

Green-e Renewable  
Energy Certification  
Program

Annual  
Verification  
Instructions  
for REC  
Brokers



Green-e

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## I. OVERVIEW

This document provides instructions for fulfilling the annual verification requirements of the Green-e Renewable Energy Certificates (REC) Broker Certification Program (“Green-e Program”). The term “Broker” as used in this document refers to REC brokers participating in the Green-e Program. This document contains:

- Directions for completing the **Broker Verification Worksheets** (“Worksheets”);<sup>1</sup>
- A glossary of terms;
- An attestation form to be completed by the Broker.

The participating Broker should complete *Worksheets* 1-4 for the year of sales under review (called the “**Reporting Year**”<sup>2</sup> or “RY”) and supply all supporting documentation to the Green-e Program for verification. The **Green-e Annual Verification Submission**<sup>3</sup> includes the *Worksheets*, all attestation forms, and all documents requested in the **Green-e Verification Checklist** (“*Checklist*”). The *Green-e Annual Verification Submission* is due to the Center for Resource Solutions (CRS) by June 30 of the year following the RY being reported.

### A. Objectives of Verification

Brokers who participate in the Green-e Program must conduct an annual verification process to substantiate brokered transactions, as well as marketing claims. This document provides instructions on the documentation and processes required to demonstrate that:

1. RECs were generated in quantity and type sufficient to meet **customer** sales for each specific transaction;
2. RECs were generated from **eligible renewable generators**;
3. Information provided to customers on the RECs transaction confirmation regarding the generation types from which the RECs were derived is accurate;
4. The electrical energy associated with RECs was delivered into the electric power system or consumed at the site of generation by a grid-connected end-user of electricity and was not marketed or otherwise represented as renewable energy;
5. All the attributes of the renewable energy were aggregated and not sold off separately;
6. Through reporting agreements and other contractual obligations with generators that any emission reduction credits or emission allowances allocated to or otherwise received by the generator for the generation output that supports the brokered transaction have been transferred to the customer purchasing the REC and have not

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<sup>1</sup> Other documents referenced in these *Instructions* are available on the Green-e Web site at <http://www.green-e.org>. The *Worksheets* are found at [http://www.green-e.org/verif\\_docs.html](http://www.green-e.org/verif_docs.html).

<sup>2</sup> Terms defined in Appendix A are indicated the first time they appear in **bold** type.

<sup>3</sup> Documents defined in Appendix B are indicated in **bold italic** type the first time they appear.

- been sold separately, or used for compliance with any air quality requirement of local, state or federal government;
7. Generation output that supports the brokered transaction has not been used for compliance with any procurement, renewable portfolio standard or other renewable energy requirement of local, state or federal government, except as provided for in the ***Green-e National Standard*** (“*National Standard*”);
  8. RECs were sold only once;
  9. The public utilities commission (PUC), department of environment, municipal utility governing board, or other appropriate regulatory body in the state where the electricity associated with a brokered REC was generated and sold was given notification that the environmental attributes of the electricity were sold as a REC, and to ensure no use of mandated renewables;
  10. The generator and Broker have no knowledge of double counting, double selling or double claiming of RECs; and
  11. The Green-e certified brokered transaction only contained RECs that were generated in the calendar year in which the transaction occurred, the first three months of the following calendar year, and/or the last 6 months of the prior calendar year.

The primary objective of this verification is to provide CRS with reasonable assurances that the information reported in connection with the Green-e Program is accurate and prepared in accordance with identified program standards. Indirectly, this independent verification will foster consumers’ confidence that **renewable power** is being delivered into the grid in accordance with their transaction amount.

## **II. GENERAL ASSURANCE PROTOCOL PROVISIONS**

### **A. Scope of Verification**

This document contains directions for preparing the forms and attestations needed to satisfy the annual reporting requirements of the Green-e Program. ***When all of the steps described in this document are fully and accurately executed, the REC Broker will have completed the annual verification.***

### **B. Period Covered By Reporting Requirements**

The agreed-upon procedures reports must be prepared for the Green-e Program on a calendar year basis. For those companies that began participating in the Green-e Program mid-year in a given year, the reports should be prepared for the period starting on the date the Broker signed the their Green-e contract and ending on December 31 of that year, or alternatively for that full calendar year with permission of the Green-e Program staff.

