On-peak (if applicable)
Multi-fuel	Any	Multi-fuel (required) Municipal Solid Waste (if applicable) Michigan Workforce (if applicable) Michigan Equipment (if applicable) Self-reporting (if applicable) On-peak (if applicable)
Electric Storage	n/a	Electric Storage System (required) Michigan Workforce (if applicable) Michigan Equipment (if applicable) On-peak (if applicable)

Municipal Solid Waste Affidavit: This affidavit is signed by the Account Holder to confirm that the Generating Unit’s Nameplate Capacity does not exceed the limits in Section 39 (1) (b) of PA 295.

Michigan Work Force Affidavit: This affidavit is signed by the Account Holder to confirm that the Generating Unit or Storage Facility was constructed using a workforce composed of residents of the State of Michigan as determined by the Commission.¹¹

Michigan Equipment Affidavit: This affidavit is signed by the Account Holder to confirm that the Generating Unit or Storage Facility was constructed using equipment made in this state as determined by the Commission.¹²

Electric Storage System Affidavit: This affidavit is signed by the Account Holder to confirm that the reported generation and storage information from the Storage Facility complies with Section 39 (2) (c) of PA 295.

Self-Reporting Affidavit: This affidavit is signed by the Account Holder to confirm the procedures whereby the Account Holder will self-report generation and/or on-peak generation data.

Multi-Fuel Affidavit: This affidavit is signed by the Account Holder to confirm the procedures whereby the Account Holder will monthly self-report the proportion of different fuels used in a Multi-fuel Generation Project.

¹¹ PA295 Section 39(2)(e)

¹²PA295 Section 39(2)(d)

On-peak Affidavit: This affidavit is signed by the Account Holder to confirm the procedures whereby the Account Holder will monthly self-report the proportion of on-peak versus off-peak data.

5.1.1 Aggregated Projects

For small (150 kW or less) generating units, MIRECS will allow aggregation (“Distributed Generation Aggregation”) of Generating Units that are not metered together and do not share the same location but that are located within the same state and otherwise share the same **essential generating characteristics** into one Aggregated Project. As a rule, the essential generating characteristics are any characteristics that may determine eligibility for one or more types of Michigan Credits. A list of essential generating characteristics is found in Appendix C.

The Aggregation Project will be allowed, so long as the aggregated nameplate capacity does not exceed a total Nameplate Capacity of 1 MW and each Generating Unit being aggregated is metered, or if not metered then uses an approved means of calculating or accurately estimating system output, as outlined in Section 6.2. (In the remainder of this document, such an alternative “approved means of calculating or accurately estimating system output” is termed a “measurement protocol.”) The MIRECS Administrator may require documentation to verify each aggregated Generating Unit and generation data including: proof of Registration Rights and proof that each Generating Unit is within the same state.

In the case where more than one Generating Unit is associated with a single meter or other approved measurement protocol, if all of the Generating Units do not have the exact same essential generating characteristics, the owner or Responsible Party must install a new meter to separately measure the output of each Generating Unit with unique essential generating characteristics, or shall establish another approved measurement protocol such that all of the output from all Generating Units associated with the single meter or measurement protocol can be treated as having the same essential generating characteristics; which must also be the same essential generating characteristics as the aggregated group of which it is a part

5.1.2 Multi-Fuel Generation Project Registration

A Multi-Fuel Generation Project is one that is capable of producing energy using more than one Fuel Type, where the quantity of each fuel used is greater than 1% annually on a total heat input basis, excluding fuels used for start-up. A Multi-Fuel Generation Project can be a Project that uses a renewable fuel with a fossil fuel or one that uses multiple types of renewable fuels. Such facilities must register with MIRECS as a Multi-Fuel Generation Project. A Generating Unit that uses 1% or less of a second fuel may elect to register as a Multi-Fuel Generation Project if they would like Credits issued for the second fuel type. If the relative quantities of electricity production from each fuel cannot be measured or calculated, and verified, the Generating Unit is not eligible to register as a Multi-fuel Generation Project in MIRECS.



Credits will be created for eligible fuel types only. Each Credit issued for a Multi-Fuel Generation Project will reflect only one fuel source. The total number of Credits issued for a fuel type in a reporting period will be proportional to the electric output from that fuel type for that reporting period.

Each MIRECS Account Holder or Responsible Party that has registered a Multi-Fuel Generation Project must report monthly to the MIRECS Administrator the proportion of electric output per Fuel Type, by MWh, generated by the Multi-fuel Generation Project during that month, calculated according to the applicable provisions of Section 6.10.1. Though generation from Fuel Types must be reported, the MIRECS will only issue Credits for the renewable energy and Advanced Cleaner Energy Credit-eligible generation. Credits will not be issued until such information is provided by the Account Holder or Responsible Party.

The procedures and methodologies used by the Account Holder or Responsible Party to calculate the contribution of each Fuel Type should be presented along with the completed *Multi-Fuel Affidavit*. Supporting documentation can include third-party verification reports. The Account Holder or Responsible Party must maintain supporting documentation related to the derivation of the proportion of electric output per Fuel Type for each month for a minimum of 5 years from the date of submission to the MIRECS Administrator. The MIRECS Administrator and/or the Commission may require copies of such calculations and supporting documentation will be subject to audit by the MIRECS Administrator, state regulators (including the Commission), or their agents.

5.1.3 Behind the Meter

Behind-the-Meter Projects that are interconnected with the grid may select to self-report generation data even if the nameplate capacity exceeds 1 MW. In order for MIRECS to accept the registration a Behind-the-Meter Affidavit will have to be completed by the account holder.

5.1.4 EWR Projects

An Energy Waste Reduction (EWR) Project is certified pursuant to Section 87 of the Public Acts of 2016: Act No. 342. The purpose of this act is to promote the development and use of clean and renewable energy resources and the reduction of energy waste through programs.

An Electric EWR project (for companies that have the Electric Service Provider company type) and/or a Gas EWR project (for companies that have the Gas Service Provider company type) will automatically be created in MIRECS for 'Michigan Utility Service Provider' Account Types. To activate an Electric EWR project or a Gas EWR project, the Account Holder must complete the online registration form, which contains information related to the characteristics of the EWR Project. [Step-by-step instructions for activating and EWR Project can be found here.](#)

EWR Generation data, for EWR Electric Projects, and Storage data for EWR Gas Projects, will be self-reported via either the user interface, or via a data file upload. The

Unit of Measure will be “MCF” for Gas EWR data and “MWh”, for Electric EWR data. The Utility Service Provider is responsible for reporting their own EWR Data.

