**NYGATS**

**REQUIREMENTS FOR QUALIFIED REPORTING ENTITIES**


**INTERFACE CONTROL DOCUMENT**
**(GENERATOR DATA)**


**April 03, 2017**

## Document Information

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## Revision History

| Revision | Date | Author | Description of Change |
|---|---|---|---|
| 0.1 | 23 NOV 15 | BGOWER; APX | Draft |
| 1.0 | 25 FEB 16 | BGOWER; APX | Final |
| 1.1 | 29 MAR 16 | BGOWER; APX | Added QIP Data collection requirements to Section 2 (5) |
| 1.2 | 05 JUL 16 | BGOWER; APX | Minor changes to file format label Clarification on  file format field description |
| 1.3 | 03 April 16 | BGOWER; APX | Added DST instructions in section 4.2 |

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## 1    Introduction

This document identifies the requirements that must be met in order to be considered a Qualified Independent Party in the New York Generation Attribute Tracking System (NYGATS). It also contains the protocol for reporting generation data to NYGATS for the purposes of creating generation attribute Certificates. NYGATS operating documents can be found at http://www.nyserda.ny.gov/nygats.  Any capitalized terms contained herein that are not otherwise defined herein have the meanings as such terms are defined in the NYGATS Operating Rules.  If any terms of this document conflict with the NYGATS Operating Rules, the terms of the NYGATS Operating Rules shall control.

## 2    Qualified Independent Party Guidelines

As a Qualified Independent Party (QIP), the reporting party will adhere to the following guidelines:
1. A Qualified Independent Party is defined in the NYGATS Operating Rules as a reporting entity that is (1) the control area operator, interconnecting utility, scheduling coordinator, or an independent third-party meter reader and is not affiliated with the owner of the generator for which the entity is reporting; or (2) the control area operator or interconnecting utility and that is affiliated with the generator owner, but having sufficient segregation of duties such that the person performing the Qualified Independent Party duties does not have access to transfer or retire Certificates created for that generator.
2. A QIP shall create a QIP account in the NYGATS. The NYGATS Administrator will validate the submitted registration information.
3. Generation data will be reported to NYGATS using a CSV format described in this document. Reported data shall be inherently reliable and fully auditable. NYGATS reserves the right to audit the MWh data totals.
4. Reported data should be at a sufficiently detailed level as to identify the amount of energy generated by the Generating Unit.
5. Reported generation data should be financial settlement quality data from revenue quality meters which would include ANSI-C12.20 compliant meters.  Generation data from the meter must be collected by the QIP via direct physical read or directly transmitted to the QIP by digital machine-to-machine transmission, such as telemetry or internet connection.
6. A QIP may report data for aggregated small generators pursuant to Section 4.3 in the *NYGATS Operating Rules.*
7. If the Qualified Independent Party 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 QIP or its affiliates that is responsible for reporting would qualify as independent from the entity or group within the QIP or its affiliates engaged in marketing functions or REC retirement under the principles defined by the FERC's Independent Functioning and No Conduit Rules[1]. This separation should be specific to making the QIP independent from the marketing/retiring entity.
8. Generating Units will adhere to regular internal and external validation and verification procedures that may include but are not limited to:

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[1] 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)

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- Regular Meter Calibration – based on the size of the generating unit; and

- Internal Meter Data Validation.

9. QIPs will upon request provide the NYGATS Administrator with regular internal and external audit and verification reports that may include but are not limited to the use of:

- Parallel Meters

- Internal Meter Data Validation

- Regular Meter Calibration – based on the size of the generating unit

- Meter Calibration Tools calibrated against national standards

- Meter Data System's Integrity Validation which includes an analyst validation check and historical comparison

- Internal Audit Process

- Third Party Consultants on Energy Procurement Activities

- Balancing Authority's annual audit results

10. QIPs will report generation for Unit Specific Imports pursuant to section of 12.3 of the NYGATS Operating Rules

## 3    Qualified Independent Party Candidates

Qualified Independent Parties for the NYGATS may include but are not limited to:

- Control Areas
- Electric Distribution Companies
- Energy Service Companies
- Meter Readers
- Independent Third Parties approved by the NYGATS Administrator and NYSERDA

## 4    File Description

### 4.1    Qualified Independent Party (QIP) File Description

The data shall be in ASCII Text with data fields delimited by commas (Comma-Separated Value (CSV) or Notepad (TXT) 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 4-1 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.

NYGATSID,QIPID,MM/YYYY,MM/DD/YYYY,MM/DD/YYYY,TotalMWh
123,Unit1,10/2016,10/01/2016,10/31/2016,125

**Null Values**

The NYGATS data file will not accept a file with Null data.

### 4.2    File Description for Import Generator Hourly File

The data shall be in ASCII Text with data fields delimited by commas (Comma-Separated Value (CSV) or Notepad (TXT) 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 4-2 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.

NYGATSID,QIPID,DATE,HOUR,TOTALMWh
456,177,06/01/2015,1,12.345

When loading the hourly import data file, NYGATS will validate the following criteria.

- NYGATS only accepts extra hour (i.e. 2*) in schedule and the meter data for the DST long day (November). If the user tries to upload a file that has hour 2* for any day except the long day they should get an error message that says, "Hour 2* only allowed for DST long day".
- NYGATS will not accept uploaded meter data with hour 3 for the DST short day. If the user tries to upload a file that has hour 3 for the short day (March) they should get an error message that says, "Hour 3 not allowed for DST short day [MM/DD/YYYY]".

