



REQUIREMENTS FOR QUALIFIED REPORTING ENTITIES

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1 Introduction

This document identifies the requirements that must be met in order to be considered a Qualified Reporting Entity in the North American Renewables Registry (NAR). It also contains the protocol for collecting and transferring generation data from participating Qualified Reporting Entities (QRE) to the North American Renewables Registry for the purposes of creating NAR Renewable Energy Certificates. Operating Documents for the North American Renewables Registry can be found at <http://narenewables.apx.com>

2 Qualified Reporting Entity Guidelines

As a Qualified Reporting Entity, the reporting party will adhere to the following guidelines:

1. A Qualified Reporting Entity should create a Qualified Reporting Entity account in the North American Renewables Registry. The North American Renewables Registry Administrator will validate all information submitted along with the registration.
2. Reported data should be at a sufficiently detailed level as to identify the amount of renewable energy generated by the generating unit.
3. Reported data should be inherently reliable and fully auditable.
4. Reported generation data should be financial settlement quality data from revenue quality meters which would include ANSI-C12.
5. Qualified Reporting Entities should submit data to the North American Renewables Registry on the basis agreed upon between the QRE and the North American Renewables Registry Account Holder that has designated them as the Qualified Reporting Entity for their registered Generating Unit(s).
6. Aggregation is allowed if the Generating Units behind the meter share the same Aggregation Generation Characteristics. Refer to Appendix C in the *North American Renewables Registry Operating Procedures*¹ for the list of Aggregation Generation Characteristics.
7. If the Qualified Reporting Entity also functions as its own balancing authority and owns Generating Units, or is subject to a renewable portfolio standard and is retiring Renewable Energy Certificates, it should be able to demonstrate that the entity or group within the QRE or its affiliates that is responsible for reporting would qualify as independent from the entity or group within the QRE or its affiliates engaged in marketing functions or REC retirement under the principles defined by the FERC's Independent Functioning and No Conduit Rules.² This separation should be specific to making the reporting entity independent from the marketing/retiring entity.

¹ <http://narenewables.apx.com>

² See *Standards of Conduct for Transmission Providers*, Docket No. RM07-1-000, Order No. 717, 125 FERC ¶ 61,064, 18 CFR §§ 358.5-6 (Issued October 16, 2008).

8. Generating Units will adhere to regular internal and external validation and verification procedures that may include but are not limited to:
 - a. Regular Meter Calibration – based on the size of the generating unit; and
 - b. Internal Meter Data Validation.
9. Qualified Reporting Entities will upon request provide the NAR Administrator with regular internal and external audit and verification reports that may include but are not limited to the use of:
 - a. Parallel Meters
 - b. Internal Meter Data Validation
 - c. Regular Meter Calibration – based on the size of the generating unit
 - d. Meter Calibration Tools calibrated against national standards
 - e. Meter Data System’s Integrity Validation which includes an analyst validation check and historical comparison
 - f. Internal Audit Process
 - g. Third Party Consultants on Energy Procurement Activities
 - h. Balancing Authority’s annual audit results

3 Qualified Reporting Entity Candidates

Qualified Reporting Entities for the North American Renewables Registry may include but are not limited to:

- Balancing Authorities
- Electric Service Providers
- Generator Aggregators
- Meter Readers
- Independent Third Parties

4 File Description

4.1 Reporting Entity File Description

The data shall be in ASCII Text with data fields delimited by commas (Comma-Separated Value (CSV) format). The Generation file has the following general structure:

```
<column1Name>,<column2Name>,...  
<column1Value>,<column2Value>,...
```

If the Column Name(s) and Value(s) do not conform with the above specification, the application will indicate a fatal error and the file will not be loaded.

TABLE 1: GENERATING DATA FILE CONTENT STRUCTURAL ELEMENTS

<columnXName>	a human-readable label for the X'th column of CSV data
<fieldXValue>	a value for the X'th column of CSV data. There can be any number of data rows in a file. Data types are not quoted.