5.2 Verification of Static Data Submitted During Project Registration

Upon completion of the Project registration process, the MIRECS Administrator will review attestations, Energy Information Administration reports and other data sources to verify the information provided to MIRECS 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 online registration process and the materials provided to verify the information, the MIRECS Administrator will notify the registrant that the information could not be positively verified. A process of either correcting the registration form, or withdrawing the registration form, or providing proof that the information on the registration form is correct will ensue between the MIRECS Administrator and the registrant until the MIRECS Administrator is satisfied that the information provided meets MIRECS standards for accuracy.

In some cases, the MIRECS Administrator may require the Account Holder to contract with a third-party verifier to perform a site visit to further verify information as needed. The cost of verification will be born by the Account Holder seeking to register the Project.

5.3 Updating Static Data

After the initial Project registration in MIRECS, Account Holders can continually notify MIRECS of the following actions or occasions that will have the effect of changing static data tracked by MIRECS:

- (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 by a letter signed by both the prior and new owners of the Project and provided to the MIRECS Administrator. Neither MIRECS nor the MIRECS Administrator will be responsible for depositing Credits 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 in a Project’s eligibility for any programs or certification tracked by MIRECS. This must be communicated by the Account Holder before any Credits affected by the change are issued or within thirty (30) calendar days after the change occurs, whichever is sooner.
- (d) A change to any of the “essential generating characteristics” of the Project.

5.4 Misrepresentation of Static Information:

Account Holders can be removed from MIRECS for cause, including misrepresentation of static data. MIRECS reserves the right to withhold issuing Credits, to freeze an Account associated with a particular Project, or to withhold participation in MIRECS for Projects that have willfully misrepresented static data. If the MIRECS Administrator has cause to suspend the Project's participation in MIRECS, no Credits will be created while the Project is under suspension. Upon removal of the suspension Credit issuance can proceed.

5.5 Terminating an Project's Participation in MIRECS

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

- (a) The date the Project should be/will be removed from MIRECS,¹³
- (b) The name of the Project's Qualified Reporting Entity, if applicable; and
- (c) The Sub-account to which Credits have been deposited (if the usual Account for deposit is being closed as well).

MIRECS will issue Credits for a Project up to the date of Project termination as instructed by the Project's owner or Responsible Party. No Credits will be issued for adjustments that occur after the termination date. If the Account to which the Project is linked is also closed at the same time, the Project's owner or Responsible Party must also specify the Account to which any remaining Credits that have not yet been issued should be deposited. Failure to do so will result in loss of Credits.

5.6 Changing the Account with Which a Project is Associated

If the Project's owner or Responsible Party wants to change the Account with which a Project is associated, they can do so¹⁴ by notifying the MIRECS Administrator and providing the information requested by the MIRECS Administrator, 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.

Credits 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 or storage 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 Credits relating to generation or storage that

¹³ This is the same as the final date of generation or storage for which Credits are to be issued.

¹⁴ An exception to this is for EWR Projects, which are not permitted to change accounts.



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 or storage and Credit issuance).

The MIRECS Administrator will need written confirmation of this change from both parties involved in the Project transfer in order to implement the change. When changing the Account with which a Project is associated, there cannot be any time when the Project is not associated with an Account. If there is such a lapse, this will be treated as a deregistration/re-registration of the Project instead of a change of Account, and the relevant fees will be assessed.

5.7 Assignment of Registration Rights

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

MIRECS 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.

5.7.1 Termination of Registration Rights

Registration Rights may be terminated by either the Project's owner or Responsible Party subject to confirmation by the MIRECS Administrator that both agree to the change. Termination of Registration Rights has the effect of deregistering the Project from MIRECS. If the Registration Rights assignment has been terminated, no new Credits will be issued from that Project until it is registered again.

6 Dynamic Data in MIRECS – Generation Data

6.1 Generation Data Requirements

Credits are issued for any renewable energy production, thermal production, energy waste reduction, or energy storage that otherwise would have been served by a non-renewable resource if not for the Project. MIRECS will not create Credits for generation supplying station service. Data used to issue Credits for renewable generation must be derived from a Revenue-Quality Meter and communicated to the MIRECS Administrator by a Qualified Reporting Entity unless the Nameplate Capacity is less than 1 MW, in which case it can be self-reported¹⁵. If self-reported, the Account Holder will have to

¹⁵ All Electric EWR projects (measured in MWh) and Gas EWR projects (measured in MCF) will self-report.

submit a *Self-Reporting Affidavit*. Generation occurring prior to the Commenced Operation Date, known as Test Energy, qualifies to be reported into MIRECS as long as it is reported by a Qualified Reporting Entity from an approved meter.

6.2 Revenue Metering Standards

All individual Generating Units registered in MIRECS must register their Revenue-Quality Meter or Midwest ISO assigned CPNODE. For Generating Units that are interconnected to a utility or Balancing Authority, a “Revenue-Quality Meter” is any meter used by the reporting Balancing Authority for settlements. 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 Balancing Authority’s energy management system, and verified through a Balancing Authority checkout/energy accounting or settlements process that occurs monthly. The preferred source for the data is a meter data acquisition system. If the Balancing Authority 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 Qualified Reporting Entity.

For Generating Units that do not go through a Balancing Authority 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 MIRECS Administrator by a Qualified Reporting Entity 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 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 either 1) Revenue-Quality Metering placed to measure only the hourly positive generation flowing to the distribution system, adjusted to reflect the energy delivered into either the transmission or distribution grid at the high side of the transformer, or 2) if under 1MW, by an approved means of calculating or accurately estimating system output. If the Customer-Sited Distributed Generation uses all of the energy produced on site, then no adjustment for transformer losses is needed.