**C. Date the Annual Verification Submission Is Due to the Center for Resource Solutions**

The completed *Annual Verification Submission* must be submitted to CRS no later than June 30 of the year following the RY being reported and each year thereafter. The submission must include all requested items and should be sent to:

Center for Resource Solutions  
Presidio Building 97  
PO Box 29512  
San Francisco, CA 94129  
Attention: Alex Pennock, Certification and Analysis

The completed *Worksheets* must be both submitted in hardcopy along with the *Annual Verification Submission*, as well as electronically in Microsoft™ Excel compatible format, to:

alex@resource-solutions.org

**D. Other Information to be Submitted to the Center for Resource Solutions with the Annual Verification Submission**

The following reports and information should accompany the Broker's verification submission.

- Copies of Green-e *Broker Verification Worksheets* 1-4;
- Written explanation from the Broker for any exceptions in the *Worksheets*;
- **Green-e REC Broker Attestation and Registration Form for Generators** ("*Generator Attestation*") for each **generator** with which you brokered a transaction for Green-e certified RECs. For generators sized 10 kw or less, a **Green-e Attestation for Renewable Energy Certificates (RECs) Delivered From a Small Solar/Wind/Hydro Electric Power Facility** ("*Small Generator Attestation*") should be submitted;
- **Green-e Attestation from REC Broker** ("*Broker Attestation*") filled out by the Broker, for each brokered transaction. You should submit one *Broker Attestation* to match every *Generator Attestation* and *Small Generator Attestation*.
- A transaction confirmation document for each transaction;
- Documentation supporting marketing claims, if any, as indicated on the *Checklist*;
- Copies of notifications to utilities and state regulators, where required; and
- **Green-e Attestation from Program Participant** ("*Participant Attestation*") for the company for whom this verification is being conducted. Only one copy is required each Reporting Year. The blank form is attached at the end of this document.

### III. DIRECTIONS FOR COMPLETING FORMS

The requirements described below apply to Broker participating in the Green-e Program. The procedures are organized so as to first gather information about supplies of RECs and then about brokered transactions of RECs.

**All forms must be typed. All Worksheets must be completed in a Microsoft Excel™ compatible program and be submitted to CRS electronically in addition to the hardcopy that must be included with the Annual Verification Submission. Illegible forms will be returned.**

## **A. Supply**

### **1. Directions for Completing Worksheet 1**

To be an eligible renewable generator for the purposes of Green-e verification, each generator from which RECs are claimed must complete the *Generator Attestation* provided.

- a. Using Worksheet 1, make a list of all transactions brokered during the RY being reported. Record the generator facility, generator location, Energy Information Administration (EIA) or Qualifying Facility (QF) ID number, operational date of facility, nameplate capacity, the renewable MWh transacted, whether RECs or electricity were purchased and/or generated, the fuel type and date (quarter and year) of generation. List on separate rows generation by a single facility that took place in different years.

### **2. Directions for Completing Worksheet 2**

- a. Record in Column 2A and 2B the eligible fuel types and location of generation,<sup>4</sup> respectively, of the renewable MWh that you listed in Worksheet 1. List each unique combination of fuel type and location only once; if multiple facilities supplied renewable MWh derived from the same fuel type and generated in the same location, you will list all renewable MWh from these facilities on the same row of Worksheet 2.
- b. Record in Column 2C the MWh of renewables brokered in this RY by fuel type and location that were generated between **July 1 and December 31 of the year prior to the RY being reported** and that you listed in Worksheet 1.
- c. Record in Column 2D the MWh of renewables brokered in this RY by fuel type and location that were generated between **January 1 and December 31 of the RY being reported** and that you listed in Worksheet 1.
- d. Record in Column 2E the MWh of renewables brokered in this RY by fuel type and location that were generated between **January 1 and March 31 of the year following the RY being reported** and that you listed in Worksheet 1.

