

WREGIS Interim Operating Rules Changes

1. PCR 224 – Change Rule 12.9 to clarify payment and requirements
2. PCR 236 – Small-Scale Aggregation - Addition of Class H Option
3. PCR 238 – Thermal Tracking - TRECs



WREGIS Project - Change Control

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Change Request Form			
Project Request ID: 224 Status: Open	Requested by: Mike Muston Organization: Buena Vista Biomass Power	Type of Change: Operating Rules	Date Requested: 4/1/2014 Target Date: 6/2014 Priority: High
Title: Change Rule 12.9 to clarify payment and requirements for creation of retroactive certificates.			
<p>Description: Buena Vista Biomass Power (BVBP) is requesting a change in WREGIS operating rule 12.9, the WREGIS Retroactive Creation of Certificates rule, to clarify the payment that may be needed for retroactive creation of certificates, and the requirements that must be in place for such creation. Currently, Rule 12.9 only allows such requests from a state program or provincial program or similar program entity that requires retroactive certificate creation, and WREGIS reserves the right to require states and provinces to pay any necessary costs.</p> <p>This change will preserve the role of state and provincial programs and similar entities in requesting the creation of retroactive certificates. However, Rule 12.9 would be clarified in two ways: 1) the costs, if any, of a retroactive certificates request would be payable by any interested party, rather than limited to the requesting program; and 2) a program requirement that WREGIS be used for tracking generation after a date specific would be sufficient basis for a program to make a retroactive certificates request.</p> <p>This change would help ensure that renewable generation is counted for state and provincial programs in the first place, which will benefit the stakeholders in those programs by increasing participation and holding down costs. This is currently at times prevented by administrative authority and/or resource constraints at state and provincial entities, and this change will address those barriers.</p>			
APX Response:			



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Reason for Change: Need For New Structure For Issuance of Retroactive WREGIS Certificates

Consequences of Not Implementing Change: Potentially increased double counting due to generation not being tracked in WREGIS. Loss of eligible renewable energy (counting at least once) and commensurate financial impact to WREGIS stakeholders. Continued placement of administrative responsibility for deliverables under Rule 12.9 without adequate administrative authority or staffing/resourcing at state and provincial entities.

Estimate for Scheduled Release:

Cost Impact:

Total Cost Estimate:

Risk & Issues Involved:

External Impacts:



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Attachments/References: Suggested Rule 12.9 language

12.9 Retroactive Creation of Certificates

Retroactive creation of Certificates refers to the creation of Certificates for a past generation period for which WREGIS has no verified static data. This could occur when a Generating Unit registers in WREGIS in the middle of the year but is required to provide WREGIS Certificates for the entire year's production. It could also occur if a registered Generating Unit needs to provide Certificates for a generation period prior to the June 25, 2007 WREGIS Go Live date.

Automatic creation of retroactive Certificates is not part of the standard functionality of WREGIS. If creation of these Certificates is needed, this process will require action through the Change Control process. WREGIS will not have a time limit for which retroactive Certificate creation will be allowed, however, retroactive Certificate creation will only be allowed in WREGIS upon request from a state program or provincial program that requires tracking of generation in WREGIS after a date certain. The length of time for which retroactive Certificate creation will be allowed pursuant to such a state or provincial request will be dictated by the states or provinces that require it.

No Prior Period Adjustment will be allowed for the retroactive Certificates that were created, and retroactive Certificates cannot be created more than once for any single Generating Unit.

WREGIS reserves the right to require states and provinces that request retroactive Certificates, or other involved stakeholders, to pay for the cost associated with the additional WREGIS staff time and labor required for all work associated with retroactive Certificates including, but not limited to, entering and verifying data, and systems changes.