6.3 Measurement of Generation and Adjustments

The output from each Generating Project registered in MIRECS will be measured at the point of interconnection to the transmission or distribution company’s facility, 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 Credits created. MIRECS will not create Credits for that portion of the generation that is used to supply station service, and therefore, generation data should also be netted of station service supplied from the generator’s side of the point of interconnection. For wholesale Generating Units also serving on-site loads, MIRECS will create Credits for the on-site load distinct from

station service, if the Generating Unit's owner or Responsible Party can provide evidence that the metering used is capable of distinguishing between on-site load and station service. Otherwise, the MIRECS Administrator will deem a conservative default fraction of total generation to be from station service unless it can be proven otherwise. If adjustments are needed due to metering, reporting, error or any other reason, the reporting entity must report the adjustment as soon as possible to the MIRECS Administrator. If Credits 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 Credits created that month. If Credits have been created, the adjustment will be treated as a prior period adjustment described below in Section 6.4.

6.4 Prior Period Adjustments

Adjustments can be made by an Account Holder after the data is reported and used to issue Credits in MIRECS. These adjustments are known as prior period adjustments. The Account Holder will access the Project Output Data Review screens to submit an adjustment to the MIRECS Administrator. If accepted by the MIRECS 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 Credits are next issued. If new Credits are created, the vintage of the Credits shall reflect the actual generation period. The MIRECS Administrator will not accept adjustments for generation reported more than two years prior.

6.5 Notification of Adjustments

The Account Holder will be informed of all credit or debit adjustments once the adjustment has been posted to the Generation Activity Log. Once MIRECS informs the Account Holder of a need for adjustment, the Account Holder then has thirty (30) calendar days to dispute or accept the adjustment. If after thirty (30) days the Account Holder has failed to respond, the MIRECS Administrator will automatically accept the adjustment.

6.6 Data Collection Procedure

Energy-generation or thermal data for which Credits are issued should be reported in monthly intervals and will be accepted by the MIRECS Administrator on an ongoing basis. Data files are to be electronically transmitted to MIRECS using a secured protocol and a standard format specified by the MIRECS Administrator. The data shall reflect, at a minimum, the month and year of the generation or thermal activity, monthly accumulated MWhs or MMBtu's, for each meter ID and the associated meter ID(s) for each resource as well as on-peak vs. off-peak generation for facilities qualifying for the On-peak Incentive Credit. The owner of the Generating Project, as the owner of the metered data, or the Responsible Party, has the responsibility to direct the Balancing Authority to release generation data to MIRECS.

The data must be transmitted by a single entity, which must be either (1) a Qualified Reporting Entity or (2) a Self-Reporting Project. Small projects with a nameplate

capacity of less than 1 MW, EWR Projects, Aggregated Projects or Behind the Meter of any size can be treated as self-reporting projects.

The reporting entity must maintain supporting documentation related to the derivation of the proportion of electric output per Fuel Type for each month for a minimum of 5 years from the date of submission to the MIRECS Administrator. The Account Holder should also keep support on hand for all Incentive Credits acquired. The MIRECS Administrator and/or the Commission may require copies of such calculations, and supporting documentation will be subject to audit by the MIRECS Administrator, state regulators (including the Commission), or their agents.

6.6.1 Midwest ISO (MISO) Data

If a project has selected the Midwest ISO as the reporting entity, MISO will provide monthly generation data based on the available 55 day settlement (S55). If there is a dispute with the reported data, the project owner is responsible for contacting MISO and submitting a settlement prior to the 105 day settlement (S105) period, pursuant to MISO rules. MISO will not provide settlement data to MIRECS after the S105 period.

6.7 Requirements of Data Reporting Entities

MIRECS will accept generation data from Qualified Reporting Entities (QRE) and Self-Reporting Projects. The table below displays facility types and who is eligible to serve as a reporting entity for each type.

TABLE 6.1: FACILITY TYPES

	FACILITY TYPE	NAMEPLATE CAPACITY	ACCESS TO METERING DATA	REVENUE METERS	MIRECS REPORTING
1	Midwest ISO generation-only projects	5 MW and up	Midwest ISO	Yes	Midwest ISO/QRE
2	Utility interconnected generation-only projects	5 MW and up	Utility	Yes	Utility/QRE
3	Generation facilities that also serve on-site load	1 MW and up	Midwest ISO (grid) On-site (generator)	Yes	Self-reporting
4	Medium Projects	1 MW- 5 MW	Generators, utilities	Yes	Utility/QRE
5	Small project	Less than 1 MW	Generators	Yes?	Self-reporting
6.	EWR Projects	N/A	Utility	N/A	Self-reporting
7.	Thermal Projects	N/A	N/A	N/A	Self-reporting/QRE

QUALIFIED REPORTING ENTITY GUIDELINES.

(1) *MISO units larger than 5 MW*

Projects that use MISO as their control area operator and complete the MISO Release Form are permitted to select MISO as the Reporting Entity. The interconnecting utility or approved independent third party meter reader is also permitted to serve as a QRE.

(2+4) *Utility interconnected generation-only facilities*

Utilities can serve as the Qualified Reporting Entity for small and medium generating units, where the utility conducts the settlement process.

(3) *Behind-the-Meter Reporting:*

Behind-the-Meter facilities that are interconnected with the grid may self-report generation data even if the nameplate capacity exceeds 1 MW. Behind-the-Meter projects will report all generation (excluding station service), including the energy that is used for onsite industrial load as well as the portion that is exported to the grid. There will be no differentiation between the Credits issued from onsite load and the Credits exported into the grid.

(5) *Small Facilities*

Small facilities less than 1 MW can self-report after signing the Self-Reporting Affidavit.

(6) *EWR Projects*

Electric EWR projects (measured in MWh) and Gas EWR projects (measured in MCF) will be self-reported either via the user interface or via a data file upload. The Utility Service Provider is responsible for reporting EWR Data.

The *MIRECS Requirements for Qualified Reporting Entities* document describes the terms and conditions under which the QRE agrees to exchange information and conduct business with MIRECS. 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.

6.8 Special Requirements for Self-Reporting Projects Only

A Self-Reporting Project must enter actual cumulative meter readings measured in kWh or MWh, (or equivalent reading depending on the unit of measure, such as MCF for Gas EWR Projects, or MMBtu for Thermal Projects), 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 by email from the MIRECS Administrator. Any such Project not entering a cumulative meter reading within thirty (30) days of receipt of such a notice may be deemed inactive by the MIRECS Administrator and have its Generating Activity Log suspended. If and when a Self-Reporting Project's Generation Activity Log is reactivated, the next meter read shall be the new baseline for accumulated generation data. A Self-Reporting Project must submit metering records to substantiate generation reporting.