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<sup>4</sup> If not making a regional claim to your customers about a particular resource or about a product that contains electricity or RECs generated from a particular resource, you may use 'National' as the location of the resource. If making regional claim, then break out resource type by location of generation consistent with location claim made for the product using the resource.

- e. Add columns 2C, 2D and 2E and record the sum in column 2F. Add column 2F down to get the “Total Eligible MWh Brokered in Green-e Transactions This RY”.

## **B. Verification of Sales**

### **1. Directions for Completing Worksheet 3**

Collect Broker company billing statements and any other documentation supporting the amount of renewable energy sold under each Broker transaction being verified during the RY being reported.

- a. Record in Table 3.1 each purchaser for whom your brokered a transaction of Green-e certified RECs. List the total MWh, resource type, and generator of RECs sold to purchaser. Record as a separate row MWh from each generator that was brokered to purchaser.
- b. Record in Table 3.2 the number of RECs sold and number of customers by the location (state) of the customer.

## **C. Notifications**

### **1. Directions for Completing Worksheet 4**

For brokered transactions where a utility is involved in a REC transaction such that the electricity that was generated with a REC claimed in the brokered transaction is sold to rate-based customers, various notifications must be made. For background on this requirement, see Section III.E of the *National Standard*.

- a. List in column 4A all the generators that appear in Worksheet 1 in which any of the following cases apply:
  - i. A utility is rate-basing the electrons from the renewable generation and selling the RECs separately;
  - ii. The generator is selling the commodity electricity supply to a utility and selling the RECs in a separate transaction to a marketer/broker;
  - iii. The utility owns and/or operates the renewable generation facility and is selling the RECs to a marketer/broker; or
  - iv. The generator is selling the electricity to a utility and the RECs directly to end-use customers.
- b. For each generator, indicate which of the six cases applies to that generator by placing an “X” in the appropriate column (columns 4B-4G). If more than one case applies, check multiple boxes.
- c. For generators where case 1, 2, 4 or 5 applies: collect the following documents and have them available for the accountant:

- i. Letter or other disclosure from utility(ies) listed in column 4H sent to the utility's state regulatory authority (for example, the Public Utilities Commission). In the case of a municipal utility not regulated by a PUC, the letter may be addressed to the governing board of the utility; and
  - ii. Letter or other disclosure from utility(ies) listed in Column 4H addressed to the state regulatory authority in the state in which the generation producing the RECs occurred, if different from the state in which the utility is operating; and
  - iii. Letter or other disclosure from utility(ies) listed in column 4H sent to the utility's state environmental authority (for example, the state Department of Environment).
- d. For generators where case 3 or 6 applies, collect the following documents and have them available for the accountant:
- i. Letter or other disclosure from utility(ies) listed in column 4H sent to the utility's state regulatory authority (for example, the Public Utilities Commission). In the case of a municipal utility not regulated by a PUC, the letter may be addressed to the governing board of the utility; and
  - ii. Letter or other disclosure from utility(ies) listed in Column 4H addressed to the state regulatory authority in the state in which the generation producing the RECs occurred, if different from the state in which the utility is operating; and
  - iii. Letter or other disclosure from utility(ies) listed in column 4H sent to the utility's state environmental authority (for example, the state Department of Environment); and
  - iv. Letter or other disclosure from the generator in column 4A sent to the utility listed in column 4H.

#### **IV. HOW TO GET HELP**

Should assistance be required, Center for Resource Solutions staff are available to answer questions. Questions relating to the verification may be directed to: Alex Pennock at 415-561-2100 or [alex@resource-solutions.org](mailto:alex@resource-solutions.org). To obtain electronic copies of this document, along with attestations and *Worksheets*, look on our Web Page at [http://www.green-e.org/verif\\_docs.html](http://www.green-e.org/verif_docs.html).

## APPENDIX A: GLOSSARY OF TERMS

**Biomass:** Eligible biomass resources for REC brokered transactions include: landfill gas, digester gas, plant-based agricultural, vegetative and food processing waste, bioenergy crops, clean urban waste wood, and mill residues.

**Certificate:** see **Renewable Energy Certificate**.

**Customer:** For the purposes of this assurance protocol, the customer is identified as the party who has purchased a Green-e certified REC product that was brokered through Broker.