Approvals

APX: _____ Date: _____

WREGIS: _____ Date: _____



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Notes:

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Change Request Form			
Project Request ID: PCR 236 Status: Open	Requested by: WREGIS Staff Organization: WECC	Type of Change: Software Update and Operating Rules Update	Date Requested: 8/25/2016 Target Date: Priority: High
Title: Small-Scale Aggregation - Addition of Class H Option			
Description: Expansion of small-scale aggregation functionality to include Class H as a classification option, to accommodate account holders' requests. As with the stand-alone generator registrations, Class H will require a qualified reporting entity to report meter data for the groups. Updates include the following: Software Update: On the small-scale aggregation registration form, include Class H as an option on page 1, and remove the nameplate capacity cap on page 2. Operating Rules Update: Minor updates will be made to Appendix F of the WREGIS Operating Rules to include the Class H registration option.			
APX Response: "1. Add Class H option to WREGIS Generation Reporting Classification field on Page 1 of small scale aggregation registration (myModule/reg/Generator.asp?Type=GEN) 2. Remove nameplate limitation on Page 2 of small scale aggregation registration (myModule/reg/GeneratorAggregated.asp?action=update) 3. File upload size allowance on Page 2 must increase significantly. Currently the limit is somewhere below 2,000 lines. WREGIS staff anticipates file uploads that include over 11,000 lines. Look in to current size limit and feasible max. 4. Add Download button to Page 2 so user can download a record of the aggregated units from the registration form. The download button can be similar in look and functionality to the "Download Available Tags File" button found on the Match Certificates screen (accountStatus/CertificateTransferBatch.asp) 5. Possibility of a scroll bar or condensed view option on Page 2 to scroll through lines of data over a certain amount "			
Reason for Change: Flexibility in methodology for small-scale aggregate group registrations.			
Consequences of Not Implementing Change:			
Estimate for Scheduled Release:			
Cost Impact: Per contract, will be implemented on a Time & Material basis, at \$200/hour/ Coding/Bug Fix/Unit Test: 8 hours/ System Test, Regression Test and UAT: 1.5 hour			
Total Cost Estimate: 9.5 hrs, \$1,900			
Risk & Issues Involved:			
External Impacts:			



WREGIS Project - Change Control

Attachments/References:

Approvals

APX: James Webb

Date: 9/13/2016

WREGIS:

Date:

Notes:

Appendix F: Small Scale Aggregation

Background

When the WREGIS system was originally designed, it was intended to be used for large-scale renewable facilities throughout the Western Interconnection. Since then, it has become obvious that some users of the system will also need to track and aggregate a growing number of small-scale renewable energy facilities, such as residential- and commercial/industrial-scale solar photovoltaic systems.

Given that these small systems may number in the thousands for any given aggregator, the current WREGIS registration process for renewable energy certificates is burdensome. In addition, due to software constraints, it is impossible to register a system smaller than 1.0 kW in WREGIS as a standalone unit. It was therefore the intention of the WREGIS Administrator to create a more user-friendly aggregation methodology to allow for registration and tracking of these small-scale solar projects.

Applicable New Definitions

Distributed Generation (DG) Aggregation is the act of summing generation from customer-sited distributed generation facilities in kilowatt-hours over multiple months or facilities until one MWh has been accumulated and a WREGIS Certificate can be issued. DG Aggregation will be used primarily for small distributed generation facilities that individually do not generate one MWh in a month and that can be aggregated on the basis of Distributed Generation Similar Characteristics and will be aggregated by [Class H](#), Class I or Class J as may be appropriate.

Distributed Generation Similar Characteristics are comprised of the following characteristics, which are also identified in the QRE-ICD:

- Fuel type
- Fuel source
- Generation technology
- Multi-fuel indicator

The number of applicable characteristics will be determined on a case-by-case basis through discussion between the WREGIS Administrator and the aggregation applicant.

Distributed Generation Aggregation Project is a group of small DG facilities that will be aggregated together for purposes of WREGIS registration.