6.9 Generation Activity Log

Each Project registered in MIRECS will have a Generation Activity Log associated with it. The Generation Activity Log is an electronic ledger where generation (or equivalent for Thermal and/or EWR Projects) is posted prior to Credit creation. Each time generation data is received by MIRECS for a particular Project, the date and quantity of MWhs is posted to the Generation Activity Log. Similarly, adjustments received will be posted likewise. The status of each entry in the Generation Activity Log will be noted, where the possible values are:

- **MIRECS Accepted:** This label is used for all generation that has been reported to MIRECS, has passed the MIRECS feasibility test and has been logged to the Generation Activity Log, but has not yet been accepted (or disputed) by the Account Holder.
- **MIRECS Pending:** The MIRECS Administrator is waiting for the resolution of a situation before the Credits can be issued. For example, if the MIRECS Administrator is waiting to receive a Fuel Type allocation from a Multi-fuel Generation Project or other update from a Generating Unit.
- **Account Holder Accepted:** The Account Holder has accepted the posted generation, but the Credits have not yet been issued.
- **MIRECS Admin Accepted:** The MIRECS Administrator has accepted the posted generation, but the Credits have not yet been issued.
- **Account Holder Disputed:** The Account Holder has disputed the posted amount of generation.
- **MIRECS Admin Disputed:** The MIRECS Administrator has disputed the posted amount of generation.
- **Credits Created:** Credits have been created.

The status of each entry in the Generation Activity Log will be changed consistent with the information received by the MIRECS Administrator. Credits will be issued based on the total whole number of MWhs (MCF's or converted MMBtus) on the Generation Activity Log that are marked "Account Holder Accepted". Only Credits that are marked as such will contribute to Credit creation¹⁶. Any fractional MWh will be rolled forward until sufficient generation is accumulated for the creation of a Credit. Each time an item is posted to the Generation Activity Log, the Account Holder will be notified electronically. Account Holders will have at thirty (30) calendar days to accept or dispute any new regular entries to the Generation Activity Log and thirty (30) days to accept or dispute adjustments. If the Account Holder does not respond, the posting will be automatically accepted after the specified period.

The Generation Activity Log will include, at minimum, the following entries:

¹⁶ EWRCs will only be issued once reviewed and approved by MPSC staff.

- (a) Account Holder's Name
- (b) Activity Date
- (c) MIRECS Project ID for associated data posted
- (d) Activity Description identifying Data Submitted, Fractional Data Remaining, Credits Created, etc.
- (e) Reporting Period Start
- (f) Reporting Period End
- (g) MWh of generation reported to MIRECS during the current month
- (h) Fuel Type
- (i) Status
- (j) Note (displaying serial numbers or data upload file names)

6.10 Multi-fuel Generation Projects

For Multi-fuel Generation Projects, Credits will be created for the eligible Fuel Type(s) only.¹⁷ Each Credit issued for a Multi-fuel Generation Project will reflect only one fuel source, with the total number of Credits issued for a Fuel Type being proportional to the overall output for that reporting period.

The Generating Unit or its associated Account Holder may be asked to submit supporting documentation related to the derivation of the proportion of electric output per Fuel Type for each period for which the Generating Unit or Account Holder is issued Credits. The MIRECS Administrator will require copies of such calculations and supporting documentation may be subject to audit by the MIRECS Administrator, state regulators (including the Commission), QREs, certification organizations or their agents.

6.10.1 Allocating Output for Each Fuel Source

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

- (a) For biomass co-fired with fossil fuels or using fossil fuels for startup or supplemental firing: In each month, the Credits for each Fuel Type in such Multi-fuel Generation 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.

In addition, upon registration, all Multi-fuel Generation Projects must submit to the MIRECS Administrator a report prepared by an independent professional engineer

¹⁷ For example, a coal-fired Generating Unit that uses less than 1% of biomass co-firing can be considered a Multi-fuel Generation Asset and have biomass Credits issued in respect of that biomass-fired generation.

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. More details on this requirement are found in [Appendix D](#).

Multi-fuel Generation Projects that are eligible for the on-peak Incentive Credit have the option to list a different fuel split for on-peak generation versus off-peak generation. The Account Holder must be able to substantiate any such differentiation if reported in MIRECS.

7 Creation of Credits

Credits are issued in whole numbers only. Once a Credit is created, no changes can be made to that Credit. **Note that certain eligibilities for a specific Credit may expire.**

7.1 Credit Creation

The MIRECS Administrator will issue one Credit for each MWh (or MCFs or converted MMBtus) of eligible energy that is generated by a Project, as well as for any Incentive Credits for which the generation may qualify. Credits are issued based on the number of whole MWhs (or MCFs or converted MMBtus) that are listed in the Generation Activity Log for a given reporting period and for Incentive Credits (based on the multipliers defined in PA295 and PA 342).

Each Credit shall have a unique serial number. Credit serial numbers shall contain codes embedded in the number. The table below identifies the serial number format used in MIRECS.

TABLE 7.1: MIRECS SERIAL NUMBER IDENTIFIERS

Identifier	Display Order	Data Type	Length	Range of Codes	Comments
Originating Registry	1	Alpha-numeric	3	MIRECS	Used to identify originating registry.
Unit type	2	Alpha-numeric	4	REC: Renewable Energy Credit issued for a Generating Project or Thermal Project EWR: Energy Waste Reduction Credit for a Gas or Electric EWR Project. IREC: Incentive Credit	Used to identify if the issuance is based on a facility or contract registration with MIRECS
Project ID	3	Numeric	6	1-999999	Unique ID assigned to each Project record in MIRECS.
State	4	Alpha-numeric	2		State Abbreviation identifying the State in which the renewable energy generation occurred.
Vintage Month	5	Numeric	2	01-12	The month in which the renewable energy generation occurred.

Identifier	Display Order	Data Type	Length	Range of Codes	Comments
Vintage Year	6	Numeric	4	2009-2099	The year in which the renewable energy generation occurred.
Batch Number	7	Numeric	5	Numeric value assigned to the each batch of credits created 1 – 99,999 unique per originating generator per vintage.	
Serial Block Start	8	Numeric	9	Numeric values assigned by MIRECS from 1 - 999,999,999.	A number to identify the first credit in a block of credits.
Serial Block End	9	Numeric	9	Numeric values assigned by MIRECS from 1 - 999,999,999.	A number to identify the last credit in a block of credits.