**Eligible Renewable Generator:** Renewable generators who have legal documentation verifying the name, address, capacity, fuel type and operational date used and whose generation types fall within the relevant Green-e definition of renewable resources.

**Eligible Renewable Resource:** As defined by the *Green-e Renewable Energy Certification Program National Standard*. These include wind, solar photovoltaic, geothermal, small and/or low-impact hydropower, and most types of biomass.

**Geothermal:** Natural heat and steam from within the earth that is captured to generate electric power. Geothermal energy can also be used for space heating or industrial steam.

**Generator:** The facility that physically generates the electricity.

**Green-e Annual Verification Submission:** The completed and collected documents required to be submitted annually to the Center for Resource Solutions as part of certification. These documents include all completed *Broker Verification Worksheets*, relevant *Attestations* and all documents required by the *Green-e Verification Checklist*.

**Green-e Renewable Energy Program National Standard:** The governing document for Green-e certification. It is available on the Green-e Web site at [http://www.green-e.org/getcert\\_re\\_obli\\_stan.shtml](http://www.green-e.org/getcert_re_obli_stan.shtml).

**Hydroelectric:** A technology that produces electricity from falling or moving water that turns a generator.

**Kilowatt-hour (kWh):** The most commonly used unit of measure telling the amount of electricity consumed over time. It means one kilowatt of electricity supplied for one hour.

**Megawatt-hour (MWh):** One thousand kilowatt-hours.

**New Renewable:** The term “new” is defined to include any eligible renewable facility beginning operation after January 1, 1997, or repowered after that date. Only new renewable resources are eligible to participate in Green-e certified products.

**REC Broker:** Any company that brokers transactions of eligible resources between REC generators and non-residential/commercial customers without taking ownership of

the RECs. Transactions between a generator and end-use customer, which are arranged by a broker with an agreement with the Center for Resource Solutions, are eligible for certification provided the resource meets the Green-e eligibility requirements outlined in the *National Standard*.

**Renewable Energy Certificate (REC):** For purposes of participating in Green-e, eligible renewable generation may be characterized as having a commodity electricity attribute and a renewable attribute, sometimes referred to as a “greenness” attribute. Hence, for each MWh of eligible renewable energy generated, a corresponding MWh of renewable attribute is generated. This renewable attribute may be separately documented from the commodity electricity through the use of a certificate or a “ticket”, which the generator may then sell or broker separately from the commodity energy. For the purposes of this report, one REC is equivalent to the renewable attributes from one MWh of eligible renewable generation.

**Renewable Portfolio Standard:** A state or federal level policy that requires that a minimum amount (usually a percentage) of electricity supply provided by each supply company is to come from renewable energy.

**Renewable Power:** Electricity generated from eligible biomass, wind, solar thermal, photovoltaic, geothermal, and eligible hydroelectric resources. Also called renewable resources, renewable supply, and renewable electricity.

**Reporting Year:** The reporting year is the period beginning January 1 in the sales year being reported or the date the Participant began selling its Green-e certified product, and ending on December 31 of that year.

**Solar:** Refers to sources that use solar radiation to produce electricity. Photovoltaic technologies convert sunlight directly into electricity. Solar thermal electric facilities use the heat of the sun to generate electricity.

**Ticket:** See **Renewable Energy Certificate**.

**Vintage:** The vintage of a renewable MWh is the date that the renewable electric generation was measured by the system operator or utility meter at the generator site. The vintage of a generator or generating facility is the date that the facility was placed into service.

## APPENDIX B: DESCRIPTION OF DOCUMENT TITLES AND OTHER INFORMATION NEEDED FOR VERIFICATION

The following is a list of information that program participants need to provide for verification and should be tailored to each particular engagement as reports and information will vary.