The following example shows a conforming input file.

```
GENERATORID/UNITID/VINTAGE/FROM/TO/TOTALMWH
1,2,01/2001,01/01/2001,01/31/2001,100
```

Null Values

If null is valid as a field value for a given field, the data may be optionally omitted in the file. For example, the following line indicates the last field is null.

```
32000,125
```

Null is not a valid value for any current field elements.

5 Field Definitions

The following sections define the data contained in each extract file accepted by NAR.

5.1 Generation Extract for NAR Generating Units

The generation extract provides total generation by unit for a given month. This file will be generated and delivered from the Qualified Reporting Entity. The Qualified Reporting Entity will use their North American Renewables Registry login and password to access the NAR System, and upload the file to the NAR portal.

The fields are as described in the following table.

TABLE 2: GENERATING UNITS FILE FORMAT

Field Name	Data Type	Description
GENERATORID	Integer	Unique NAR identifier for the unit assigned by NAR upon Asset approval.
UNITID	Integer	Unique identifier for the unit assigned by its Control Area or Reporting Entity.
VINTAGE	Character (7)	Month and year of generation, formatted at MM/YYYY for any month in the current Reporting Period.
BEGINDATE	Character (10)	Begin month-day-year of generation output period formatted at MM/DD/YYYY
ENDDATE	Character (10)	End month-day-year of generation output period formatted at MM/DD/YYYY
TOTALMWH	Float	Total MWhs for the Reporting Month

6 File Loading

All files will be loaded into NAR using a valid active NAR Login and password that is associated with an active open Qualified Reporting Entity NAR Account type.

6.1 Loading Generation Extract File for NAR Generating Units

Only Account Holders of type “Qualified Reporting Entity” or “NAR Administrator” have the ability to load the Generation Extract File.

After logging into their NAR Account, the Account Holder should locate the Meter Data Loading module. To locate the desired generation output file, the user selects the Meter Data Loading module’s “Browse” button to display a pop-up screen where the user can locate the desired file on computer or network drives. After selecting a file, the user selects the “Upload Now” button to upload the file. A current period output file can be loaded as many times as needed adhering to the four rules listed below:

TABLE 3: GENERATING UNITS FILE FORMAT

Data Reloading Rule	Description
Rule 1, reloading data when the existing data is already “Account Holder Accepted”	After an Account Holder has explicitly accepted the posted output data, if a file of the same, or different, data is reloaded, NAR will reject the data and notify the reporting entity that data for this unit has already been accepted. The status of the existing data will not change. To override this rule, see rule 4 below.
Rule 2, reloading data when the existing data is “NAR Accepted” or “Account Holder Disputed”	Reloading the data file will overwrite any data that was previously loaded for that unit and set the new data status to “NAR Accepted”.
Rule 3, reloading data when the existing data is “NAR Administrator Accepted”, “NAR Administrator Disputed”, or “NAR Admin Adjusted”	If a file of the same, or different, data is reloaded, NAR will reject the data and notify the reporting entity that this unit’s data is either “NAR Admin Accepted” or “NAR Admin Disputed” and therefore cannot be accepted. The status of the currently posted data will not change. To override this rule, see rule 4 below.
Rule 4, data file reloaded by the NAR Administrator	The reloaded data will overwrite all previously loaded data for this unit regardless of its current status

Before posting the output to the NAR database, the system validates the uploaded data. When all validations are successfully completed, the data is loaded into the database and written to the Generation Activity Log. The system notifies the Account Holder via email that:

- Generation output data has been loaded for specific generating units in the account; and
- Data is available to be reviewed for accuracy, then approved or disputed.