7.2 Process and Timeline for Credit Creation

The renewable energy or advanced cleaner energy from a project with Michigan eligibility will not result in the issuance of energy Credits for a period prior to one year from the project owner, responsible party or generating unit registration. Exceptions will be made for Accounts completed on or before March 31, 2010, which can have Credits issued for generation data older than one year but for no period earlier than January 2009.

Once the generation data is received by the MIRECS Administrator and a data validity check is performed, it will post on the Account Holders “Generation Activity Log” and the System will notify the Account Holder via email that generation has been posted. The generation posting will be marked “MIRECS Accepted” on the Generation Activity Log. Once the generation is accepted by the Account Holder, the generation posting will be marked “Account Holder Accepted.” The Credits will issue immediately following this. Where this process differs is with EWRCs. For these credits types only, it will require review and approval by MPSC staff prior to issuance.

The Account Holder must notify the MIRECS Administrator if it believes the generation data amount 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 thirty (30) 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 MIRECS Administrator, the Credits will be created.

7.3 Credit Creation for Accumulated Generation

Generation data from Generating Units that have a Nameplate Capacity under 25 kW and that are not reported to MIRECS on a monthly basis may be accumulated over one or more months prior to submittal to MIRECS for Credit issuance. The vintage on the issued Credit will be the last month and year of generation contributing to an

accumulated MWh. Credit creation for accumulated generation will occur on the same schedule as all other generation in MIRECS.

7.4 Data Fields Carried on Each Credit

Each Credit carries a list of data fields. These fields include:

TABLE 7.2: CREDIT DATA FIELDS

DATA FIELD	COMMENTS
CREDIT DATA:	
Credit Type	REC, EWR or IREC
MIRECS ID	Unique ID assigned to each Project record in MIRECS.
Project Type	Used to identify if the issuance is based on a Generation Project, Thermal Project, or Energy Waste Reduction Project
Project Name	Name of Project
Primary Project Name	Name of Facility
Credit Vintage	Vintage of Generation
Credit Serial Numbers	See details above
Quantity of Credits	Total Credits
Meter Data From: NA	
Meter Data To: NA	
Credit Creation Date:	Date Credits were issued in MIRECS
Project Documents/Attestations: View	Any associated documents (metering records etc.)
STATIC PROJECT DATA:	
County	County facility is located in
State or Province	State or Province facility is located in
Country	Country facility is located in
NERC Region	NERC Region facility is located in
eGrid Sub-Region	eGRID Sub-Region facility is located in
Qualifying Facility (Y/N)	Whether facility is a Qualifying Facility
Commenced Operation Date	Date the Facility commenced operation
Fuel Type/Energy Source	Fuel Type abbreviation
Nameplate Capacity	Nameplate Capacity of Facility
Reporting Entity Type	QRE or Self-reporting
Reporting Entity Contact Company or Organization name	Name of QRE, if applicable
Utility to which Facility is interconnected	Utility Interconnect
Repowered Indicator (Y/N)	Denotes whether Facility is Repowered
Repowered Amount: NA	Denotes the portion, if applicable, of unit that is repowered
Repower date (required if Repowered Indicator = Y)	Date of repowering
Eligibility for MIRECS	
ELIGIBILITY FOR VOLUNTARY PROGRAMS:	
Green-e Energy Eligible	Denotes eligibility and, if applicable, certification number
LIHI Certified	Denotes eligibility and, if applicable, certification number

8 Credit Errors and Correction

8.1 Generation Data Validity Check

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

8.2 Credit Errors Discovered After Credit Issuance

Once a Credit is created, no changes can be made to that Credit. In the event that an error is discovered after Credits have been issued, the MIRECS 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 Credits issued, the MIRECS administrator will first attempt to rectify this by making an adjustment to the Generation Activity Log associated with the generator. If the error is found in one of the fields on the Credit, the MIRECS 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 Credits, freezing the account of the offending party, levying an administrative fine or banning participation in MIRECS.

9 MIRECS Compliance Requirements

Renewable Energy (RE) and Energy Waste Reduction (EWR) Compliance Sub-Accounts are automatically created annually in MIRECS. Utility Service Providers will make transfers to the Compliance Sub-Account to mirror and support their annual compliance filing with the Commission. Credits in this sub-account will remain in Active status until the Compliance Sub-Account has been reviewed and approved by the Commission. A Notification will be triggered 15 days prior to the compliance deadline identified in the Compliance Sub-Account to warn the Account Holder of the approaching deadline. The Commission will have access to the sub-account with an ability to approve or reject the pending retirements. Once approved, the Credits will be Retired. A separate Compliance Sub-Account will be created for each compliance year. The MIRECS Administrator is not responsible for ensuring that Account Holders retire Credits when appropriate.

9.1 RE Compliance Sub-Account

Following the creation of the Compliance Sub-Account, Utility Service Providers can proceed to transfer Credits to the Compliance Sub-Account(s). Credits can be transferred into the Compliance Sub-Account and from the Compliance Sub-Account to other Sub-

Accounts until the Account is ‘submitted’ to the Commission (see #4 below). The exception to this is for Credits for which PA 295 eligibility expires prior to submission of the Compliance Sub-Account. For these Credits the following applies:

1. The Credits must be transferred to the Compliance Sub-Account *prior* to the expiration of the PA 295 eligibility
2. The Credits can only be transferred to a Compliance Sub-Account for Compliance Year that is equal to or prior to the year in which the PA 295 eligibility will expire
3. If the Credits are in the Compliance Sub-Account before the PA 295 eligibility expires, they will retain the eligibility for the specific Compliance Year
4. After the expiration date has been passed the Credits can no longer be transferred to or from a Compliance Sub-Account.

From a Compliance Sub-account, the Account Holder can access a Compliance Report that displays the quantity achieved and quantity still needed to meet the annual requirement. The report will also show how many of the Credits are Renewable Energy Credits, Incentive Renewable Energy Credits, Energy Waste Reduction Credits, Advanced Cleaner Energy Credits (and whether the ACE Credits are from a plasma facility or not), and whether the Credits are from project owned by the Utility Service Provider.