GOVERNING RULES

Prior to registering a DG Aggregation Project, the applicant must obtain advance approval from the WREGIS Administrator. Such approval will be based on the ability of the applicant to show proof of the right to registration for the facilities to be aggregated. Such proof could be shown by means of signed agreements, regulatory order, governing laws or tariffs, etc.

After initial approval of the aggregation project is granted, the aggregation applicant assigns each DG Aggregation Project a control number that will be the alternative to a revenue meter ID in WREGIS. The applicant must have a spreadsheet or other documentation showing the exact facilities included in each control group that will be submitted as backup documentation to the WREGIS Administrator. Each control group must fall into the Generation Classifications of ~~either Class I or~~ Class J, or Class H as defined in the WREGIS Operating Rules, Table 9-1. Although both Class I and Class J allow capacity of up to 360 kW, the group size should be at 250 kW or less during initial registration to allow for any necessary future additions, such as increases in the capacity of control group facilities. Restrictions on Class H registrations can be discussed with the WREGIS Administrator at the time of initial aggregation project approval.

Changes in control groups may be allowed by the Administrator on a no-more-than-monthly basis to allow for facility additions, subtractions, or changes in facility size. Ongoing documentation may be required by the Administrator for audits and for approval of requested control group changes. Each WREGIS Account Holder with a DG Aggregation Project will be required to submit an annual update of its backup documentation.

Certificates produced by a DG Aggregation Project will be subject to existing fees for creation, transfer, retirement, exporting, or reserving of certificates.



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Change Request Form			
Project Request ID: PCR 238 Status: Open	Requested by: WREGIS Staff Organization: WECC	Type of Change: Software Update and Operating Rules Update	Date Requested: 12/2016 Target Date: ASAP Priority: High
Title: Thermal Tracking - TRECs			
Description: Expansion of functionality to track Thermal Energy (TRECs) from the generation of electricity, to accommodate Program Administrators' requests and law/rule requirements. Updates include the following: 1-Software: add functionality to track TRECs (Thermal registrations and certificates). 2-Operating Rules: add an Appendix and minor changes to the WREGIS Operating Rules to include tracking of TRECs (Thermal registrations and certificates).			
APX Response: APX will update the WREGIS interface per the requirements specified by WREGIS staff.			
Reason for Change: To accommodate Program Administrators' requests and law/rule requirements.			
Consequences of Not Implementing Change: Program Administrators' will not be able to meet their law/rule requirements.			
Estimate for Scheduled Release:			
Cost Impact: Per contract, will be implemented on a Time & Material basis, at \$200/hour/ Coding/Bug Fix/Unit Test: 230 hours/ System Test, Regression Test and UAT: 89 hour/Release: 10 hrs/Documentation: 20 hrs			
Total Cost Estimate: 349 hours, \$69,800			
Risk & Issues Involved:			
External Impacts:			



WREGIS Project - Change Control

Attachments/References:

1. ODOE Thermal RECs Rules December 2016
2. NMPRC SB0249
3. Overview of Proposed System Changes – Thermal (TRECs)
4. Proposed Changes to WREGIS Operating Rules

Approvals

APX: James Webb

Date: 1/27/2017

WREGIS:

Date:

Notes:

Appendix G: Thermal Renewable Energy Certificate (TREC)

Applicable Definitions

British Thermal Unit (BTU) is the quantity of heat required to raise the temperature of 1 pound of liquid water by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit). BTU or MMBTU (one million BTUs) is the standard unit of measurement for thermal energy.

Cogeneration is the production of electricity from steam, heat, or other forms of energy produced as a by-product of another process.

Secondary Purpose is an end use for thermal energy that may be additionally eligible by a participating renewable energy program.

Thermal Energy is the energy made available in a combined-heat-and-power system for use in any industrial or commercial process, heating or cooling application, or delivered to other end users, i.e., total thermal energy made available for processes and applications other than electrical generation.

Thermal Renewable Energy Certificate (TREC) is a renewable energy certificate that has specifically been issued for thermal energy.