## 5    Field Definitions

### 5.1    Generation Extract for NYGATS Generating Units

The generation extract provides total generation by unit for a given month. The QIP will use its login and password to access NYGATS and upload the file to the NYGATS portal. The fields are as described in the following table:

**Table 5-1 Generating Units file format (NYGATS Generating Unit Projects)**

| Field Name | Data Type | Description |
|---|---|---|
| NYGATS ID | Character - Numeric | NYGATS assigned identification number; Prefix (GEN, AGG) should not be included |
| QIPID | Character – Alpha/Numeric | Unique identifier for the unit assigned by its Control Area or QIP |
| VINTAGE | Character (7) – MM/YYYY | Month and year of generation, formatted at MM/YYYY for any month in the current Reporting Period. If using Excel, MM/YYYY cells will be reformatted each time the file is opened. The Cell format will need to be adjusted back to MM/YYYY every time the file is opened. |
| BEGINDATE | Character (10) – MM/DD/YYYY | Begin month-day-year of generation output period formatted as MM/DD/YYYY |
| ENDDATE | Character (10) – MM/DD/YYYY | End month-day-year of generation output period formatted as MM/DD/YYYY |
| TOTALMWh | Number | Total MWhs for the Reporting Month |

**Table 5-2 Generating Units file format (Import Projects)**

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| Field Name | Data Type | Description |
|---|---|---|
| NYGATS ID | Character - Numeric | NYGATS assigned identification number; Prefix (GEN, AGG) should not be included |
| QIPID | Character – Alpha/Numeric | Unique identifier for the unit assigned by its Control Area or QIP |
| DATE | Character– MM/DD/YYYY | Month, Day and year of generation |
| HOUR | Number | Hour of the day Generation occurred DST Long Day should include an extra hour listed as 2* |
| TOTALMWh | Number | Total MWhs for the Reporting Hour |

## 6 File Loading

All files will be loaded into NYGATS using a valid active NYGATS Login and password that is associated with an active Qualified Independent Party Account type.

### 6.1 Loading Generation Data File for NYGATS Generating Units

Only Account Holders of type "Qualified Independent Party" or "NYGATS Administrator" have the ability to load the generation data file.

After logging into their NYGATS Account, the Account Holder should locate the Meter Data Loading module. To locate the desired generation output file, the QIP 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 for that period's Certificate creation adhering to the four rules as listed below:

| 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, NYGATS will reject the data and notify the QIP 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 "NYGATS 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 "NYGATS Accepted". |
| Rule 3, reloading data when the existing data is "NYGATS Administrator Accepted", | If a file of the same, or different, data is reloaded, NYGATS will reject the data and notify the QIP that this unit's data is either "NYGATS Admin Accepted", "NYGATS Admin |

| Data Reloading Rule | Description |
|---|---|
| "NYGATS Administrator Disputed", or "NYGATS Admin Adjusted" | Disputed", or "NYGATS Admin Adjusted" 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 NYGATS Administrator | The reloaded data will overwrite all previously loaded data for this unit regardless of its current status |

Before posting the output to the NYGATS 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
- Data is available to be reviewed for accuracy, then approved or disputed.

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

| Validation Type | Description | Failure Result |
|---|---|---|
| Reporting Entity/QIP validation | Is the QIP designated to report output data for the Generating Unit, as classified by the Account Holder in the Generating Unit's registration information? | System rejects data, sends QIP an error message that they are not designated to report on this Generating Unit, and creates an Exception Report for NYGATS Administrator review. |
| Engineering Feasibility Assessment | 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. | Soft-warning to the QIP that the MWh have failed the Engineering Feasibility for the Generating Unit. The QIP is allowed to continue posting the data, but it will remain in a pending state. Both the NYGATS Administrator and the Account Holder will be notified of the failed feasibility estimate. Before the data can become eligible for Certificate issuance, the NYGATS Administrator will require the Account Holder or QIP to submit the hourly metering readings or settlement system reports as available. |
| 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 QIP 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. |
| 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 |

| Validation Type | Description | Failure Result |
|---|---|---|
| (Import Project) Hourly Import File – Loading a file on any day except the DST long day (November) with an extra hour | NYGATS only accepts extra hour (i.e. 2*) in schedule and the meter data for the DST long day (November). If the user tries to upload a file that has hour 2* for any day except the long day they will receive an error. | Hour 2* only allowed for DST long day |
| (Import Project) Hourly Import File – Loading a file on the DST short day (March) with an extra hour | NYGATS will not accept uploaded meter data with hour 3 for the DST short day. If the user tries to upload a file that has hour 3 for the short day (March) they will get an error message | Hour 3 not allowed for DST short day [MM/DD/YYYY] |

When a QIP submits generation data, NYGATS validates the data to verify its engineering feasibility before writing it to the database. To perform the validation, NYGATS uses the following required variables that were defined in  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, NYGATS will use the following equation:

**(nameplate capacity) \* (capacity factor) \* (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, NYGATS 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, 2017 and an End Date of January 31, 2017 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 NYGATS).

If the loaded data fails the Engineering Feasibility validation, the QIP will be prompted with a 'soft' warning as to the failed validation.  The QIP 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,

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NYGATS will send an automated email to both the NYGATS Administrator and the Account Holder that the data loaded for their Generating Unit has failed the Engineering Feasibility validation, but that the QIP has decided to have the data posted to the database anyway. The notification will also state that the data has a status of "NYGATS Pending" until either corrected, or approved by the NYGATS Administrator. Data with this status will not contribute to Certificate Creation. The QIP 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.