9.2 EWR Compliance Sub-Account

Following the creation of the EWR Compliance Sub-Account, Utility Service Providers can proceed to transfer EWRCs to the EWR Compliance Sub-Account(s). EWRCs can be transferred into and out of the EWR Compliance Sub-Account until the Account is ‘submitted’ to the Commission (see #4 below). The exception to this is for Credits for which PA 342 eligibility expires prior to submission of the Compliance Sub-Account. For these EWRCs, the following applies:

1. The EWRCs must be transferred to the EWR Compliance Sub-Account *prior* to the expiration of the PA 342 eligibility
2. The EWRCs can only be transferred to an EWR Compliance Sub-Account for Compliance Year that is equal to or prior to the year in which the PA 342 eligibility will expire
3. If the EWRCs are in the EWR Compliance Sub-Account before the PA 342 eligibility expires, they will retain the eligibility for the specific Compliance Year
4. After the expiration date has been passed, the EWRCs can no longer be transferred to or from an EWR Compliance Sub-Account

From the EWR Compliance Sub-account, the Account Holder can access an EWR Compliance Report that displays the quantity achieved and quantity still needed to meet their annual requirement. The EWR Compliance Report will feature the Annual EWR Compliance Requirement, Total Credits, EWRCs for Compliance, RECs for EWR Compliance, EWRCs for Financial Incentive, Percent of Compliance Mandate Achieved, and EWR Compliance Balance.

REQUIREMENTS:

Compliance Year	Overall Mandate (substitution allowed)	Overall Mandate (no substitution allowed)
REC	No limit	No limit
IREC	No limit	No limit
	10%	0%
EOC		
Developed and/or Owned Projects (excl. PURPA) ¹⁸	50%	50%

Conversion ratios:

REC:

1 MWh = 1 REC

IREC:

1 IREC = 1 REC

Thermal (Steam RECs):

3.412 MMBtu = 1 REC

Gas EWR:

1 MCF = 1 EWRC

Electric EWR:

1 MWh = 1 EWRC

When the Account Holder has finished their transfers for the compliance year, they will ‘submit’ the Compliance Sub-account for Commission review. This will lock the Credits in place allowing for the Commission to perform their review. No changes to this Sub-account can be made by the Account Holder during this time. The deadline for submitting the report will be the same as the filing deadline with the Commission.

The Commission will receive an automatic notification that a report has been submitted for their review. After their review the Commission can select to either ‘approve’ or ‘reject’ the Compliance Sub-account. Approval will result in the Credits being Retired permanently in the Compliance Sub-account associated with the given compliance year. Rejection will reopen the Compliance Sub-Account to allow the Account Holder to amend the Compliance Sub-account with the required Credits after which they can re-submit the Sub-account for Commission review. Status of the Compliance Sub-Account can be accessed via the Compliance Reports available to the Account Holder and the Commission

10 Importing and Exporting

MIRECS has established import and export procedures with registries covering other renewable energy markets.

10.1 Importing Credits

Credits in the exporting registry are sent and received in the MIRECS Administrator's inbox. Once the MIRECS Administrator accepts the imported Credits, a number of validation checks are performed before the Credits are transferred into the receiving MIRECS Account Holder's inbox. After the MIRECS Account Holder approves the Credits, the imported Credits are reconciled with the exporting Compatible Tracking System.

10.2 Exporting Credits

MIRECS Account Holder's will select the Sub-Account that contains Credits they wish to export. Once the Credits have been selected to transfer, the export option will need to be selected, along with the Compatible Tracking Systems. The MIRECS Export Ratio will then appear and show the adjusted Credit quantity to be exported. At this time the Compatible Tracking System's Account Holder will also be selected, and the export can then be submitted. The Compatible Tracking System will then review the MIRECS Export and accept or reject to complete the process. For export purposes, Incentive Renewable Energy Credits are converted into Renewable Energy Credits in order to create a REC ratio of 1 MWh to 1 REC. See the [Import/ Export IRECs](#) document for more information regarding the MIRECS REC ratio. EWRCs cannot be exported.

11 Public Reports

MIRECS provides public reports displaying registration and Credit information. Public reports will be accessible to anybody via the public page on the MIRECS website. It is expected that additional public reports will be added to meet future needs of Account Holders and Program Administrators using MIRECS. Public reports are carefully designed to ensure the confidentiality of Account Holder data per the Terms of Use. See the Terms of Use for more information regarding confidentiality.

- **Account Holders.** This report contains a listing of all Account Holders with some limited contact information.
- **MIRECS Projects.** This report contains a listing of all Projects registered in MIRECS with limited eligibility information.
- **Import Projects:** This report contains a listing of all Import Projects certified in MIRECS with limited eligibility information

- **Bulletin Board:** This report allows Account Holders to post Credits they own for the purpose of finding potential buyers. If there are no offers available the message “No Records.” will display.

11.1 Account Holder Reports

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

- **My Event Log.** This report lists all of the events that have taken place in the Account.
- **My Sub-Accounts.** This provides a list of Credits held in the Account’s Sub-accounts and allows the Account Holder to filter data by specific Active or Retirement Sub-accounts.
- **My Credit Transfers.** This report provides a comprehensive list of Credit transfers, between Sub-accounts and other Account Holders in MIRECS.
- **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 MIRECS and includes the date of registration, the MIRECS ID and a link to the Project registration screens.
- **My Generation Activity Log.** This report provides as summary of all Credit data loaded into MIRECS for all of Account Holder’s Projects.
- **My Generation Report.** This report provides a summary of all Credits created in MIRECS. It is filtered by vintage year.
- **My Recurring Transfers.** This report provides a list of all forward transfers that are created in MIRECS.
- **Compliance Report.** This report displays the quantity achieved and quantity still needed to meet the annual compliance requirement. The report will also show the status of the Sub-Account submission.
- **My Credit Breakdown.** This report provides a snapshot of all active Credits in the ‘Active’ sub-accounts and ‘Compliance’ sub-accounts by Year.
- **Retirement Report.** This report provides Account Holders the ability to view all Credits Retired and an effective date of Retirement. This report can be provided to third parties wanting to verify Retirement of Credits.