Governing Rules

These rules govern the manner in which Thermal Renewable Energy Certificates (TREC) are issued for thermal energy. They apply to a facility that generates both electricity and thermal energy that is used for a secondary purpose. The facility and its thermal energy must be recognized as renewable and eligible by one or more state, provincial, or voluntary program located in the WECC footprint.

Classifications

Thermal facilities fit in to two different classifications:

1. K – Thermal
 - Capacity to generate one or more TRECs per hour of operation (3.412 million Btu/hr)
2. L – Thermal
 - Capacity to generate less than one TREC per hour of operation (3.412 million Btu/hr)

Data Verification

Thermal facilities are required to meet the same verification standards that are currently used to register electric generating units (Section 5.3.1). Additional registration paperwork, however, may be required for the thermal portion of the registration to confirm the metering practices and to establish the secondary purpose(s).

Data Conversion

WREGIS converts reported thermal energy to a single WREGIS certificate using the following BTU/MMBTU-to-MWh equivalency standard:

$$3,412,000 \text{ BTUs}/3.412 \text{ MMBTUs} = \text{one WREGIS Certificate (1 MWh equivalent)}$$

The total reported BTU/MMBTUs and MWhs is displayed on the data reporting screen at the time the data is uploaded.

A max annual energy amount is used by the system to “gut check” the amount of energy reported and is determined by the WREGIS Administrator at the time of registration. If the reported energy exceeds the estimated amount, the WREGIS Administrator will follow up with the QRE and/or the Account Holder to resolve.

Reporting Energy Data

Thermal energy data must be reported monthly and may only be reported by the following types of Account Holders:

1. QRE – Non-Balancing Authority – Thermal
2. Self-Reporting Account Holder (AH) – Class L

Consequently, a Cogeneration Electricity/Thermal registration can have data reported from two separate sources:

1. Electrical meter data reported by:
 - a. QRE (Balancing Authority or Non-Balancing Authority)
 - b. Self-Reporting AH (Classes I and J)
2. Thermal data as identified above.

Similar to the electric generation reporting process, thermal energy data is uploaded via the file upload function of the system in which the Account Holder may indicate either BTUs or MMBTUs. Upon upload, the system converts the thermal data to MWhs and displays the reported amounts on a summary screen as mentioned above.

Metering Standards

Similar to the electric generator revenue metering standards (Section 9.3), all thermal facilities are required to meet a specific set of standards as determined by their class and as indicated below:

1. **Large facilities** - For facilities with the capacity to generate one or more TREC per hour of operation (3.412 million Btu/hr), the generator representative must have installed a thermal energy measurement system to continually measure thermal energy. The thermal energy delivered to the secondary purpose must be metered. All parameters needed to determine thermal energy to the secondary purpose must be directly measured.

2. **Small facilities** - For facilities with the capacity to generate less than one TREC per hour of operation (3.412 million Btu/hr), the generator representative must have installed a thermal energy measurement system to measure thermal energy delivered to the secondary purpose. Calculation parameters such as heat capacity, and directly measured parameters such as temperature and pressure, that do not vary more than +/-2 percent for the full range of expected operating conditions, may be evaluated on an annual basis and used in the calculation methodology as a constant.

These parameters may be based on such sources as manufacturers' published ratings or one-time measurements, but must be clearly defined and explained in a thermal energy measurement plan. All other parameters used to determine the amount of thermal energy must be continually measured.

Both on-site load and station service are handled in the same manner as electric generation (Section 9.6).

Certificate Creation

Thermal certificate creation is handled in the same manner as electric generation. Separate batches of certificates are issued for each type of renewable energy:

1. Electric – “renewable” fuel type and/or aggregated meter
2. Thermal – “renewable” thermal type

Certificates are created for one or both if reported data has been reviewed and approved by either the Account Holder or the WREGIS Administrator. This means that certificate creation of one type is not dependent upon the reporting or approval of the other type.