- 1) Contracts, billing statements or other third party documentation that contains information of RECs brokered, date generated and generating facility.
- 2) **“Internal Reporting Documents that Indicate Sales by Month”**: A report from the REC Broker that contains the detail of sales per customer for each transaction brokered and that was used to complete Worksheet 3.
- 3) **“Green-e Worksheet 1: Detail of Generation”**: A report that contains the detail of annual brokered transactions (RECs brokered by quarter, month or date generated). This report is used to complete Worksheet 2.
- 4) **“Green-e Worksheet 2: Verification of Eligible Renewables”**: This worksheet provides information about the brokered RECs that support REC transactions offered by Brokers during the calendar year ending December 31, 2005. Worksheet 2 identifies the quantity of each type of renewable RECs brokered (and resold, if applicable).
- 5) **“Green-e Worksheet 3: Verification of Brokered Transactions”**: This worksheet provides information about how transactions recorded on Worksheet 2 were allocated.
- 6) **“Green-e Worksheet 4: Verification of Notifications”**: This worksheet documents required notifications for REC transactions involving a utility.
- 7) **“Green-e Attestation from REC Broker”** signed by the company for which the assurance protocol is being conducted. One copy of this attestation must be filled out for every transaction. Each transaction will be covered by two attestations: a copy of the *Broker Attestation* and a corresponding *Generator Attestation*.
- 8) **“Green-e REC Broker Attestation and Registration Form for Generators”** completed by every generator from which REC transaction were brokered. **“Green-e Attestation for Renewable Energy Certificates (RECs) Delivered From a Small Solar/Wind/Hydro Electric Power Facility”** completed by every wind, solar, and hydro generator with nameplate capacity under 10 kW.
- 9) **“Green-e Attestation from Program Participant”** for the Reporting Year. Only one copy, signed by the company for which the assurance protocol is being conducted, needs to be included with the *Annual Verification Submission*. A blank copy of the *Participant Attestation* is included as Appendix C of these *Instructions*.

- 10) **“Green-e Verification Checklist”**: This document was provided by CRS to the Program Participant. It contains information regarding the transactions that are subject to this annual verification and any additional reporting requirements for the Broker.
- 11) **“Green-e Verification Cover Letter”**: A letter provided to the Broker at the start of the verification process that provides an outline of requirements for verification and relevant documents necessary to complete verification.



## APPENDIX C: GREEN-E ATTESTATION FROM PROGRAM PARTICIPANT

Reporting Year: \_\_\_\_\_

I, (print name and title) \_\_\_\_\_, declare on behalf of  
(name of renewable energy broker) \_\_\_\_\_ (“Participant”), that:

- 1) All the RECs brokered through my company’s Green-e Certified REC transaction(s) were generated by eligible renewable energy generators as defined in the *Green-e Renewable Energy Certification Program National Standard*, including any regional exclusions as defined in the *National Standard* and other Green-e rules and market advisories;
- 2) All the renewable attributes, including any emissions offsets or claims and all CO2 benefits, represented by the Green-e certified products brokered reported in the *Worksheets*, as outlined in the *Annual Verification Instructions for REC Brokers*, were transferred to customers or retired on their behalf and were not sold separately;
- 3) The renewable MWh claimed for the verified products were brokered once by Participant as part of a Green-e certified product;
- 4) To the best of my knowledge, for the RECs sold by Generator, Generator did not:
  - a) sell the electrical energy that was generated with the RECs claimed separately;
  - b) market or otherwise represent as renewable energy the electrical energy that was generated with the RECs claimed; and
  - c) use the electrical energy that was generated with the RECs claimed to meet any federal, state or local renewable energy requirement, renewable energy procurement, renewable portfolio standard, or other renewable energy mandate.Nor did any other party, to best of my knowledge, do the actions described in a, b, and c above with the electrical energy that was generated with the RECs claimed by Generator;

I further declare that statements contained in *Green-e Worksheets 1-4* are true and correct, and that the RECs claimed for the verified products were, to the best of my knowledge, sold once and only once. Further, the eligible renewable MWh sold through the certified products did not contribute to any mandated renewable portfolio standard or other mandated renewable energy program. As an authorized agent of the aforementioned Company, I have authority to submit this report on the company's behalf.

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Signature

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Date

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Place of Execution

**This Form is used by the Center for Resource Solutions to verify the accuracy of claims made by brokers. The information on this form is held strictly confidential and will not be shared with any other party except in aggregate form.**