Description: Before generation output data is posted to any NAR databases, the system performs the following validations:

TABLE 4: GENERATING UNITS FILE FORMAT

Validation Type	Description	Failure Result
Reporting Entity validation	Is the reporting entity designated to report output data for the generating unit, as classified by the Account	System rejects data, sends reporting entity an error message that they are not designated to report on this generating unit, and creates an

Validation Type	Description	Failure Result
	Holder in the generating unit's registration information?	Exception Report for NAR Administrator review.
Engineering Feasibility Assessment	As described on the next page, feasibility is determined using a formula that includes the amount of generation reported (MWh), the duration (begin/end), the nameplate capacity, and the capacity factor or the Annual Maximum Energy Output.	Soft-warning to the reporting entity that the MWh have failed the Engineering Feasibility for the generating unit. The reporting entity is allowed to continue posting the data, but it will remain in a pending state. Both the NAR Administrator and the Account Holder will be notified of the failed feasibility estimate. Also, the NAR Administrator will have to review the data (and approve it) before it can become eligible for Certificate Issuance.
Begin/End Duration overlap/gap check	For the duration of generation (Begin MM/DD/YYYY and End MM/DD/YYYY), are there gaps or overlaps from the data reported for the previous reporting period?	System rejects the data and sends an error message to the reporting entity that the duration reported for this unit has either gaps or overlaps from data reported for a previous reporting period. Either error message will be specific to the problem – one message for a gap, and another for an overlap.
Multiple Units aggregated to this meter flag – Y/N	Does the unit being reported on share its meter with multiple units? If No, proceed with other validations. If Yes, see description to the right.	NAR will write the data to the database for the Primary Generating Unit. At Certificate Creation, and assuming the data is not disputed, NAR will divide the amount of reported generation by the number of units sharing the meter (or allocated by percentage specified by the Account Holder) and then process the data individually for each unit.
Current Status of any previously loaded data	If data was previously loaded for the units in the file, what is that data's current status?	See Rules 1-4 on the previous page

When a reporting entity submits generation data NAR validates the data to verify its engineering feasibility before writing it to the database. To perform the validation, NAR uses the following required variables that were defined in Page 1 of the Generating Unit Registration screen:

- Nameplate Capacity
- Capacity Factor or Maximum Annual Capacity
- Duration – defined as the length of period, in hours, for which generation activity is being reported (this is calculated by the system given the Begin Date/End Date in the file or entered manually)

Data validation is performed for both current period reporting and prior-period adjustment reporting, regardless of whether the data is loaded as a file or entered manually in the unit's Self-Reporting screen. To determine the feasibility of the submitted data, NAR will use the following equation:

$$(\text{nameplate capacity}) * (\text{capacity factor}) * (\text{number of hours in the duration}) * (1.02)$$

The number of hours in the duration is based on the duration of the generating period each time the information is reported on the generating unit. To determine the duration value, NAR will calculate the number of hours in the generating period (for example, the number of hours in the generating period with a Begin Date of January 1, 2006 and an End Date of January 31, 2006 would be 744). The 1.02 will allow for a margin of error.

If the validation is successful, the data is loaded into the database, and becomes available to the Account Holder to review and then accept, or dispute. If the data is accepted, it will be included in the certificate issuance cycle for the relevant reporting period. For prior-period adjustments, the data will contribute to the next certificate issuance after it was accepted (either by the Account Holder, or auto-accepted by NAR).

If the loaded data fails the Engineering Feasibility validation, the reporting entity will be prompted with a 'soft' warning as to the failed validation. The reporting entity has the ability to continue posting the data by selecting the "continue" button on this pop-up screen, and if so wishes to continue posting data, NAR will send an automated email to both the NAR Administrator and the Account Holder that the data loaded for their generating unit has failed the Engineering Feasibility validation, but that the Reporting Entity has decided to have the data posted to the database anyway. The notification will also state that the data has a status of "NAR Pending" until either corrected or approved by the NAR Administrator. Data with this status will not contribute to Certificate creation. The reporting entity can also decide to not have the data posted to the database as a result of the failed validation by selecting the "cancel" button on this same pop-up screen. Selecting cancel will discontinue the data loading process for the unit in question and no notifications will be sent.