- **Credit Import Report.** This report provides details on all Import transactions in MIRECS.
- **My Invoices.** This report lists all invoices that have been issued to the Account Holder including the amount and payment status. The report also includes payment information.

12 Data Security

The following are a minimum set of security practice requirements for MIRECS 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 Credits.
- (c) Well-defined system backup and recovery processes.
- (d) Secured file transfer and data upload processes using encrypted communications for all data interfaces

[THE REMAINDER OF THIS PAGE IS LEFT BLANK]

Appendix A: Account Holder Registration Process

The following information will guide you through the steps necessary to create a Michigan Renewable Energy Certification System Account. The MIRECS Administrator is available to assist you throughout the registration process. Please call 888 9MIRECS (888-964-7327) or email mirecs@apx.com.

STEP 1 – REVIEW MIRECS OPERATING DOCUMENTS

You should first review the MIRECS Operating Documents including the Terms of Use, Fee Schedule, Operating Procedures, and QRE Requirements. The documents are posted on the Documents page on the MIRECS website (www.mirecs.org).

STEP 2 – ONLINE REGISTRATION

Go to MIRECS and select the “Register Here” link. A pop-up window will appear with a checklist describing the steps required to register for an account. Select the appropriate Account Type and click the “Continue Registration” button.

The available Account Types are:

- **Michigan Utility Service Provider Account:** This type of Account can hold, transfer (outgoing and incoming), and Retire Credits. A Michigan Utility Service Provider Account can also register and maintain Projects and have Credits issued to it for its Projects. A Michigan Utility Service Provider Account is the only type of Account that can Retire Credits for compliance with PA295 and PA 342.
- **Non-profit Wholesale Power Provider Account:** A non-profit entity that supplies wholesale electric power to one or more Michigan Utility Service Providers that maintain a Michigan Utility Service Provider Account. This type of Account can hold, transfer (outgoing and incoming), and Retire Credits. This Account type can also register and maintain Projects and have Credits issued to it for its Projects.
- **General Account:** This type of Account can hold, transfer (outgoing and incoming), and Retire Credits. A General Account can also register and maintain Projects and have Credits issued to it for its Projects.
- **Project Account:** This type of Account can register Projects and have Credits issued to it for its Projects. A Project Account can hold, transfer (only outgoing transfers), withdraw and retire Credits. A Project Account cannot receive transfers from other parties.
- **Retail Purchaser Account:** This type of Account is for retail purchasers of Credits. A Retail Purchaser Account can hold, accept incoming transfers, and retire Credits. They can also register and maintain Projects that are under 1MW

- in capacity and have Credits issued in their Account. A Retail Purchaser Account cannot make outgoing transfers.
- **Qualified Reporting Entity (QRE)/ Verifier Account:** An Account Holder with a QRE Account is assigned to a Project and is responsible for verifying generation or storage information from that Project. MIRECS tracks the specific types of Projects for which QRE's are approved to provide services, ensuring that they are suitably qualified and accredited. The QRE Account cannot hold Credits.
 - **Program Administrator Account:** This type of Account is provided to administrators of compliance and voluntary programs that utilize MIRECS and/or have eligibilities noted for certain Credits. 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.

STEP 3 – ACCEPT THE TERMS OF USE

Read and agree to the MIRECS Terms of Use (this is your next step after clicking “Continue Registration”). Acceptance of the Terms of Use must be indicated by reviewing all terms; checking each section; and lastly, agreeing to the Terms of Use by pressing the “I Agree” button.

STEP 4 – COMPLETE ACCOUNT APPLICATION

Upon accepting the Terms of Use, the next screen shows the online New Account Application Form. You will need to complete all required fields that are noted by an asterisk (*). Note: It will be possible for the public to view the Organization Contact information you provide when your Account is approved.

Upon completing the New Account Application form and clicking SUBMIT, you will receive an Email notification to validate your registration. This validation must occur before the MIRECS Administrator is notified of your pending Account.

STEP 5 – ACCOUNT REVIEW

The MIRECS Administrator will review the Account application. If the Account application is complete and approved, an email notification of Account approval will be sent to the designated Account Manager Email address provided in the New Account Application form. If materials are incomplete or additional information is required, the MIRECS Administrator will notify the Account Manager. Approved Account Holders may begin using all functions of the system available to their type of Account.

STEP 6 – BILLING

Applicable Account Subscription and Registration Fees will be billed when the Account is approved. Once the invoice is created, the MIRECS Administrator sends the Account



Manager an Email notification with the invoice and payment details. The Invoice is also made available online via the “My Invoices” report within MIRECS for downloading and printing. Invoices must be paid within thirty (30) days. Failure to pay will result in Account deactivation.

STEP 7 – CREATE SUB-ACCOUNT(S) & ADDITIONAL LOGINS

All types of Account Holders must first create an Account for their organization. After Account approval, additional Sub-accounts can be created and Logins added to an Account. Owners of Generating Units or Storage Facilities, in addition to creating an Account, must also register each one of their Generating Units and Storage Facilities, including designation of a Qualifying Reporting Entity. Please refer to the MIRECS’s online help for registration details.

Appendix B: Project Registration Process

The following information will guide you through the steps necessary to register a Project in your Michigan Renewable Energy Certification System account. The Registry Administrator is available to assist you throughout the registration process. Please call 888-964-7327 or email mirecs@apx.com.

STEP 1 – Review MIRECS Operating Documents

The MIRECS's operative documents detail the requirements and definitions of different types of Projects. The documents are on the Documents page on the MIRECS website (www.mirecs.org).

STEP 2 - Register Project

- a. [Log in to your account](#) and select the "Register New Project" link.
- b. Fill out the information on the New Project Registration page and select "Next".
- c. Continue to fill out the information on the second and third page of the Project Registration screen and press "Submit".
- d. The Registry Administrator will then be notified of the New Project Registration.
- e. At any time during this process you can save the form and return to complete it at a later time if you do not have all the required information.

STEP 3 - Project Review

The Registry Administrator will review the Project registration. If the Project application is complete and approved, an email notification describing account approval will be sent to the Account Holder. At this time an invoice will be issued for any applicable registration and subscription fees. If materials are incomplete or additional information is required, the Administrator will notify the Account Manager.

STEP 4 – Credit Issuance

Credits can be issued as often as once a month if the metering data has been communicated to MIRECS. Metering data must come from a Qualified Reporting Entity unless the Generating Unit is less than 1 MW in capacity, in which case it can be a Self-Reporting Generator.

Appendix C: Essential Generation Characteristics for Aggregate Metering

Aggregate metering is a term used here to describe what occurs when more than one Generating Unit is registered as one Project. In order to do this, the Generating Units must have the same “essential generation characteristics.”

As a principle, the “essential generation characteristics” for the purposes of aggregate metering should be any characteristics that affects the Credit’s eligibility for any state program, certification program or in general determines value in the marketplace.

The determination of what counts as the essential characteristics that must be the same across Generating Units that are registered as one Project

Appendix D: Documentation Requirements for Multi-Fuel Generation Projects

Upon registering a Multi-fuel Generation Project, the Account Holder must submit to the MIRECS Administrator a report prepared by an independent professional engineer containing documentation of a methodology for calculating the electricity production associated with each fuel used during a month. Following the MIRECS Administrator's review and acceptance of such a report's methodology, the Account Holder may seek creation of Credits. This requirement will be waived for Generating Units that provide fuel-split information to a state, provincial or other regulatory authority.

Documentation of the following information used to calculate the proportion of electric output per Fuel Type generated by the Generating Unit during a calendar month must be maintained by Multi-fuel Generation Projects seeking Credits, using the best available sources of information. If the Multi-fuel Generation Project already provides documentation to regulatory entities addressing each of the items below or otherwise provides substantiation of the percentage of generation from each Fuel Type to regulatory entities, this documentation may substitute, upon approval of the MIRECS Administrator, for the requirements listed below.

1. Quantities of each Fuel Type (if applicable) must be measurable and verified by documentation provided to Balancing Authority(s), EPA or state air regulators, if available. If such documentation is not available, verifiable documentation of fuel quantities consumed during the month may be considered, such as metered liquid or gaseous fuel input where the meter is read by an independent third party so long as such entity has an agreement with the MIRECS Administrator, or financial records of fuel supply deliveries coupled with plant reports documenting mass of each fuel consumed in each calendar month.
2. Documentation of net heat content for each Fuel Type (if applicable) must be supported by documentation of heat content measurement by an independent laboratory.
3. If specification of a heat rate is required, the heat rate must be determined according to testing certified by an independent professional engineer consistent with the protocol accepted for plant heat rate testing in the plant's Balancing Authority. If different heat rates apply for different fuels, the determination for each applicable heat rate must meet the requirements of this paragraph.

Appendix E: MIRECS Fuel Types

TABLE E1: MIRECS FUEL TYPES

Fuel/Project Type (SHORT DESCRIPTION)	FUEL/PROJECT TYPE (LONG DESCRIPTION)	Renewable
ALT	Alternate Use	No
BAM	Biogas - Agricultural Methane	Yes
BAP	Biomass Combustion - Agricultural Products	Yes
BAW	Biomass Combustion - Agricultural Waste	Yes
BBL	Biomass Combustion - Black Liquor	Yes
BCA	Biomass Combustion - Animal Waste	Yes
BGA	Biogas - Animal Waste	Yes
BGW	Biogas - Wastewater Methane	Yes
BI2	Biomass (ACEC Qualifying)	No
BI3	Biomass (Non-Renewable) as defined by PA 295	No
BIG	Biogas - Agricultural Products	Yes
BIM	Biomass (Renewable) as defined by PA 295 sec 3 (f)	Yes
BL2	Landfill Gas (ACEC Qualifying)	No
BLB	Biogas - Liquid Biofuels	Yes
BLF	Landfill Gas	Yes
BML	Biomass Combustion - Liquid Biofuels	Yes
BWP	Biomass Combustion - Wood Products	Yes
BWW	Biomass Combustion - Wood Waste	Yes
CO1	Coal	No
CO2	Coal - Non ACEC	No
CON	Conversion of Fuel from Natural Gas Pipeline	No
CSP	Concentrated Solar Power	Yes
DI1	Diesel	No
DI2	Diesel - Non ACEC	No
FC1	Fuel Cells using Hydrogen derived from Fossil Fuels	No
FC2	Fuel Cells	No
GAP	Biogas - Agricultural Products	Yes
GAW	Biogas - Agricultural Waste	Yes
GE1	Geothermal Energy	Yes
GWP	Biogas - Wood Products	Yes
GWW	Biogas - Wood Waste	Yes
H2O	Hydropower as defined by PA 295 sec 11 (i)(iv)	Yes
HRR	Hydroelectric - Run-of-the-River	Yes
HTI	Hydroelectric - Tidal	Yes

HWA	Hydroelectric - Wave power	Yes
HYD	Fuel cells using Hydrogen derived from renewables	Yes
ITC	Industrial Thermal Cogeneration - (ACEC Qualifying)	No
IWE	Industrial Waste Energy - (ACEC Qualifying)	No
JET	Jet Fuel	No
MS1	Municipal Solid Waste - Renewable	Yes
MS2	Municipal Solid Waste - Non-Renewable	No
NG1	Natural Gas	No
NG2	Natural Gas - Non ACEC	No
NON	Not Listed - Contact the MIRECS Administrator	No
NU1	Nuclear	No
OC1	Tidal or Wave	Yes
OI2	Oil/Other Petroleum Based Fuel - Non ACEC	No
OIL	Oil/Other Petroleum Based Fuel	No
OTH	Other non-eligible fuel	No
SCP	Concentrated Solar Power	Yes
SO1	Solar and Solar Thermal Energy	Yes
STO	Stored Electricity as defined in PA 295 sec 39 (2)	No
THR	Thermal (REC)	Yes
TIR	Tire Derived Fuel	No
WND	Wind	Yes
WO1	Waste Oil (ACEC Qualifying)	No
WO2	Waste Oil	No

Appendix F: List of Referenced Documents

MIRECS Operating Procedures
MIRECS Terms of Use
MIRECS Fee Schedule
MIRECS Project Owner's Designation of Responsible Party
MIRECS Requirements for Qualified Reporting Entities
Regulated Person Attestation
Multi-Fuel Affidavit
Municipal Solid Waste Affidavit
Michigan Workforce Affidavit
Michigan Equipment Affidavit
Self-Reporting Affidavit
On-Peak Affidavit
Electric Storage System Affidavit
Importing/ Exporting IRECs